

VERIFICATION REPORT OF PERALTA I WIND POWER PROJECT

AENOR Asociación Española de
Normalización y Certificación

Contact Information

AENOR

6 Génova. 28004 Madrid – Spain

www.aenor.es

Project Title	<i>Peralta I Wind Power Project</i>
Version	<i>02</i>
Report ID	<i>Reference Number 2014/141/VOL/26</i>

Report Title	<i>Verification report of Peralta I Wind Power Project</i>
Client	<i>Palmatir S.A.</i>
Pages	<i>39</i>
Date of Issue	<i>23-February-2016</i>
Prepared By	<i>Spanish Association for Standardisation and Certification (AENOR)</i>
Contact	<i>6 Génova. 28004 Madrid – Spain. Telephone +34 914326000 Fax +34 913190581. lroble@enor.es, www.aenor.es</i>
Approved By	<i>Luis Robles Olmos, Manager of Climate Change Unit</i>
Work Carried Out By	<i>Team Leader: Freddy Alejandro Garro Flores Verifier: Marcelino Pellitero Martínez Technical Reviewer: Luis Javier Arribas Alonso</i>

Summary:

Palmatir S.A. has commissioned the validation/verification body AENOR to perform a verification of VCS Project Activity “Peralta I Wind Power Project” in Uruguay (hereafter “project activity”) for the period from 13/05/2014 to 31/10/2015.

The project with CDM program was registered on 28/12/2012 under UNFCCC reference number (9336). The starting date of the first crediting period under the CDM is 01/11/2013. The commissioning operating date was on 13/05/2014.

A gap validation with the cover page and sections 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS Project Description Template was validated to comply with VCS rules, therefore, the project activity was registered under VCS with ID 1349. The crediting period for the Project under the VCS is from 13/05/2014 to 12/05/2024. The emission reductions are thus claimed as Voluntary Carbon Units (VCU) and verified on the basis of the Verified Carbon Standard (VCS) version 3.5 for GHG emission reduction and removal projects.

The verification consisted of the following three phases: i) a desk review of the Monitoring Report ii) On-site Visit; iii) the resolution of outstanding issues and internal technical review followed by the issuance of the final verification report and opinion. In the course of the verification process 4 corrective actions and 8 clarifications were raised, all have been successfully closed. The list of Clarification and Corrective Actions Requests (CL and CAR) is presented in Appendix 2.

AENOR confirms that the project is implemented in accordance with the validated VCS-PD, CDM-PDD and the monitoring plan; and then, claimed emissions reductions are calculated without material misstatements.

AENOR has performed the verification of “Peralta I Wind Power Project” on the basis of all issues and criteria of VCS Standard version 3.5 and VCS Program Guide version 3.5 for VCS projects and also on the criteria given to provide for consistent project operations, monitoring and reporting. Hence, in AENOR’s opinion the project correctly applies the baseline and monitoring methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”; Version 13.0.0 and meets the relevant UNFCCC requirements for the CDM Methodology, Voluntary Carbon Standard requirements and the relevant host country criteria.

Therefore, AENOR is able to certify that the emissions reductions from the “Peralta I Wind Power Project” project during the period from 13/05/2014 to 31/10/2015. amount to 125,466 tonnes of CO₂e.

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1 INTRODUCTION

Palmatir S.A. has commissioned AENOR to carry out the verification of VCS Project Activity “Peralta I Wind Power Project” in Uruguay for the period from 13/05/2014 to 31/10/2015. This report contains the findings from the verification and a certification statement for the certified emission reductions.

1.1 Objective

The objective of the verification is the review and ex-post determination by a Validation/Verification Body (VVB) of the GHG emission reductions that have been achieved as a result of the implementation of the project during a defined verification period. It includes the determination and evaluation that:

- The project activity has been implemented and operated as per the registered VCS-PD /1/ , CDM-PDD /2/ and that all physical features (technology, project equipment, and monitoring) of the project are in place;*
- The VCS monitoring reports /6/7/ and other supporting documents provided are complete and verifiable and in accordance with applicable CDM/VCS requirements;*
- The actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology; and*
- The data is recorded and stored as per the monitoring methodology.*

1.2 Scope and Criteria

The verification scope is:

- to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan;*
- to evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement;*
- to verify that reported GHG emission data is sufficiently supported by evidence.*

The project is assessed against the requirements of VCS Standard, version 3.5 /3/ and VCS Program Guide version 3.5 /4/ for VCS projects. AENOR has conducted the verification based on the recommendations in the latest version of CDM Validation and Verification Standard /5/, and employed a rule-based approach as criteria, focusing on the identification of significant reporting rules and the reliability of project monitoring.

Verification is not meant to provide any consultancy towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the monitoring.

1.3 Level of Assurance

The verification report is based on the registered VCS-PD, CDM-PDD and the VCS Monitoring Reports (MR) /6/7/, supporting evidences made available to the verifier and information collected through performing interviews and during the on-site assessment.

All the revisions of the verification report before being submitted to the client were subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent AENOR's instructions. The technical review was performed by a technical reviewer(s) qualified in accordance with AENOR's qualification scheme for CDM/VCS validation and verification.

The verification team and the technical reviewers consist of the following personnel:

<i>Name</i>	<i>Position in the team</i>
<i>Freddy Alejandro Garro Flores</i>	<i>Team Leader</i>
<i>Marcelino Pellitero Martinez</i>	<i>Verifier</i>
<i>Luis Javier Arribas Alonso</i>	<i>Technical Reviewer</i>

The verification has been planned and organized to achieve a reasonable level of assurance, with respect to material errors, omissions, and misrepresentations.

