



VALIDATION OF POST
REGISTRATION CHANGES OF THE
**74 MW WIND ENERGY
PROJECT IN TAMILNADU,
INDIA**

**REPORT NO.INDIA-PRC/629.49/2015
REVISION No.01**

BUREAU VERITAS CERTIFICATION

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VALIDATION OPINION

Date of first issue: 29.10.2015		Organizational unit: Bureau Veritas Certification Holding SAS	
Client: The Ramco Cements Limited		Client ref.: Mr. K Selvanayagam	
Project reference No.: 7647	Date of registration: 18/10/2012	Registered PDD version and date Version 11, 10/09/2012	Revised PDD version and date Version 12, 25/05/2015
Monitoring period to which the request applies: 01/11/2012 to 15/11/2013		PRC tracks <input type="checkbox"/> Prior approval track <input checked="" type="checkbox"/> Issuance track	
The DOE conducted validation of the changes: <input type="checkbox"/> Prior to commencement of a verification for the project activity or PoA. <input checked="" type="checkbox"/> When performing a verification for the project activity or PoA.			
Types of Changes <input type="checkbox"/> A. Temporary deviations from the monitoring plan as described in the registered PDD, PoA-DD or generic CPA-DD, or the monitoring methodology <input type="checkbox"/> B. Corrections that do not affect project/ programme design <input type="checkbox"/> C. Change to the start date of the crediting period <input checked="" type="checkbox"/> D. Permanent changes from the monitoring plan as described in the registered PDD or the monitoring methodology <input type="checkbox"/> E. Changes to the project or programme design of a registered project activity or PoA <input type="checkbox"/> F. Changes specific to afforestation or reforestation project activities			

Report No.: India-PRC/629.49/2015	Subject Group: CDM
Project title: 74 MW wind energy project in Tamilnadu, India	
Work carried out by: Ms. Sapana Pednekar - Team Leader Mr. Pratik Bhattacharya – Team Member	
Internal Technical Review carried out by: Mr. Sanjay Patankar	
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Indexing terms

Work approved by:


Mr. Rajendra Sharma

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Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CL	Clarification Request
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DOE	Designated Operational Entity
FAR	Forward Action Request
GHG	Green House Gas(es)
MoV	Means of Verification
MP	Monitoring Plan
PDD	Project Design Document
PLF	Plant Load Factor
PP	Project Participant
PPA	Power Purchase Agreement
PRC	Post-Registration Changes
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

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1. INTRODUCTION

The Tata Power Company Limited has commissioned Bureau Veritas Certification to validate the post-registration changes of CDM project “74 MW wind energy project in Tamilnadu, India” (hereafter called “the Project”) at Udumalpet region covered in Coimbatore and Dindigul districts; and Thandayarkulam and Uthumalai regions in Tirunelveli district. Tamil Nadu state, in India.

This report summarizes the findings of the validation of the post-registration changes, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1. Objective

The objective of a validation is to provide a through and independent third party assessment of the post-registration changes. In particular, the changes' compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the changes meet the applicable CDM requirements and the identified criteria.

1.2. Scope

The validation scope is defined as an independent and objective review of the revised project design document and other relevant documents. The information in these documents is reviewed against the requirements of paragraph 37 of the CDM M&Ps, the applicability conditions of the selected methodology and guidance issued by the Board.

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

1.3. Validation Team

The assessment team and internal technical reviewer team consist of the following personnel:

FUNCTION	NAME	TA 1.2	TASK PERFORMED*
Team Leader	Ms. Sapana Pednekar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI <input type="checkbox"/> TR
Team Member	Mr. Pratik Bhattacharya	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input type="checkbox"/> RI <input type="checkbox"/> TR
Internal Technical Reviewer (ITR)	Mr. Sanjay Patankar	<input checked="" type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI <input checked="" type="checkbox"/> TR
Report Issuance	Mr. Rajendra Sharma	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI <input type="checkbox"/> TR



*DR = Document Review; SV = Site Visit; RI = Report issuance; TR = Internal Technical Review

2. METHODOLOGY

The overall validation, from Contract Review to Validation Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a validation protocol was customized for the project, according to the version 09.0 of the Clean Development Mechanism Validation and Verification Standard, issued by CDM Executive Board at its 82nd meeting on 20/02/2015 /5/. The protocol shows, in a transparent manner, criteria (requirements), means of validation and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes, details and clarifies the requirements the post-registration changes are expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The completed validation protocol is enclosed in Appendix A to this report.

