



**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	15 MW Wind Energy Project in Maharashtra (UNFCCC reference number: 1778)
Process track	<input type="checkbox"/> Prior approval <input checked="" type="checkbox"/> Issuance <input type="checkbox"/> Renewal of crediting period
Version number of the validation report	02
Completion date of the validation report	06/04/2022
Type(s) of PRCs	<input type="checkbox"/> Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents ¹ <input checked="" type="checkbox"/> Corrections <input type="checkbox"/> Changes to the start date of the crediting period <input type="checkbox"/> Inclusion of a monitoring plan <input checked="" type="checkbox"/> Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents <input type="checkbox"/> Changes to the project design <input type="checkbox"/> Changes specific to afforestation and reforestation project activities
Version number of PDD to which this report applies	04
Project participants	M/s D. J. Malpani Eneco Energy Trade B.V.
Host Party	India
Applied methodologies and standardized baselines	Applied methodology: AMS-I.D. ver. 11.0 ² - Grid connected renewable electricity generation Standardized baseline: Not Applicable
Mandatory sectoral scopes	01 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).

² <https://cdm.unfccc.int/methodologies/DB/W3TINZ7KKWCK7L8WTFQQOFQQH4SBK>

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 <i>Applus+ Certification CDM Technical Manager</i> Signature: 

SECTION A. Executive summary

The project is the implementation and operation of 15 MW wind farms to generate electricity by M/s D.J.Malpani (DJM). The project activity consists of 12 wind electric generator (WEGs) of 1.25 MW each installed in three phases at various location within Maharashtra.

The project activity is in line with the sustainable development priority of the country. The generated electricity from WEGs is connected to state electric utility namely Maharashtra State Electricity Distribution Company Limited (MSEDCL) and transmitted through state electric grid.

Validation Scope: The scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology AMS-I.D version 11.0. The validation of PRC was based on the requirements in the CDM Validation and Verification Standard for project activities, version 03.0.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design document.

Validation Process: The project assessment is based on the "CDM Validation and Verification Standard for project activity version 03.0 and is conducted using standard auditing techniques to assess the correctness of the information provided by the project participants. Before the assessment begins, members of the team covering the technical scope(s), sectoral scope(s), and relevant host country experience for evaluating the CDM project activity are appointed.

Following are the task performed by the assessment team:

- I A desk review of the project design documentation;
- II Follow-up interviews with project stakeholders;
- III The resolution of outstanding issues and the issuance of the final validation report and opinion.

The prepared validation report and other supporting documents then undergo an internal quality control at the HQ (Accredited office) before being submitted to the CDM-EB.

In order to ensure transparency, assumptions must be clear and stated explicitly and background material must also be referenced. Applus+ Certification has developed a specific checklist customized for the project. The checklist demonstrates, in a transparent manner, the project criteria (requirements), discussion on each criterion by the assessment team, and the results from validating the identified criteria.

Appointment of the 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	Host country experience
Mr. Jitendra Mohan Singh	LA	Yes	Yes	NA	Yes
Mr. Denny Xue	TR	Yes	Yes	NA	NA

Document review

The Project Design Document submitted by the Client was reviewed against the approved methodology and other relevant criteria to verify the correctness, credibility, and interpretation of the presented information. Furthermore, a cross-check between information provided and information from other sources has been done. Please refer Appendix 3 of this report.

Follow-up interviews

Applus+ Certification performed interviews, telephone conferences with project stakeholders to confirm selected information and to resolve issues identified in the document review.

Resolution of Clarification and Corrective Action Request

The objective of this phase of the validation was to resolve the requests for corrective actions and clarification and any other outstanding issues which need to be clarified for Applus+ Certification's positive conclusion on the project design document. The Corrective Action Requests and Clarification Requests raised by Applus+ Certification were resolved during communications between the Client and Applus+ Certification to guarantee the transparency of the validation process, the concerns raised and responses given are summarized in Appendix 4 below.

The final revised PDD^{2/} version 4 dated:28/03/2022 submitted by PP serves as the basis for the final assessment presented. Additional changes to the project during the validation process are not considered to be significant with respect to the main CDM objectives. The two CDM main objectives are the reduction of anthropogenic GHG emissions and the contribution of sustainable development to the host country.

Internal quality control

As final step of a validation of the final documentation including the validation report and the checklist have to undergo an internal quality control by the technical review committee, i.e. each report has to be finally approved either by the head of the technical review committee or the deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one to avoid any conflict of Interest.

After confirmation of the PP the validation opinion and relevant documents are submitted to the EB through the UNFCCC web-platform.