1.4 Summary Description of the Project

The project activity involved the development (construction and O&M) of an onshore wind farm located at 280 km north from Montevideo, near the village of Peralta, Department of Tacuarembó (Uruguay). This wind farm consists of 25 wind turbines with 2MW each, resulting in total installed capacity of 50 MW. The energy is dispatched to a first electrical substation located in the wind farm and then dispatched to an electrical substation called "Cuchilla Peralta" (owned by UTE and where the energy produced is measured) located at 50m from the first substation.

Palmatir S.A. is the implementer and operator of this project.

The project is registered under the CDM scheme. CDM project is registered in UNFCCC on 28/12/2012 with reference 9336 "Peralta I Wind Power Project".

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification was performed through means of the following three phases in accordance with the requirements of the registered VCS-PD, the applied methodology, and the VCS Standard version 3.5 and other relevant VCS requirements.

- I. A desk review of the monitoring report and all support documents.
- II. Follow-up interviews with project stakeholders and site inspection.
- III. The resolution of outstanding issues and the issuance of the verification report and statement.

The verification of the emission reductions has assessed all factors and issues that constitute the basis for emission reductions from the project. These include:

- The emission reduction calculations and the relevant data records.
- The calibration and maintenance records for the monitoring instruments
- The management systems to support the project operation and monitoring.

2.2 Document Review

The VCS monitoring report final version /7/, and the emissions reductions calculation spreadsheet /8/, were assessed as part of the verification. In addition the registered VCS-PD and CDM-PDD, in particular the baseline estimations and the monitoring plan, the registered CDM validation report /10/ and the VCS Validation Report /9/, as well as relevant documents, was reviewed. A detailed documents reviewed are listed in Annex 1 of the report.

2.3 Interviews

A site visit to the project activity was undertaken from 03 November 2015 to assess the implementation and operation of the project activity; review evidence and interview key personnel to confirm evidence associated with the data generation, emission reduction calculation and reporting of the monitoring parameters.

The key personnel interviewed and the main topics of the interviews are summarized in the table below:

Interviewed organization Person/Position	Interview topics
Palmatir S.A. Juan Ignacio Morán, Production Manager Instalaciones Inabensa, S. A. – Zeroemissions	• Flows for generating, aggregating and reporting the monitoring parameters. • Crosscheck between information provided in the monitoring report and data from the monitoring system, log books, purchase

<i>Carlos Alvarez García, VCS Consultant</i>	<i>records, handwritten records.</i> <i>Monitoring report and emission reduction calculations.</i> <i>Testing of monitoring equipment and observation of monitoring practices.</i> <i>Calibration of monitoring equipment.</i> <i>Running of specific checks and trials on data sources and data management practices where non conformities are detected.</i> <i>Clarifications related to monitoring procedures.</i> <i>Sufficiency of monitoring plan.</i> <i>Reliability of internal and external data.</i> <i>Internal data quality control.</i>
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2.4 Site Inspections

On 03 November 2015, AENOR's verification team carried out an on-site visit. Also, the on-site visit included interviews with key personnel to confirm evidence. The main tasks covered during the on-site visit include, but are not limited to:

- An assessment of the implementation and operation of the project activity as per the registered VCS-PD.*
- A review of information flows for generating, aggregating and reporting the monitoring parameters.*
- A cross-check between information provided in the Monitoring Report and data from other sources such as database, surveys, WBTs or similar data sources.*
- A check of the monitoring procedure and observations of monitoring practices against the requirements of the VCS-PD, CDM-PDD and the selected methodology.*
- A review of calculations and assumptions made in determining the GHG data and emission reductions.*
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.*

2.5 Resolution of Findings

As an outcome of the verification process, verification team can raise different types of findings (corrective actions, clarifications or other findings) according to the rules and requirements governing the VCS Program.

A Clarification Request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met; or where a non-conformance arises the verification team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

- a) Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;*
- b) Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions;*
- c) Issues identified in a FAR during verification to be verified during verification have not been resolved by the project participants.*

Forward Action Requests (FARs) are issued for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.

The project participants were requested to address all verification findings and finally provided the verification team with sufficient evidence to determine that the applicable VCS requirements have been met. The project participant modified the initial monitoring report to resolve the verification team concerns and resubmitted a final version. AENOR has prepared this report based on the final monitoring report.

To guarantee the transparency of the verification process, the 4 CARs and 8 CLs raised, the responses provided by the project participants, the means of validation of such responses and references to any resulting changes in the Monitoring report or supporting annexes are documented in the Verification Protocol in Appendix 2.

2.5.1 Forward Action Requests

Project verification resulted without any forward action requests.

2.6 Eligibility for Validation Activities

Not applicable.

3 VALIDATION FINDINGS

The project was validated by AENOR (VCS validation report (report number 2014/141/VOL/26), dated 07/08/2014 /9/) and it was registered under the VCS registration Project ID 1349.

There is a deviation in the project description, which are also assessed as a part of verification. They are explained in the section 3.3 of this report.

3.1 Participation under Other GHG Programs

The project activity is also registered under CDM, with reference: Project 9336. Details of the CDM registration is Project title: Peralta I Wind Power Project, registration date 28/12/2012 /11/.

3.2 Methodology Deviations

Not applicable.

3.3 Project Description Deviations

Deviation: Changes to the start date of the crediting period.

As described in the Monitoring Report, the PP applies a delay in the start date of the crediting period of 1 month and two days thus the new renewable 10 year crediting period, begins on 13/05/2014 and the first crediting period will conclude on 12/05/2024. The last VCS crediting period will end at the date when the last CDM crediting period of the project activity will expire as per paragraph 3.8.3 of the VCS Standard (version 3.5). This means, VCS crediting period will end on 31/10/2034.