2.1. Review of Documents

The Revised Project Design Document (PDD) submitted by Bunge India Pvt. Ltd and additional background documents related to the project design and monitoring plan were reviewed.

Furthermore, cross checks were made between information provided in the revised PDD and information from sources other than those used.

To address Bureau Veritas Certification corrective action and clarification requests, Bunge India Pvt. Ltd revised the PDD and resubmitted it on 25/05/2015.

The validation conclusions presented in this report relate to the project as described in the revised PDD version 12.

2.2. Follow-up Interviews

On 27/03/2014 - 30/03/2014, Bureau Veritas Certification performed a site visit and interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Project participant were interviewed (see References).



2.3. Resolution of Clarification, Corrective and Forward Action Requests

The objective of this phase of the validation is to resolve issues that require further elaboration, research or expansion prior to Bureau Veritas Certification's positive conclusion on the post-registration changes.

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

- (a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable, verifiable and additional emission reductions;
- (b) The applicable CDM requirements have not been met;
- (c) There is a risk that emission reductions cannot be monitored or calculated.

A Clarification Request (CL) is raised, if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

A Forward Action Request (FAR) may also be raised during validation, to identify issues related to project implementation that require review during the first verification of the project activity.

To guarantee the transparency of the validation process, the issues raised, the responses provided by the project participants, the means of validation of such responses and references to any resulting changes in the PDD or supporting annexes are documented in the Validation Protocol in Appendix A.

2.4. Internal Technical Review

The validation opinion underwent an Internal Technical Review (ITR) before requesting approval of the post-registration changes.

The ITR is an independent process performed to examine thoroughly that the process of validation has been carried out in conformance with the requirements of the validation scheme as well as internal Bureau Veritas Certification procedures.

The Team Leader provides a copy of the validation opinion to the reviewer, including any necessary validation documentation. The reviewer reviews the submitted documentation for conformance with the validation scheme. This will be a comprehensive review of all documentation generated during the validation process.

When performing an Internal Technical Review, the reviewer ensures that:



- The validation activity has been performed by the team by exercising utmost diligence and complete adherence to the CDM rules and requirements.
- The review encompasses all aspects related to the project which includes project design, baseline, additionality, monitoring plans and emission reduction calculations, internal quality assurance systems of the project participant as well as the project activity, closure of CARs and CLs during the validation exercise, review of sample documents.

The reviewer may raise Clarification Requests to the validation team and will discuss these matters with the Team Leader.

After the agreement of the responses to the Clarification Requests from the validation team as well as the PP(s), the finalized validation opinion is accepted for further processing such as uploading via the UNFCCC interface.

3. VALIDATION CONCLUSIONS

In the following sections, the conclusions of the validation are stated.

The findings from the desk review of the revised project design documents and the findings from interviews during the follow up visit are described in the Validation Protocol in Appendix A.

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A. The validation of the Project resulted in 00 CAR(s), 01 CL(s) and 00 FAR(s).

The CL was closed out based on adequate responses from the Project Participant(s) which meet the applicable requirements. They have been reassessed before their formal acceptance and closure.

The number between brackets at the end of each section corresponds to the VVS paragraph.

3.1. Temporary deviations from the registered monitoring plan and/or monitoring methodology (298-302)

There are no temporary deviations from the registered monitoring plan.

3.2. Corrections (303-305)

There are no corrections to the registered PDD.

3.3. Changes to the start date of the crediting period (306-307)

No changes to the start date of the crediting period are involved.



3.4. Inclusion of a monitoring plan to a registered project activity or programme of activities(308-310)

Not applicable

3.5. Permanent changes from the registered monitoring plan or monitoring methodology or standardized baseline (312-316)

There are permanent changes from the registered monitoring plan which are described in detail in the following sections.

Description of the Changes:

In the approved revised PDD, it is stated that the calibration of meters would be on annual frequency. However, during site visit and interview with site personnel and also review of calibration certificates, the verification team observed that the frequency of annual calibration is not being followed during the current verification period. The verification team sought for the clarification on delay of the calibration of the meters in accordance with the description in the registered PDD. In response to the clarification sought by the verification team, the Project participant provided evidence of the follow up with TNEB who is authority for calibration of meters. In spite frequent follow ups with TNEB, the calibration of meters was not taken up. Verification team also noted that, the meters are under jurisdiction of TNEB and calibration of these meters is also responsibility of TNEB and Project Participant cannot intervene in the same. As the frequency of calibration of meters is not followed in line with the requirement of registered monitoring plan, the Project Participant has proposed for change in the calibration frequency from existing once in year to once in 5 years. To support this change Project Participant has also referred to Notification published by 2006 by CEA (Central Authority of Electricity) who is national Authority which says 'all interface meters shall be tested at least once in five years' /4/. Also there are some of the newly replaced meters of 0.2s accuracy class which are in fact more precise than previous installed meters of 0.5 class. At the time of validation all the installed meters were of 0.5 accuracy class. As per TANGEDCO published notification of 2011, all the new replaced meters will be of 0.2s class ABT compliant meters. All these meters are under purview of the TANGEDCO and Project Participant do not have any role in it. Verification team also noted that changed accuracy of the meters will lead to more accurate recording of the readings. Thus the envisaged change would lead to more accurate calculation of emission reductions.