Conclusion

Applus+ Certification has performed a validation of the post registration change to the registered PDD of the "15 MW Wind Energy Project in Maharashtra" (UNFCCC Ref. No. 1778). The validation was performed on the basis of UNFCCC criteria and host country criteria, as well as criteria given in applied methodology^{7/} AMS-I.D (version 11.0) to provide for consistent project operations, monitoring and reporting.

The review of the project design documentation and the subsequent follow-up interviews have provided Applus+ Certification with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria. The project will hence be recommended by Applus+ Certification for registration with the UNFCCC.

Applus+ Certification has received a confirmation from the host Party that the project activity assists it in achieving sustainable development.

The validation has been performed following the requirements of the latest version of the CDM VVS version 03.0 for the project activity and on the basis of the contractual agreement. The single purpose of this report is its use during the registration process as part of the CDM/UNFCCC project cycle.

SECTION B. Validation team, technical reviewer and approver

B.1. Validation 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	Validation findings
1.	Lead Auditor /Technical Expert	OR	Singh	Jitendra Mohan	True Quality Certifications private Limited- Outsourced entity	Yes	No	Yes	Yes

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	Xue	Denny	Applus+ Certification
2.	Approver	IR	Calle de Miguel	Agustín	Applus+ Certification

SECTION C. Means of validation

C.1. Desk/document review

The details of the document observed during the validation process are listed below in Appendix 3 of this report.

C.2. On-site inspection

The need of post registration changes in the registered PDD (version 02) for the project activity was identified during the desk review and remote audit. The validation assessment of post-registration change addressed in this validation opinion report was performed, under the “issuance” process track of the 5th periodic verification for the project activity (MP: 01/04/2016 to 23/10/2018 for which on-site inspection to the project site was not conducted by the DOE due to high threat of COVID-19 in entire state of India and state-wise lockdown and quarantine rules.

Hence, in line with the guidance to relax mandatory site visits by DOEs due to COVID 19 pandemic published by UNFCCC , 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 03.0”. As per UNFCCC guideline DOE concluded that the site visit cannot be postponed and therefore the remote audit was conducted on 28/10/2021 by taking into account the deadline in terms of delivery/forwarding of Certified Emission Reductions (CERs) generated by the PA for the current monitoring period. So, the site visit cannot be postponed to a later date. 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 Skypes 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

Duration of on site inspection:N/A				
No.	Activity performed on-site	Site location	Date	Team member
1	N/A			

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Banker	Mr. Kailas	Site Incharge (PP representative)	28/10/2021 ³ (Skype call)	Project Implementation, General technical aspects about details for the correction in including correctness and appropriateness of texts/figures added in the revised version of the PDD and their compliance with applicable CDM rules.	Jitendra Mohan Singh
2.	Durgavale	Mr. Sagar	O & M Incharge (PP representative)			
3.	Saurabh	Sumant	Consultant EKI Energy Services Ltd.			

C.4. Sampling approach

Not Applicable.

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	00	00	00
Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents	00	00	00

³ The site visit date as indicated in this report is same as the verification remote audit date

Corrections	00	00	00
Changes to the start date of the crediting period	00	00	00
Inclusion of a monitoring plan	00	00	00
Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents	00	01	00
Changes to the project design	00	00	00
Changes specific to afforestation and reforestation project activities	00	00	00
Others (please specify)	00	00	00
Total	00	01	00

SECTION D. Validation findings

D.1. Compliance with PDD form

Means of validation	The guideline for completing CDM form version 12.0 for project activity is checked by the assessment team.
Findings	No findings raised for this compliance
Conclusion	The latest version 12.0 available in the UNFCCC site is used for the revision of PDD. The project activity description is in accordance to the PDD form and thus the same is acceptable to the assessment team. Moreover, as the PP uses a later valid version of the PDD's template, the DOE hereby confirms that the information transferred is materially the same as in the original registered PDD ^{1/} version 02 dated on 09/01/2008.

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

Means of validation	The post registration changes do not fall under this category.
Findings	The post registration changes do not fall under this category.
Conclusion	The post registration changes do not fall under this category.

D.3. Corrections

Means of validation	Assessment team checked the registered PDD version 02 dated 09/01/2008
Findings	No findings raised for this compliance.
Conclusion	<p>Following corrections were carried out in the revised PDD^{2/} version 4 dated 28/03/2022.</p> <p>Due to new template format of the PDD version 12.0 of UNFCCC following text are added :</p> <p>Cover page: Assessment team confirms that Completion of additional fields namely Project participant(s), Host Party, Sectoral scope and selected methodology(ies), mandatory and conditional sectoral scope and estimated amount of annual average GHG emission reductions is in line with new PDD template. Also section F as per the new PDD template is now included which mentions the details of the Host country approval. The project obtained Host Country Approval from MoEFCC vide letter number 4/7/2007-CCC dated 16/11/2007. The same is checked from the UN home page as well (https://cdm.unfccc.int/Projects/DB/BVQI1207584460.66/view) and found correct. Also, PP has added "Eneco Energy Trade B.V." as an other parties involved.</p> <p>Section A.4 has been updated filled as per requirement of PDD template: Type and category of the project mentioned in Section A.4.2 of old PDD is shifted in Section B.1 of new PDD due to changes in template of PDD. Thus acceptable to DOE.</p> <p>Section A.6 has been updated as per the latest PDD template. Assessment team confirms that the proposed CDM project activity is registered as a CDM project activity with UN reference number as UN 1778. This project activity is not</p>