AENOR confirmed with VCS staff that as long as the project has not already issued credits a crediting period may be changed using a project description deviation and verified that also complies with UNFCCC rules (paragraph 275 of CDM Project Standard version 09.0 /12/).

Moreover, above deviation does not affect the applicability of the methodology /13/, the additionally nor the appropriateness of the baseline scenario as mentioned in the registered VCS-PD, thus, accepted by the verification team of AENOR.

AENOR confirms that the deviation is properly described and justified in the Monitoring Report, thus the project deviation is deemed to be valid and that the project remains in compliance with VCS rules.

3.4 Grouped Project

The project is not a grouped project. Hence this section is not applicable.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

AENOR verified that the project is fully implemented according to the description included in the registered CDM-PDD and VCS-PD.

The verification team confirmed through visual inspection and document review that all physical features of the VCS project activity, including data collection systems and storage systems have been implemented in accordance with the registered CDM-PDD and VCS-PD. The technical diagrams of the project activity /14/ were reviewed and an installed capacity of 50 MW was confirmed.

The audit team has confirmed the project started its commercial operations on 13/05/2014 in accordance with Commissioning act /15/ provided by National Administration of Power Plants and Electric Transmissions (UTE); therefore, the carbon crediting period and the monitoring starts on same date. The project is completely operational which was confirmed by means of the on-site visit. Neither a notification nor approval of change has been requested to the CDM Executive Board.

During the first monitoring period (13/05/2014 to 31/10/2015), the project has operated continuously and satisfactorily, with some no significant interruptions as per DTE reports from national electricity regulator /16/.

The verification team confirmed that the monitoring plan of the validated CDM project activity is in accordance with the applied methodology ACM0002 "Consolidated methodology for grid-connected electricity generation from renewable sources" version 13.0.0 on the following reasons:

- During the desk review monitoring parameters included in the applied methodology were compared with the ones included in the monitoring plan of the registered CDM-PDD, and they were found consistent.
- During the verification process no need was identified for a revision of the monitoring plan.
- No other relevant aspects for monitoring not included in the methodology were identified.

No deviations from the monitoring methodology were identified during the verification process.

In addition, monitoring of reductions in GHG emissions has been implemented in accordance with the monitoring plan. The monitoring mechanism is effective and reliable. In accordance with the monitoring plan, only one parameter is as follows:

EGfacility, y: Quantity of Net Electricity generation supplied to the grid in year y by the project plant/unit to the grid and from the grid: This data is measured continuously and at least recording monthly. Data measured by UTE-meters are cross-checked with the records from the electronic supervisory system of the wind farm and records for sold of electricity /17/.

Furthermore, the meter readings provided by the project participant have been verified against the original reading records downloaded from the Administration of the Electricity Market (ADME) website, and they were found consistent. No contradictions were found. In order to be conservative, the PP crosschecked the monthly readings with the monthly records for sold of electricity, taking the lower value for ERs calculation.

PP has provided the certificates from UTE /18/ that are consistent with the calibration information included in the latest monitoring report as follows:

Meter	Serial number	Accuracy class	Calibration date	Certificate number
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Main	46033991	0.2S	07/02/2014	140327
Back up	65005113	0.5S	07/02/2014	140326

In addition, the calibration period is in accordance with relevant industry standards Commercial Measurements System by URSEA /19/.

In addition, during desk review and on-site visit was confirmed that the project has not received or sought any other form of environmental credit for the project. Also, it was verified that the project has not been rejected from other GHG program after validation and; therefore, it was not necessary to a complete revalidation of the project against the VCS rules, as stated in paragraph 3 of section 3.11.11 of VCS-Standard.

Overall the project activity was implemented as described in the registered VCS-PD and CDM-PDD. Verification team confirmed that the component project implementation is in accordance with the project description contained in the registered/ VCS-PD and CDM-PDD. No material discrepancies were identified between project implementation and the project description.

4.2 Accuracy of GHG Emission Reduction and Removal Calculations

The monitoring has been carried out in accordance with the provision of monitoring plan; the verification team reviewed if:

- The monitoring of reductions in GHG emissions resulting from the proposed VCS project activity were implemented in accordance with the monitoring plan contained in the registered VCS-PD and CDM-PDD.*
- The monitoring plan and the applied methodologies had been properly implemented and followed by the project participants.*
- All parameters stated in the monitoring plan, the applied methodologies and relevant CDM EB decisions had been sufficiently monitored and updated.*
- The responsibilities and authorities for monitoring and reporting were in accordance with the responsibilities and authorities stated in the monitoring plan.*

The monitoring system and all applied procedures are in compliance with the monitoring plan contained in the registered VCS-PD and CDM-PDD and the applied methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”; Version 13.0.0, based on the information included in the final monitoring report, there are several procedures for data collecting depending on the methodology applicable for each step of the project. The result of these monitoring tasks for the monitoring period has been verified as per the final review by the General Manager of the power plant /20/.

Based on the information in the registered VCS-PD, the baseline emission factor ($EF_{grid,CM,y}$) was ex-ante determined according to version 13.0.0 of the approved methodology ACM0002 and is fixed for the crediting period. The value of baseline emission factor used in the Monitoring Report is 0.519 tCO₂e/MWh, which is the same as the one in the registered VCS PD and CDM-PDD.