The verification team noted that considering the current scenario, the annual frequency of calibration/testing was not followed and Project participant has been following up with TNEB who own these meters, but till conclusion of the current verification activity there was no calibration or meter testing activity taken up by the utility board. Hence in line with paragraph 398 of VVS version 9, in cases where the DOE determines that it is not possible for the project participants to conduct the calibration at a frequency specified by either the applied methodology, the applied standardized baseline, guidance provided by



the Board, and/or the registered monitoring plan due to reasons beyond the control of Project participant, the post registration changes to the monitoring plan to be taken as per paragraph 9.6 of VVS version 9 and Appendix 1 para 5(a) and (b) of PS version 9.

Assessment of the changes:

(a) When the changes occurred

The annual calibration frequency as per registered monitoring plan was not followed during the current verification period. Project Participant has pursued with the TNEB who is responsible for testing/calibration of the meters connected in the project activity on many instances but failed to get the calibration done with the stipulated frequency of once in a year. Hence has proposed for the change in the frequency from once in a year to once in five years. Also the accuracy class of meters in some cases is 0.5 and in some 0.2s. As per TNEB notification, the meters are in process of getting upgraded from 0.5 to 0.2. The meters are under jurisdiction of TNEB/TANGEDCO and Project Participant do not have any role to play. Also due to the change in the accuracy class of the meters from existing 0.5 to 0.2 will lead to more accurate readings.

(b) Reasons for these changes taking place

The annual frequency of meter testing/ calibration as stated in the registered monitoring plan was not followed during the current verification period. The calibration process is not in hands of Project Participant. Hence in line with paragraph 398 of VVS version 9, in cases where the DOE determines that it is not possible for the project participants to conduct the calibration at a frequency specified by either the applied methodology, the applied standardized baseline, guidance provided by the Board, and/or the registered monitoring plan due to reasons beyond the control of Project participant, the post registration changes to the monitoring plan to be taken as per paragraph 9.6 of VVS version 9 and Appendix 1 para 5(a) of PS version 9.

In case of meters, the new meters (of 0.2 class) will be replacing old meters of 0.5 class in accordance with the requirement of TANGEDCO. In this activity Project Participant has no specific role as all these meters are owned by TNEB.

(c) Whether the changes would have been known prior to registration of the project activity

At the time of registration, the power purchase agreement (PPA) was referred which states that calibration of meters would be once in a year. At the time of registration, it was anticipated that annual calibration frequency would be adhered to by the authority, viz; TNEB. Although in reality, the same was not followed despite of couple of reminders. Hence Project Participant is compelled to change the calibration frequency from once in a year to once in 5 years. The



change is supported with the Notification issued by CEA which is Central Governing Authority in India for Electricity/4/.

Regarding the change in the accuracy class of the meters, at the time of registration all the meters installed were of 0.5 class. However after 2011, TANGEDCO erstwhile known as TNEB has issued a notification /3/ to all the TNEB Circles and Projects that as when the existing meters of 0.5 class are found faulty or if any request from Wind Farm Developer is received, they will replace the TOD meters with the ABT complaint Meters of accuracy class of 0.2.

(d) How the changes would impact the overall operation/ability of the project activity to deliver emission reductions as stated in the PDD

There is no impact on the ability of the project activity to deliver the emission reductions as stated in the registered PDD. In case of any abnormal or inconsistent readings observed at any of the meters, the meters shall be tested immediately and in case of any error observed during the meter testing, the correction factor equivalent to the error will be applied to the JMR readings of the faulty meter. Hence there will not be any impact on the overall operation of the project activity to deliver emission reductions as stated in the PDD. The old meters of accuracy class 0.5 are getting replaced with 0.2 class meters. This change will lead to more accurate recording of the readings.