	<p>included as a component project activity (CPA) in a registered CDM programme of activities (PoA).The proposed CDM project activity was not a CPA that has not been excluded from a registered CDM PoA. This is a registered CDM project activity whose first crediting period is ongoing and project exists in the same geographical location as the proposed registered CDM project activity.</p> <p>Section A.7 has been updated as per the latest PDD template: As per 'Guidelines on assessment of de-bundling for SSC project activities' Annex 13 to EB 54⁴ , para 2, 'A proposed small-scale project activity shall be deemed to be a debundled component of a large project activity if there is a registered small-scale CDM project activity or an application to register another small-scale CDM project activity :</p> <ul style="list-style-type: none"> • With the same project participants; • In the same project category and technology/measure; • Registered within the previous 2 years; and • Whose project boundary is within 1 km of the project boundary of the proposed small- scale activity at the closest point. <p>The project participant hereby confirms that they have not registered any small-scale CDM activity or applied to register another small-scale CDM project activity within 1 km of the project boundary, in the same project category and technology/measure in previous 2 years.</p> <p>Section B.6.3 has been updated:PP has updated grid emission factor as 0.8975 tCO₂/MWh which was mentioned as 897.5 tCO₂/GWh in the registered PDD. Further, PP has included the calculation of baseline emisisions in Section B.6.3 as follows:</p> <p>Baseline emissions or CERs generated by the project are estimated to be:</p> <p>Baseline emissions (project) (tons of CO₂)= Grid emission factor (tons of CO₂/MWh) * Power generated from the project (MWh/year) = 0.8975 * (2400 *12) = 25,848 tons CO₂/year</p> <p>There is no change in basline emission from original PDD.</p> <p>Section B.7.3 has been updated: In the of the revised PDD, details of feeder change and single line diagram of metering arrangement has been added.</p> <p>Appendix 7 as per new PDD template is now incoporated which describe the PRC changes applied to the registered PDD version 02. The changes are acceptable to the assessment team as it complies with the requirement of Appendix of CDM PS PA version 03.0 Para1(a) and para 1 (d).</p>
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D.4. Changes to the start date of the crediting period

Means of validation	The post registration changes do not fall under this category.
Findings	The post registration changes do not fall under this category.
Conclusion	The post registration changes do not fall under this category.

D.5. Inclusion of a monitoring plan

Means of validation	The post registration changes do not fall under this category.
Findings	The post registration changes do not fall under this category.
Conclusion	The post registration changes do not fall under this category.

⁴ https://cdm.unfccc.int/Reference/Guidclarif/ssc/methSSC_guid17.pdf

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	Assessment team checked the revised PDD ^{/2/} version 04 dated 28/03/2022		
Findings	CAR 01 was raised during the validation process and closed successfully. Please refer Appendix 4 of this report for the detail closure of the CAR		
Conclusion	Following are the observation of the DOE		
	Details as per Old PDD ^{/1/} Version 02 ,Dated 09/01/2008	New PDD ^{/2/} Version 4, Dated 28/03/2022	Reason for Change
	The Parameter $\sum_0^n EG_{n,y}$ was included in Version 2	The parameter $\sum_0^n EG_{n,y}$ has been removed in version 4	PP has removed this parameter as State electricity board (MSEDCL) providing directly the final values of electricity export, Import and net electricity supplied to the grid by the PA in credit note from the month of November 2017 onwards which is not in the control of PP. Assessment team has checked the credit note issued by MSEDCL and invoices and found that changes requested by PP is in line with the actual monitoring practice credit report issued by the MSEDCL. Thus, acceptable to DOE.
The Parameter $\sum_0^m EG_{m,y}$ was part of monitoring plan	The Parameter $\sum_0^m EG_{m,y}$ has been removed.	PP has removed this parameter as State electricity board (MSEDCL) providing directly the final values of electricity export, Import and net electricity supplied to the grid by the PA in credit note from the month of November 2017 onwards which is not in the control of PP. Assessment team has checked the credit note issued by MSEDCL and invoices and found that changes requested by PP is in line with the actual monitoring practice credit report issued by the MSEDCL. Thus, acceptable to DOE.	