The different data sources mentioned above permit the comparison of the data and the detection of any deviation between them. In the below table are addresses the values reported and verified for VCUs calculation.

$$EG_{(PJ,2014)} = EG_{(facility,2014)} = 108,755.16 \text{ MWh}$$

$$EG_{(PJ,2015)} = EG_{(facility,2015)} = 132,993.37 \text{ MWh}$$

According to the formulae and procedure defined in the monitoring plan the Baseline Emissions (BE_y) is calculated as follows:

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$$

$$2014: 108,755.16 \text{ MWh} \times 0.519 \text{ tCO}_2\text{e/MWh} = 56,443 \text{ tCO}_2\text{e}.$$

$$2015: 132,993.37 \text{ MWh} \times 0.519 \text{ tCO}_2\text{e/MWh} = 69,023 \text{ tCO}_2\text{e}$$

The total Emission Reductions (ER_y) is calculated as follows:

$$ER_y = BE_y - PE_y - L_y,$$

As per registered CDM-PDD, Project Emissions (PE_y) and Leakage (L_y) are equal to 0, therefore:

$$ER_{2014} = 56,443 \text{ tCO}_2\text{e}$$

$$ER_{2015} = 69,023 \text{ tCO}_2\text{e}$$

The total emissions reductions calculated for the monitoring period are 125,466 tCO₂e.

PP provided the spreadsheets used for calculating the GHG emission reductions. AENOR has reproduced all these calculations to obtain the same results, hence, they are deemed quantified correctly in accordance with the project description and applied methodology; consistent with the evidence provided and cross-checked by AENOR. Furthermore, appropriate methods and formulae for calculating baseline emissions, project emissions and leakage have been followed, and assumptions and emission factor correctly applied and justified.

4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals

AENOR was able to confirm that the calculations are based on authentic data from energy regulators, on the monthly systematic monitoring of the electricity supplied by the project and records of sold electricity. The spreadsheets used to calculate the VCUs calculations and all figures were tracked, checked and found to be consistent. The monitoring information is stored as per the monitoring plan.

The quality of supporting evidences submitted to the VVB for verification is adequate and found to be verifiable. The ER calculation spreadsheet /8/ and other supporting documents related to quality and maintenance were checked by the verification team during the site visit to confirm the authenticity of the documents and to check the correctness of the calculation.

The verification team can confirm that sufficient evidence is available for the whole monitoring period and the same is verifiable and that the data collection system meets the requirements of the monitoring plan and the applied methodology according to the assessment carried out on site and in the document review.

Verification team confirms that the quality of evidence to determine the GHG reductions and removals produced was found satisfactory. The detailed information flow with the roles and responsibilities of the individuals and the monitoring system have been provided in Appendix 1 of the VCS-MR.

4.4 Non-Permanence Risk Analysis

Not applicable.

5 VERIFICATION CONCLUSION

AENOR has performed the verification of the emission reductions that have been reported for the “Peralta I Wind Power Project” (VCS ID 1349) for the period 13/05/2014 to 31/10/2015.

Verification is performed in accordance with the relevant requirements for VCS and CDM rules.

AENOR conducted the verification on the basis of the approved consolidated baseline methodology ACM0002 version 13.0.0, the monitoring plan contained in the registered CDM-PDD and the final monitoring report. The verification included i) checking whether the provisions of the monitoring methodology and the monitoring plan were consistently and appropriately applied and ii) the collection of evidence supporting the reported data.

Based on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these risks, AENOR planned and performed our work to obtain the information and explanations that we considered necessary to provide sufficient evidence for us to give reasonable assurance that the reported amount of GHG emission reductions for the period is fairly stated.

It is AENOR's responsibility to express an independent GHG verification opinion on the GHG emissions and on the calculation of GHG emission reductions from the project for the period 13/05/2014 to 31/10/2015 based on the reported emissions reductions in the Monitoring Report for the same period.

In our opinion the GHG emissions reductions of the “Peralta I Wind Power Project” for the period 13/05/2014 to 31/10/2015 are fairly stated in the final monitoring report.

The GHG emission reductions were calculated correctly on the basis of the approved consolidated baseline methodology ACM0002 version 13.0.0 and the monitoring plan contained in the registered CDM-PDD.

AENOR is able to certify that the emission reductions from the “Peralta I Wind Power Project” during the period 13/05/2014 to 31/10/2015 amount to 125,466 tonnes of CO2 equivalent, detailed as below.

Verification period: From 13-may-2014 to 31-october-2015

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

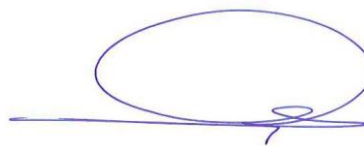
Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
13-May-2014 to 31-Dec-2014	56,443	0	0	56,443
01-Jan-2015 to 31-Oct-2015	69,023	0	0	69,023
Total	125,466	0	0	125,466

Madrid, 23/02/2016



Freddy Alejandro garro flores

Team leader



Luis Robles Olmos

Authorised person

APPENDIX 1: REFERENCE LIST

Ref	Document Name	Date
1	Validated VCS-PD, version 02	06/08/2014
2	Registered CDM-PDD, version 05	30/11/2012
3	VCS Standard, version 3.5	25/03/2015
4	VCS Program Guide, version 3.5	08/10/2013
5	CDM validation and verification standard, version 09.0	25/02/2015
6	VCS Monitoring report, version 01	21/10/2015
7	VCS Monitoring report, version 02	10/11/2015
8	Emission reduction calculation spreadsheet	-
9	VCS Validation Report, version 01	07/08/2014
10	CDM Validation Report, version 04	26/12/2012
11	UNFCCC web page	-
12	CDM Project Standard version 09.0	20/02/2015
13	CDM methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"; Version 13.0.0	11/05/2012
14	Technical diagrams of wind power plant	-
15	Commissioning act issued by UTE	13/05/2014
16	DTE reports for the monitoring period	-
17	Crosscheck records	-
18	Calibration certificates of main and back up meters	07/02/2014
19	URSEA Decision No. 14002 of 27 November 2002	27/11/2002
20	Manager review	06/11/2015