Impact to the validation conclusions in the registered PDD/ approved revised PDD:

(a) Additionality of the project activity

The change observed is only in the frequency of the calibration of the meters and change in the accuracy class of the meters. These changes do not impact additionality in any circumstances.

(b) Scale of the project activity

The capacities of all the WTGs of the project activity remain unchanged and they continue to generate the same amount of power which is transmitted through the grid; also the emission reductions claimed earlier were also based on the JMR of electricity generated by the wind farm. And after this change also it would be based on the JMR of electricity generated by the wind farm. So in a way there is no change in the approach of calculation of Emission Reductions.

The change observed is only in the frequency of the calibration of the meters and change in the accuracy class of the meters. The scale of the project activity remains the same, viz., 74 MW as there is no addition or reduction in the capacity or number of the WECs.

(c) Applicability and application of approved baseline methodology

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The applicability and application of the approved baseline methodology is unchanged as a result of the observed change, which is only related to calibration frequency and accuracy class of the meters.

(d) Compliance of the monitoring plan with applied monitoring methodology

The monitoring of parameters essential to the calculation of the emission reductions from the project activity is unchanged. The same parameters continue to be monitored at the same locations that have been described in the registered PDD. Hence, the monitoring plan continues to be in compliance with the applied monitoring methodology ACM 0002 version 12.3.

(e) Level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan.

The change does not impact the level of accuracy of the monitoring of any of the parameters incorporated in the monitoring plan. Also the emission reductions claimed earlier were also based on the JMR for the electricity generated by the wind farm. And after this change also it would be based on the JMR issued by the TANGEDCO, erstwhile known as TNEB.

3.6. Changes to the project design of a registered project activity or programme design of a registered PoA(317-327)

There have been no permanent changes to the project design of the registered Project activity prior to the current verification activity.

4. VALIDATION OPINION

Bureau Veritas Certification has performed a validation of post-registration changes of the “74 MW wind energy project in Tamilnadu, India”, which is located in Udumalpet region covered in Coimbatore and Dindigul districts; and Thandayarkulam and Uthumalai regions in Tirunelveli district. Tamil Nadu state, India. The validation was performed on the basis of UNFCCC criteria for the CDM, and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The validation consisted of the following three phases: i) desk review of the project design document and additional background documents; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion.

The review of the revised project design document, relevant additional information and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the post-registration changes meet all relevant UNFCCC requirements for the CDM and the relevant host country criteria.



Bureau Veritas Certification thus requests the approval of post-registration changes of the project activity.

Mr. Sanjay Patankar
Internal Technical Reviewer
14/11/2015
Mumbai, India

Ms. Sapana Pednekar
Team Leader
14/11/2015
Mumbai, India



5. REFERENCES

Category 1 Documents:

Documents provided by project participants that relate directly to the GHG components of the project.

- /1/ Registered PDD, version 11 dated 10/09/2012
- /2/ Revised PDD, Version 12 dated 25/05/2015
- /3/ TNEB Notification Order vide reference no CE/NCES/SE/EE/WCB/AEE2/F.ABT Meter/ D.2492/dated 3.1.11
- /4/ CEA Regulation Notification 2006 dated 17.03.2006 for periodical testing and calibration of interface meters to be once in 5years

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents used for cross-check.

- /5/ CDM Validation and Verification Standard Version 09.0 (EB 82 Annex 14)
- /6/ CDM Validation Project Standard Version 09.0 (EB 82 Annex 13)
- /7/ CDM Project Cycle Procedure Version 09.0 (EB 82 Annex 15)

Persons interviewed:

Persons interviewed during the validation or persons that contributed with other information that are not included in the documents listed above.

The Ramco Cements Limited

- /1/ Mr. Selvanayagam Company Secretary
- /2/ Mr. M Jagadish Assistant General Manager

Bunge India Pvt. Ltd

- /3/ Mr. Vikas Yadav Consultant (CDM)
- /4/ Mr. Deepjyoti Borah Consultant (CDM)

Wind World India Limited

- /5/ Mr. C.M.Jayakumar Assistant Manager
- /6/ Mr. L Ashok Kumar Site Operator
- /7/ Mr. Satish Kumar Operator