D.7. Changes to the project design

Means of validation	The post registration changes do not fall under this category.
Findings	The post registration changes do not fall under this category.
Conclusion	The post registration changes do not fall under this category.

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

Means of validation	The post registration changes do not fall under this category.
Findings	The post registration changes do not fall under this category.
Conclusion	The post registration changes do not fall under this category.

SECTION E. Internal quality control

As a final step for Validation of PRC, the final documentation, including the validation report, has to undergo an internal quality control by the Technical Reviewer(s) to be approved.

Details of the Technical Reviewer(s) are provided within the Validation Report in Section B.2. and Appendix 2 for further references of knowledge and capability to conduct the quality checking.

After the Technical Review process, the final documentation may undergo a final quality checking process called Administrative Review, done by the Applus+ Certification's Project Activity Manager and/or Technical Support.

For final approval, the final set of documents are prepared by the DOE's Technical Manager or its deputy and signed by the authorized signatory of the DOE.

In case any of the persons performing this final internal quality control approval process has acted as a part of the Assessment Team or Technical Review team, the approval can only be given by DOE's personnel who are not part of those teams.

If the final set of documents has been satisfactorily approved, the Request for PRC is submitted to the UNFCCC CDM EB along with the relevant documents.

SECTION F. Validation opinion

Applus+ Certification was contracted by M/s D. J. Malpani to perform a validation of the post registration change to the registered PDD of "15 MW Wind Energy Project in Maharashtra (UNFCCC Ref. No. 1778) according to the CDM Validation and Verification Standard for project activity version 03.0.

As the conclusion of the validation, Applus+ Certification confirms that:

- (a) the level of accuracy or completeness in the monitoring and verification process is not reduced as a result of the revisions;
- (b) the proposed changes to the monitoring plan are in accordance with the approved monitoring methodology applicable to the project activity;
- (c) the proposed changes do not affect the calculation of the emission reductions, and the additionality, scale and applicability of the project activity are not affected either;
- (d) the findings in the previous verification has been taken into account.

As a result, Applus+ Certification confirms that proposed or actual changes to the project activity comply with the requirements of Appendix 1 established in the Project Standard for project activities version 03.0.

Appendix 1. Abbreviations

Abbreviations	Full texts
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction(s)
CEA	Central Electricity Authority
CL	Clarification request
CM	Combined Margin
CMS	Central Monitoring system
CO ₂ e	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DCS	Distributed control system
DOE	Designated Operational Entity
DR	Document Review
EF	Emission Factor
EMA	Energy Market Authority (EMA)
EIA	Environmental Impact Assessment
ER	Emission Reductions
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GWP	Global Warming potential
IPCC	The Intergovernmental Panel on Climate Change
MMBTU	One million British Thermal Units
PP	Project Participant
PLF	Plant Load factor

Appendix 2. Competence of team members and technical reviewers

1. **Mr. Jitendra Mohan Singh**, has done Advanced MSc in Sustainable Energy Systems and Management from International Institute of Management, University of Flensburg, Germany and B.Tech. in Agricultural Engineering from Allahabad University, India. He has more than (18) years of working experience in different organisations like IARI, IIT Delhi, ICAR, IRADe, CAPART, SMEC and Perenia Carbon and M B Power (Madhya Pradesh) Ltd. in the area of Agriculture, Energy & Environment and Climate Change. He also worked on contract basis (ad hoc) as a RIT expert in UNFCCC from 2010 to 2013. Currently, he is associated with True Quality Certifications Private Limited and is empanelled with APPLUC certification to carry out validation and verification related to GHG reductions projects
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	Registered PDD	Version 02, Dated:09/01/2008	Project participant
2.	NA	Revised PDD (PRC)	Version 04 Dated:28/03/2022	Project participant
3.	NA	Revised Monitoring Plan	Approved by UNFCCC on 02/08/2010	UNFCCC website
4.	NA	Validation Opinion of revised MP	Dated:05/05/2010	UNFCCC Website
5.	NA	Credit Notes issued by Maharashtra State Electricity Distribution Company Ltd.	-	Project participant
6.	NA	Invocies	-	Project participant
7.	NA	Applied Methodology AMS-I.D, version 11.0	Version 11.0	UNFCCC Website

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			
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.	D.6	Date: 19/03/2022
Description of CAR				
Project activity has already commissioned. PP is requested to include the line diagram of actual monitoring practices.				
Project participant response				Date: 28/03/2022
The Line diagram of actual monitoring practices has been included in the section B.7.3 of the PDD Version 03.				
Documentation provided by project participant				
Revised PDD Version 04				
DOE assessment				Date:30/03/2022
PP has included the line diagram in Section B.7.3 of revised PDD. CAR closed.				

Table 3. FARs from this validation

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

DOE assessment	Date: DD/MM/YYYY

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 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.

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