APPENDIX 2: VCS VERIFICATION PROTOCOL

VCS VERIFICATION PROTOCOL

PROJECT: PERALTA I WIND POWER PROJECT

MONITORING AND REPORTING PERIOD:

FROM 13/05/2014 TO 31/10/2015

Verification Team: Freddy Garro Flores – Team Leader Marcelino Pellitero Martinez - Verifier	
Version of this Verification Protocol: 03	Date: 23/02/2016

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
1. Project history				
Open issues from validation Check (in case of 1 st periodic verification) whether there are any open issues indicated in the PD validation report (e.g. FAR) Have they been addressed appropriately?	1.1.	All corrective actions and clarifications indicated in the validation report were closed. Validation report does not indicate the existence of open issues.	OK	OK
Open issues from previous verification Check (in case of further periodic verifications) whether there are any open issues indicated in previous verification (FAR) Have they been addressed appropriately?	1.2.	N/A This is the 1 st VCS periodic verification.	N/A	N/A
Requests for Deviations/Revisions of Monitoring Plan Check if there have been any requests for deviations from the monitoring methodology or requests for revisions of the monitoring plan. If any, make sure that they are considered	1.3.	There is a deviation regarding the change of the start date of the crediting period. The PP had initially expected the date of commencement for the commercial operation of the project on 11/04/2014 but the real start date of commercial operation was on 13/05/2014. Therefore, in order to comply with the VCS requirements, the PP will apply a 10 year crediting period beginning on 13/05/2014 and the first crediting period will conclude on 12/05/2024. AENOR has reviewed and evaluated the proposed deviation, and conclude that it will have no impact on the applicability of the methodology, the additionality or the appropriateness of the baseline	CAR 1	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
during verification		scenario of the project.		
2. Project implementation in accordance with the registered project document and the VCS project description				
Has the VCS project activity been implemented as per the registered VCS-PD?	2.1.	During the on-site visit, the audit team verified facilities and equipment including the substation, generation equipment and transmission line are in place and operation during the monitoring period. CAR 1: The PP is requested to clarify if the changes stated in the monitoring report correspond to deviations from the project description in the registered VCS-PD. Also, the audit team has detected a deviation of the project start date; therefore, the PP shall describe and justify in the monitoring report if the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology. Please see paragraph 3.5 of the VCS Standard, procedure 2) The project activity has been implemented as per the registered VCS-PD. CAR 1 is closed. CL 1: The PP shall provide technical evidence of the project equipment. For example: single-line electrical diagram, location diagram of the wind turbines, technical specification of generation equipment. The project activity has been implemented as per the registered VCS-PD as per technical evidence provided by the PP. CL 1 is closed	CAR 1 CL 1	OK
Are all physical features of the	2.2.	All physical features of the project activity are in place as per the	CL 1	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
VCS project activity proposed in the PD, in place?		registered VCS-PD.		
Have the project participants operated the VCS project activity as per the VCS-PD?	2.3.	Yes, the PP has operated the project activity as per the VCS-PD.	CL 1	OK
Actual status of installation works Project installation should be finished at time of initial verification in so far as the project should be ready to generate emission reductions afterwards. It shall be clearly described the starting date of operation and the progress of the project activity? Is the implementation delayed? What were the reasons for the delay?	2.4.	The project installation was finished at the time of initial verification. The wind power plant started its commercial operation on 13/05/2014 in accordance with UTE communication.	CAR 1 CL 1	OK
Project boundaries Check whether the project boundaries are still in compliance with the ones indicated by the PD.	2.5.	Yes. The project boundaries are in compliance with those indicated in the VCS-PD.	OK	OK
On-site visit Was an on-site visit	2.6.	The on-site visit was conducted on 03 November 2015.	OK	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
conducted? If not, justify the rationale of the decision.				
3. Update on Changes and Incidents (during the Monitoring Period)				
Incidents Identify if there have been any significant incidents, deviant operation modes and/or downtimes of the equipment? Consider e.g. interviews with operational personnel, operational log sheets and analysis of performance data.	3.1.	The audit team has detected some incidents for the operation of the project activity. CL 2: The PP shall provide to the audit team the evidence of the UTE grid interruptions stated in the monitoring report. The detected incidents in the operation are considered no significant as per the UTE reports. CL 2 is closed.	CL 2	OK
Is the information (data and variables) provided in the monitoring report different from that stated in the PD? Has it caused an increase in estimates of the emission reductions in the current monitoring period or is highly likely to increase the estimates of emission reductions in the future monitoring periods?	3.2.	No different data or variables have been detected in the monitoring report.	CAR 1	OK
Personnel	3.3.	No change of personnel has been detected.	OK	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
Find out, if relevant monitoring personnel have been exchanged? In case of changes, assure that the implemented monitoring procedures have not been affected.				
Legislation Find out whether relevant legislation with effect on the project activity in the host country has been changed.	3.4.	No change of legislation has been detected.	OK	OK
4. Monitoring Report – General				
Is the monitoring report (and other supporting documents) provided complete in accordance with latest applicable version of the VCS Program Guide?	4.1.	CAR 2: The PP shall follow the instructions of the VCS-PD form. For example: in section 1.9 of the monitoring report the PP does not detailed if any GHG credits have been claimed under other GHG programs. Also, in section 3.2 for parameter EG_{facility,y}, the monitoring equipment is not clearly identify (type, accuracy class, and serial number, calibration date) The final monitoring report is considered complete in accordance with VCS-PD instructions. CAR 2 is closed.	CAR 2	OK
Is the VCS Monitoring Report Form used by the Project Participants in the monitoring	4.2.	Yes, the Monitoring report uses the Monitoring report template version 3.3	OK	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
report?				
Monitoring period Check if the monitoring period is in line with a) the crediting period and/or b) previous monitoring periods?	4.3	CAR 3: The PP shall clearly state in the monitoring report the end of the monitoring period. The monitoring period is in accordance with the crediting period. CAR 3 is closed.	CAR 3	OK