Vestas Wind Technology

- /8/ Mr. S Senthil Senior Engineer



6. CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Ms. Sapana Pednekar	Bureau Veritas Certification, India	<p>Team Leader, Climate Change Lead Verifier,</p> <p>She is a Post Graduate in Environmental Science from University of Pune, India and holds a PGDBA in Financial Management from Welinkars School of Management. She has total Industrial work experience of more than 10 years in the field of environmental studies of which more than 7 years' experience is in the field of CDM and VCS. She is working in Bureau Veritas Certification (India) Pvt. Ltd. for last more than 5 years and has undergone training related to Clean Development Mechanism and is currently involved in validation and verification of more than 50 CDM/ VCS project activities. She has undergone and successfully completed ISO 14001:2004 standard, ISO 50001:2011 standard Lead Auditor Courses and ISO 14064:2006 Standard Lead verifier course.</p>
Mr. Pratik Bhattacharya	Bureau Veritas Certification, India	<p>Team Member, Climate Change Lead Verifier</p> <p>Graduate in Mechanical Engineering from Kavi Kulguru Institute of Technology and Science (Nagpur University) and Post graduate Diploma in Energy Management from Indian Institute of Social Welfare and Business Management (Calcutta University) and Certified Energy Auditor under Bureau of Energy Efficiency (Government of India, Ministry of Power). He has around 4 years of experience in System Designing (HVAC) and Energy Auditing. He has undergone intensive training on Clean Development Mechanism and Environment Management System. He is involved in validation and Verification of CDM and VCS projects activities.</p>
Mr. Sanjay Patankar	Bureau Veritas Certification, India	<p>Technical Reviewer, Climate Change Lead Verifier</p> <p>Educational qualifications: B.E. (Mech.) M.E. (Mech.)</p> <p>He has over 20 years of experience in engineering manufacturing industry covering various functions like enterprise management, product design, engineering, tool & die design, improvements in the production shop, quality assurance & control and systems planning and implementation, including ISO 9001 based quality management systems. Working for the last 3 years in Bureau Veritas Certification (India) Pvt. Ltd. as Lead Auditor for ISO 9001, 14001 and OHSAS 18001 standards/specifications.</p>

APPENDIX A: VALIDATION PROTOCOL FOR POST REGISTRATION CHANGES

Table 1 Validation requirements based on VVS Version 9 section 9 (EB 82 Annex 14) and PS version 9 section 13.8 (EB 82 Annex 13)

CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
1. Temporary deviations from the registered monitoring methodology or standardized baseline					
a. Are there deviations from the monitoring plan in the registered PoA-DD or CPA-DD, or the monitoring plan in an approved revised PDD, PoA-DD or CPA-DD (hereinafter referred to as the registered monitoring plan), the applied methodology and/or the applied standardized baseline?	VVS	298	No there are no deviations.	OK	OK
b. Do the provisions of appendix 1 of the Project standard apply to the identified deviations?	VVS	298	Not Applicable	OK	OK
c. If the provisions of appendix 1 of the Project standard do not apply, is prior approval from the Board with respect to the acceptability of the deviations sought?	VVS	299	Not Applicable	OK	OK
d. If the deviation will lead to a reduction in the accuracy of the calculation of ERs, are conservative assumptions or discount factors applied to the calculations to the extent required to ensure that ERs will not be over-estimated as a result of the deviation?	VVS	300	Not applicable, as there are changes to the registered monitoring plan	OK	OK
e. For cases where a deviation from the monitoring plan may be applicable to the monitoring period under	VVS	301	Not applicable, as there are changes to the	OK	OK



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CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
verification, and part of the subsequent monitoring period, is the exact period to which the deviation applies verified?			registered monitoring plan		
2. Corrections					
a. Are the corrections to project or programme information or parameters fixed at validation, as described in the registered PDD, PoA-DD or CPA-DD made by Project participants or the coordinating/managing entity in a revised PDD, PoA-DD or CPA-DD comply with the requirements of the Project standard?	VVS	303	There are no corrections to the described registered PDD.	OK	OK
b. I. Is the corrected information an accurate reflection of actual project or programme information? And/or II. Are the corrected parameters in accordance with the applied methodology, registered monitoring plan and/or the applied standardized baseline?	VVS	304 (a) 304 (b)	There are no corrections to the described registered PDD.	OK	OK
3. Changes to the start date of the crediting period					
a. Is it ensured that the start date of the crediting period in the registered PD or included CPA is not prior to the	PS	277	There are no changes to the start date of the crediting period; hence this section is not applicable	OK	OK