Transparency Assess if the monitoring report is transparent, i.e. clear and unequivocal	4.4.	Yes, the final monitoring report is transparent.	CAR 2 CAR 3	OK
Misstatements on general issues Assess whether the monitoring report is free of material misstatements regarding issues other than the monitoring parameters. Discuss the monitoring parameters in detail in chapter "Monitoring Parameters".	4.5.	Yes, the final monitoring report is free of material misstatements	CAR 2 CAR 3	OK
5. Compliance of the monitoring plan with the monitoring methodology.				
Is the validated monitoring plan of the proposed VCS project activity in accordance with the	5.1.	Yes, the monitoring plan is in accordance with the applied methodology.	OK	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
applied methodology?				
Are there any monitoring aspects of the project activity that are not specified in the methodology, particularly in the case of small-scale methodologies (e.g. additional monitoring parameters, monitoring frequency and calibration frequency)?	5.2.	No, all the monitoring aspects are specified in the monitoring methodology.	OK	OK
6. Compliance of monitoring with the monitoring plan				
Is the monitoring of reductions in GHG emissions to result from the proposed VCS project activity implemented in accordance with the monitoring plan contained in the PD or the accepted revised monitoring plan?	6.1.	CL 3: The PP is requested to provide the monitoring registers of the parameter $EG_{facility,y}$ considering that this parameters shall be measured continuously as per the monitoring plan. Also, the total value shall be clearly stated in the monitoring report. The monitoring of reduction has been implemented as per the monitoring plan. Monitoring registers of electricity generation have been provided. CL 3 is closed.	CL 3	OK
Have the monitoring plan and the applied methodology been properly implemented and followed by the project participants?	6.2.	Yes, the monitoring plan has been properly implemented by the PP.	CL 3	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
Have all parameters stated in the monitoring plan, the applied methodology and relevant CDM Executive Board decisions been sufficiently monitored and updated as applicable (Project emission, baseline emission, leakage, management and operational system and environmental and social parameters)	6.3.	Yes, all parameters have been sufficiently monitored.	CL 3	OK
Are the responsibilities and authorities for monitoring and reporting in accordance with the responsibilities and authorities stated in the monitoring plan?	6.4.	Yes, they are	OK	OK
7. Monitoring Parameters				
7.1. EG_{facility,y}	7.1.	“net electricity generation supplied by the project plant/unit to the grid”		
Measurement / Determination method Describe how the monitoring parameter was measured / determined.	7.1. 1.	The net electricity has been continuously measured through a bidirectional main meter and a bidirectional backup meter. No failure has been detected in the monitoring equipment. The quantity of electricity supplied by the project plant/unit to the grid and from the grid has been measured, therefore, it is in line with the	CL 3	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Assess whether the measurement or determination method (data generation, frequency, aggregation, equipment, recording, reporting, standards) is in line with the registered monitoring plan of the PD and the applied methodology.		monitoring plan.		
Monitoring Equipment Is the equipment of used for monitoring (quality, type, accuracy, calibration requirements) in accordance with the relevant guidance provided by the CDM Executive Board and is equipment controlled and calibrated in accordance with the monitoring plan?	7.1. 2.	CL 4: The PP shall provide the calibration certificates of the monitoring meters (main and back up) of the net electricity of the project activity that cover the monitoring period. In addition, relevant industry standards Commercial Measurements System by URSEA (URSEA Decision No. 14002 of 27 November 2002) shall be provided to the audit team. The type, accuracy and calibration dates of the energy meters have been indicated in the monitoring report, also, the calibration has been carried as per the monitoring plan in accordance with evidence provided by the PP. CL 4 is closed.	CL 4	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
Accuracy In case of measured (or estimated) values, check whether significant inaccuracies occur; in this case, make sure that appropriate discounts have been considered for ER calculation.	7.1.3.	No significant accuracies have been detected.	CL 4	OK
Monitoring results Are monitoring results consistently recorded as per approved frequency?	7.1.4.	Yes, monitoring results has been recorded monthly.	CL 3	OK
Quality assurance and quality control procedures Have quality assurance and quality control procedures been applied in accordance with the monitoring plan to prevent or identify and correct any errors or omissions in the reported monitoring parameters?	7.1.5.	CL 5: Evidence of the crosscheck in accordance with the monitoring plan shall be provided to the audit team. Crosscheck evidence has been provided; therefore, QA/QC procedures have been applied. CL 5 is closed.	CL 5	OK
Verification Describe how the value and the information flow (from data	7.1.6.	Raw data from energy meters has been verified. Also, SCADA data and DTE invoices from regulator have been verified. No inconsistencies were found.	CL 3 CL 4	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
generation, aggregation, to recording, calculation and reporting) were verified. Consider the measurement / determination procedure, accuracies, QA/QC procedure, source and nature of the evidences. Consider as well plausibility checks as far as possible. Check if the applied value could be backed up by corresponding evidences covering the full monitoring period.			CL 5	
8. Compliance with the calibration frequency requirements for measuring instruments				
Has the calibration been delayed and the calibration has been implemented after the monitoring period in consideration (results of delayed calibration are available)? If so, which conservative approach has been adopted: a) Applying the maximum permissible error of the instrument to the	8.1	No delayed calibration has been detected as per monitoring plan. Calibration has been carried out before the star date of operation.	CL 4	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
measured values taken during the period between the schedule date of calibration and the actual date of calibration, if the results of the delayed calibration do not show any error, or if the error is smaller than maximum permissible error, or b) Applying the error identified in the delayed calibration test, if the error is beyond the maximum permissible error.				
Has the error been applied: a) In a conservative manner, such that the adjusted measured values of the delayed calibration has result in fewer claimed emission reductions?, and b) For all measures taken during the period between the scheduled date of calibration and the actual date of calibration.	8.2	N/A	CL 4	N/A
If the results of the delayed calibration are not available, or the calibration has not been conducted at the time of the verification; has been request	8.3	N/A	CL 4	N/A