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CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
date of registration?					
b. Is it ensured that Project participants or the coordinating/managing entity of a registered CDM project activity or PoA may not request any changes to the start date of the crediting period of the project activity or included CPA of more than two years, or more than four years for project activities hosted by a Least Developed Country?	PS	278	There are no changes to the start date of the crediting period; hence this section is not applicable	OK	OK
c. If the change of the start date of the crediting period constitutes a difference of more than one year but less than two years or between two and four years for project activity or included CPA hosted by a Least Developed Country, do the Project participant or the coordinating/ managing entity demonstrate that no changes have occurred to the project activity that would result in a less conservative baseline, and that substantive progress has been made to start the project activity or CPA?	PS	280	There are no changes to the start date of the crediting period; hence this section is not applicable	OK	OK
4. Permanent changes from the registered monitoring plan, monitoring methodology or standardized baseline					
a. Are there any permanent changes from the registered monitoring plan, the applied methodology and/or the standardized baseline?	VVS	312	a) Yes, there is a permanent change to the registered monitoring plan, The calibration frequency stated in the registered PDD is once in the year and will be conducted by	CL	OK



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CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
			<p>TNEB. However considering the current scenario, the annual frequency of calibration/testing was not followed and Project participant has been following up with TNEB who own these meters, but till conclusion of the current verification activity there was no calibration or meter testing activity taken up by the utility board. Hence in line with paragraph 398 of VVS version 9, in cases where the DOE determines that it is not possible for the project participants to conduct the calibration at a frequency specified by either the applied methodology, the applied standardized baseline, guidance provided by the Board, and/or the registered monitoring plan due to reasons beyond the control of Project participant, the post registration changes to the monitoring plan to be taken as per paragraph 9.6 of VVS version 9 and Appendix 1 para 5(a) of PS version 9. As a result of the assessment, it was determined by the team that the actual changes do not adversely affect the</p> <p>a) The applicability and application of the applied methodology under which the project activity has been registered ;</p>		

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CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
			b) The additionality of the project activity c) The scale of the project activity Hence, as per Appendix 1 of the Project Standard, no prior approval by the Board is sought by BVCH		
b. Is it ensured that the changes to the registered monitoring plan in the revised PDD, PoA-DD or CPA-DD are in compliance with the applied methodology and do not reduce the level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan?	VVS	313	There is no change in the level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan.	OK	OK
c. If the proposed changes refer to a later version of the applied methodology and/or the applied standardized baseline in the registered PDD, PoA-DD or CPA-DD does the application of all requirements in any later valid version of the applied methodology and/or the applied standardized baseline does not impact the conservativeness of the monitoring and verification process, including the related emission reduction calculations?	VVS	314	Not applicable	OK	OK
d. If the permanent changes will lead to a reduction in the accuracy of the calculation of ERs, are conservative assumptions or discount factors are considered to the calculations applied to the extent	VVS	315	The permanent changes will not lead to a reduction in the accuracy of the calculation of ERs.	OK	OK

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CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
required to ensure that ERs will not be over-estimated as a result of the permanent change?					
5. Changes to the project design of a registered project activity or <i>programme design of a registered programme of activities</i>					
<p>a. Are there any proposed or actual changes to the project design of the registered CDM project activity or an included CDM CPA or to the programme design of a registered CDM-PoA?</p> <p>b. In case of actual changes, does the description in the submitted revised PDD, PoA-DD or CPA-DD which describes the nature and extent of the actual changes, determining the description accurately reflecting the implementation, operation and monitoring of the modified CDM Project activity, PoA or CPA?</p>	VVS	317 318	No there is no change to the project design of the registered project activity except to revision to the registered monitoring plan as explained in the section 4 above.	OK	OK
c. Was an on-site visit conducted to assess the impacts of the actual changes on the compliance of the monitoring plan the level of accuracy of the monitoring activity, the applied monitoring methodology including applicable tool(s) and/or, where applicable, the applied standardized baseline?	VVS	319	Yes, an on-site visit was conducted from 27/03/2014- 30/04/2014	OK	OK
d. Changes to a registered CDM project activity , but not limited to	PS	289			

VALIDATION OPINION

CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
i. Changes in the effective output capacity due to increased installed capacity or increased number of units, or installation of units with lower capacity or units with a technology which is less advanced than that described in the PDD?	PS	289 (a)	There is no change in the effective output capacity of the windmills in the project activity.	OK	OK
ii. Addition of component or extension of technology?	PS	289 (b)	There is no addition or extension of technology involved in the change that is identified	OK	OK
iii. Removal or addition of one site (or more) of a project activity registered with multiple-sites?	PS	289 (c)	There is no removal or addition of site involved	OK	OK
iv. Actual operational parameters which are within the control of Project participants differing from the expected parameters?	PS	289 (d)	There is no change in any of the actual operational parameters which are with in control of Project participant and which could differ from expected parameters.	OK	OK
v. Any consequential changes to the baseline methodology and/or the standardized baseline, including changing or adding another baseline methodology or applying a baseline scenario that is more appropriate as a result of the proposed or actual modifications to the project activity?	PS	289 (e)	Not Applicable	OK	OK
e. Changes to a registered CDM PoA shall be limited to:	PS	290			
a) Are there any changes to programme boundary to expand geographical coverage or to include additional host parties?	PS	290 (a)	Not Applicable	-	OK



VALIDATION OPINION

CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
<p>b) Are there any of the following revisions to the eligibility criteria:</p> <p>I. Is the version of the methodology applied by the PoA revised or replaced subsequent to being placed on hold;</p> <p>II. Is the revision of the eligibility criteria of a registered PoA initiated by the Board at any time during the lifetime of the PoA if an issue related to environmental integrity is identified;</p> <p>III. If the use of positive lists introduced based on the "Guidelines on the demonstration of additionality of small-scale project activities" or the provisions of "the Guidelines on demonstrating additionality of micro-scale project activities";</p>	PS	290 (b)	Not Applicable	-	OK
<p>c) Do the PoA includes more than one generic CPA-DD, the addition of specific-case CPA-DDs corresponding to generic CPA-DDs for which a specific-case CPA-DD has not been submitted at the time of request for registration of the PoA;</p>	PS	290 (c)	Not Applicable	-	OK
<p>d) Is there any Removal of methodologies and/or standardized baseline from the registered</p>	PS	290 (d)	Not Applicable	-	OK

VALIDATION OPINION

CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
PoA;					
f. Are the impacts of the proposed or actual changes to the registered CDM project activity, PoA or CPA-DD reported in the revised PDD, including	PS	292			
i. The applicability and application of the applied methodology and where applicable, the applied standardized baseline under which the project activity or PoA has been registered;	PS	292 (a)	The change proposed will not have any impact on the applicability and application of the applied methodology on the registered PDD.	OK	OK
ii. Compliance of the monitoring plan with the applied methodology and, where applicable, the applied standardized baseline;	PS	292 (b)	The change identified has no impact on the compliance of the monitoring plan of the project activity with the applied methodology.	OK	OK
iii. The level of accuracy and completeness in the monitoring of the project activity or PoA	PS	292 (c)	The level of accuracy and completeness of the monitoring in the project activity is unaffected as a result of the change referred to in 5 a above	OK	OK
iv. The additionality of the project activity, PoA or CPA;	PS	292 (d)	There is no change in the additionality of the project activity because of the observed change.	OK	OK
v. The scale of the project activity or CPA;	PS	292 (e)	The scale of the project activity remains as before since there is no addition or decrement to the capacity (ies) of the WTGs.	OK	OK
vi. The eligibility criteria of PoA	PS	292 (f)	The change identified has no impact on the compliance of the monitoring plan of the project activity with the applied methodology.	OK	OK

VALIDATION OPINION

CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
g. Are the proposed or actual changes affect the additionality of the registered CDM project activity with regard to:	VVS	321			
i. Is it confirmed in case of investment analysis used to demonstrate additionality, project participants have only modified the key parameters in the original spreadsheet calculations affected by the proposed or actual changes to the project activity;	VVS	321 (a)	The change identified has no impact on the additionality of the registered CDM project activity.	OK	OK
ii. Is it confirmed in case of only barriers claimed to demonstrate additionality, project participants have demonstrated that the barriers are still valid under the new circumstances	VVS	321 (b)	The change identified has no impact on the additionality of the registered CDM project activity.	OK	OK
h. Is it confirmed that the applied methodology including applied tools and/or the applied standardized baseline do not impact on the conservativeness of the monitoring and verification process and the related emission reduction calculations in cases where:	VVS	323			
i. The proposed or actual changes impact on the implementation of the registered CDM project activity or PoA or the included CDM CPA	VVS	323 (a)	The change identified has no impact on the compliance of the monitoring plan of the project activity with the applied methodology.	OK	OK
ii. The original methodology and/or the original	VVS	274 (a)	Not applicable	OK	OK