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
to the project participants to conduct the required calibration? If so, has the project participants calculated the emission reductions conservatively?				
If it is not possible for the project participant to conduct the calibration at a frequency specified by either the applied methodology, guidance provided by the Board, and/or registered monitoring plan due to reasons beyond the control of project participants; has been followed the requirements deviations in accordance with VCS Standard?	8.4	N/A	CL 4	N/A
If calibration frequency for measuring equipments are not specified neither the monitoring methodology nor the monitoring plan; has the equipments been calibrated in accordance with specifications of the local/national standards, or as manufacturer's specification, or international	8.5	N/A	CL 4	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
standards?				
9. Assessment of data and calculation of greenhouse gas emission reductions				
It is assessed if GHG emission reductions achieved by the proposed VCS project activity are calculated applying the selected methodology.	9.1.	CAR 4: The PP shall calculate the emission reduction in the spreadsheet “ER_Calculation_Peralta” in accordance with the applied methodology in a yearly basis covering the entire monitoring period. Also, the annual calculation of emission reduction shall be conservative. The emission reduction calculation has been carried out as per applied methodology. CAR 4 is closed.	CAR 4	OK
Is a complete set of data for the specified monitoring period available? Are available evidences sufficient both in terms of frequency and in covering the full monitoring period? Are the source and the nature of evidences identified (external or internal, oral or documented, etc.)?	9.2.	Yes, a complete set of the net electricity is available and covers the entire monitoring period.	CL 3	OK
Whether data were not available because activity levels or non-activity parameters were not monitored in accordance with the registered monitoring plan has	9.3.	All data is available.	CL 3 CAR 4	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
the most conservative assumption theoretically possible been made?				
Assess if the calculation is fully traceable. In case of complex calculations an Excel calculation spreadsheet shall be used. All applied formulae must be visible.	9.4	CL 6: The PP shall clarify some issues detected in the calculation spreadsheet of the emission reduction. For example: Expected Emission Reductions, Income low, etc. The final ER calculation spreadsheet is fully traceable and all formulae are visible. CL 6 is closed.	CL 6	OK
Is the spreadsheet with the emission reductions calculations provided complete?	9.5.	Yes, the ER calculation spreadsheet is complete.	CAR 4 CL 6	OK
Has information provided in the monitoring report been cross-checked with other sources such as plant log books, inventories, purchase records, laboratory analysis?	9.6.	Yes, all information stated in the monitoring report has been cross-checked with official sources.	CL 5	OK
Have calculations of baseline emissions, VCS project activity emissions and leakage, as appropriate, been carried out in accordance with the formulae and methods described in the monitoring plan and the applied	9.7.	Yes, the emission reduction calculation has been carried out in accordance with the monitoring plan.	CAR 4	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
methodology document?				
Have any assumptions used in emission calculations been justified?	9.8.	All assumption has been justified.	CAR 4 CL 6	OK
Have appropriate emission factors, IPCC default values and other reference values been correctly applied? Are the most recent data incorporated into the calculation of the ex-post grid emission factor?	9.9.	Not applicable since the grid emission factor has been fixed in the registered VCS-PD (PDD).	N/A	N/A
10. Quality Management; defined organizational structure, responsibilities and competencies Internal QA/QC and document control				
Management System Have the GHG data monitoring system and all VCS monitoring procedures been implemented? Do they comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology?	10.1 .	Yes, the management system complies with the monitoring systems.	CL 3 CAR 4	OK
Roles and Positions Check if all roles and positions	10.2 .	Yes, all roles are clearly defined.	CL 7	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
of each person in the GHG data management process are clearly defined and implemented, from raw data generation to submission of the final data. Check further if only duly qualified personnel is involved in the monitoring procedures.				
Trainings Check if initial trainings have been carried out, in case deemed necessary.	10.3 .	CL 7: Evidence regarding training to the relevant personnel before the project operation shall be provided to audit team. Initial training has been carried out. CL 7 is closed.	CL 7	OK
Troubleshooting procedures Assess whether troubleshooting procedures have been implemented.	10.4 .	Yes, they are.	CL 5	OK
Maintenance procedures Are appropriate maintenance procedures in place?	10.5 .	Maintenance procedures are in place.	CL 4	OK
Reporting procedures Check how reports with relevance for the later determination of emission	10.6 .	Yes, it is.	OK	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
reductions will be generated. Is the frequency of emissions reports established?				
Internal QA/QC Assess whether there are any procedures in place on when, where and how checks and reviews are to be carried out, and what evidence needs to be documented? (This might include spot checks by a second person not performing the calculations over manual data transfers, changes in assumptions and the overall reliability of the calculation processes.)	10.7 .	CL 8: The PP is requested to provide to the audit team the evidence of the review by the General Manager. Procedures to check the monitoring report have been provided. CL 8 is closed.	CL 8	OK
Data collection and data processing systems Check the eligibility of used systems. Does data collection system meet the requirements of the monitoring plan as per the applied methodology?	10.8 .	Yes, data collection system meet the requirements of the monitoring plan	CL 3	OK
Data archive	10.9	All monitoring data have been recorded as per monitoring plan.	CL 3	OK