VALIDATION OPINION

CHECKLIST QUESTION	Ref.	§	Comments	Draft Concl	Final Concl
standardized baseline would no longer be applicable;					
iii. The project participant or the coordinating/managing entity applies all the requirements in: <ul style="list-style-type: none"> a) Any later valid version of the methodology and/or the standardized baseline; or b) Another methodology and/or another standardized baseline that is(are) applicable to the registered CDM project activity or PoA. 	VVS	323 (c)	Not applicable	OK	OK
i. Was it assessed whether the revised PDD, PoA-DD or CPA-DD complies with all following requirements:	VVS	324			
a) The applied methodology, tools and/or standardized baseline and verification process and the related emission reduction calculations?	VVS	324 (a)	Yes	OK	OK
b) Any later valid version of the methodology and/or the standardized baseline; or	VVS	324 (b)	Not applicable as there is no change in the version of the methodology applied	OK	OK
c) Another methodology and/or another standardized baseline that is(are) applicable to the registered CDM project activity or PoA.	VVS	324 (c)	Not applicable as there is no change in the version of the methodology applied	OK	OK

VALIDATION OPINION

Table 2 Resolution of Corrective Action /Clarification /Forward Action Requests

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
It was observed that the calibration frequency was not followed during current monitoring period.	Section 4. (a) above	<p>Further PP would like to inform that a Post Registration Change (PRC) has been requested to change the frequency of meter calibration.</p> <p>The registered PDD prescribes that the frequency of meter calibration is once in a year and TNEB holds the responsibility of carrying out the calibration of all the meters. However, the actual and current situation is different. There is delay in calibration witnessed in the project site which has been the practice in the state of Tamil Nadu. It has been observed that the concerned authority, TNEB is not performing calibrations at a specific/regular intervals; therefore prescribing any specific frequency for meter calibration is not practical due to this irregular practice or uncertainty from TNEB.</p> <p>During this monitoring period the project activity has experienced a long standing delay in meter calibration. However, PP has given efforts and has submitted written applications to TNEB requesting calibration/testing of the meters in both the project sites (letter dated 10 Feb 2014 & 9 Feb 2015). However, as the calibration is under the direct purview of TNEB hence it is not possible for PP to control the same.</p> <p>Therefore in view of the above situation and uncertainty in meter calibration at TNEB, PP is requesting for a permanent change in</p>	<p>There is a permanent change to the registered monitoring plan, The calibration frequency stated in the registered PDD is once in the year and will be conducted by TNEB. However considering the current scenario, the annual frequency of calibration/testing was not followed and Project participant has been following up with TNEB who own these meters, but till conclusion of the current verification activity there was no calibration or meter testing activity taken up by the utility board. Hence in line with paragraph 398 of VVS version 9, in cases where the DOE determines that it is not possible for the project participants to conduct the calibration at a frequency specified by either the applied methodology, the applied standardized baseline, guidance provided by the Board, and/or the registered monitoring plan due to reasons beyond the control of Project participant, the post registration changes to the monitoring plan to be taken as per paragraph 9.6 of VVS version 9 and Appendix 1 para 5(a) of PS version 9. As a result of the</p>



VALIDATION OPINION

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
		<p>the registered PDD to re-address the frequency of calibration.</p> <p>In this regard, PP has referred to national authority, CEA. As per CEA notification 2006, "all interface meters shall be tested at least once in five years. These meters shall also be tested whenever the energy and other quantities recorded by the meter are abnormal or inconsistent with electrically adjacent meters" (ref. http://www.aegcl.co.in/Metering_Regulations_Of_CEA_17_03_2006.pdf.)</p> <p>Therefore, PP has proposed that all the energy meters installed in the project activity shall be tested once in five years. The same has been included in the revised PDD (version 12 (VVS), dated 25/05/2015) under PRC request.</p> <p>The current monitoring period is 01/11/2012 to 15/11/2013 and the previous calibrations prior to start of the monitoring period have been conducted in between April 2010 to May 2012. Therefore in line with the PRC request, the previous calibration is valid across the current monitoring period; hence no delay factor (error) has been applied to the meters. However, if the delay prevails beyond the five year timeline (as requested in the PRC), the required error factors will applied during the next monitoring period to address the delay.</p> <p>PP is submitting the PDD version 12, dated 25/05/2015 (VVS track)</p>	<p>assessment, it was determined by the team that the actual changes do not adversely affect the</p> <ul style="list-style-type: none"> a) The applicability and application of the applied methodology under which the project activity has been registered ; b) The additionality of the project activity c) The scale of the project activity <p>Hence, as per Appendix 1 of the Project Standard, no prior approval by the Board is sought by BVCH</p>



VALIDATION OPINION

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
		<p>including the PRC request and also the revised MR, version 3, dated 25/05/2015 is submitted. The MR has been updated to the latest available version of the template, version 5.1.</p> <p>The registered PDD, version 11 has been transformed to VVS track keeping all the registered information unchanged. The revised PDD, version 12 contains all the updated/modified information.</p>	