Checklist Question	Ref	Comments	Draft conclusion	Final conclusion
Check whether all data of monitoring parameters are recorded and archived according to the monitoring plan and the approved methodology.	.			
Data protection Assess whether appropriate measures have been take in order to avoid unintended or intended manipulation of the measured data.	10.1 0	The access to the databases is controlled and available only for authorized personnel.	OK	OK

Table 2 Resolution of Corrective Action and Clarification Requests

Clarifications and corrective action requests by Verification team	Ref. to table 1	Summary of project owner response	Verification team conclusion
CAR 1: The PP is requested to clarify if the changes stated in the monitoring report correspond to deviations from the project description in the registered VCS-PD. Also, the audit team has detected a deviation of the project start date; therefore, the PP shall describe and justify in the monitoring report if the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology. Please see paragraph 3.5 of the VCS Standard, procedure 2)	2.1	The changes stated in the monitoring report correspond to deviations from the project description in the registered VCS-PD. The deviation of the project start date has been justified in the monitoring report. This deviation, does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology.	Change in the start date of crediting period has been clarified. CAR is closed.
CAR 2: The PP shall follow the instructions of the VCS-PD form. For example: in section 1.9 of the monitoring report the PP does not detailed if any GHG credits have been claimed under other GHG programs. Also, in section 3.2 for parameter $EG_{facility,y}$, the monitoring equipment is not clearly identify (type, accuracy class, and serial number, calibration date)	4.1	The PP now detail if any GHG credits have not been claimed under other GHG programs in section 1.9 of the monitoring report. Monitoring equipment is now clearly identified in section 3.2 for parameter $EG_{facility,y}$.	Additional information is complete in the MR: type, serial number and calibration dates of main and back up meters CAR is closed.
CAR 3: The PP shall clearly state in the monitoring report the end of the monitoring period.	4.3	The end of the monitoring period has been stated in the monitoring report, October the 31 st 2015.	Monitoring period is correct. CAR is closed.

Clarifications and corrective action requests by Verification team	Ref. to table 1	Summary of project owner response	Verification team conclusion
CAR 4: The PP shall calculate the emission reduction in the spreadsheet “ER_Calculation_Peralta” in accordance with the applied methodology in a yearly basis covering the entire monitoring period. Also, the annual calculation of emission reduction shall be conservative.	9.1	The ER calculation Peralta has been calculated as per the methodology in a yearly basis covering the entire monitoring period in a conservative way.	Net energy considers the electricity consumptions from the grid, therefore, emission reduction calculation is conservative. CAR is closed
CL 1: The PP shall provide technical evidence of the project equipment. For example: single-line electrical diagram, location diagram of the wind turbines, technical specification of generation equipment.	2.1	Technical diagrams of the project activity have been provided	CL is closed.
CL 2: The PP shall provide to the audit team the evidence of the UTE grid interruptions stated in the monitoring report.	3.1	The table in section 2.1 of the monitoring report indicates UTE grid interruptions. The interruptions have been verified in the DTE reports from UTE, submitted to the Verification team of the VVB.	CL is closed.
CL 3: The PP is requested to provide the monitoring registers of the parameter $EG_{facility,y}$ considering that this parameters shall be measured continuously as per the monitoring plan. Also, the total value shall be clearly stated in the monitoring report.	6.1	Monitoring registers have been provided also with the total value stated in the monitoring report.	CL is closed.
CL 4: The PP shall provide the calibration certificates of the monitoring meters (main and back up) of the net electricity of the project activity that cover the	7.1.2	The laboratory Calibration certificates of these calibrations of UTE have been	The calibration certificates of the main and back up

Clarifications and corrective action requests by Verification team	Ref. to table 1	Summary of project owner response	Verification team conclusion
monitoring period. In addition, relevant industry standards Commercial Measurements System by URSEA (URSEA Decision No. 14002 of 27 November 2002) shall be provided to the audit team.		submitted.	meters are correct. CL is closed.
CL 5: Evidence of the crosscheck in accordance with the monitoring plan shall be provided to the audit team.	7.1.4	The net electricity generation as a result of the project activity to the grid is calculated based on monthly records from meter M1 measurements. The results are presented in the monitoring report. The hourly generation from the SMEC meter has been submitted for crosscheck to the VVB.	CL is closed.
CL 6: The PP shall clarify some issues detected in the calculation spreadsheet of the emission reduction. For example: Expected Emission Reductions, Income low, etc.	9.4	The issues has been clarified in the monitoring report	All issues have been clarified. CL is closed.
CL 7: Evidence regarding training to the relevant personnel before the project operation shall be provided to audit team.	10.3	The project owner has trained the relevant personnel before the project operation. The training will be commensurate with the work being done. The evidence of this received training has been submitted to the VVB.	CL is closed.
CL 8: The PP is requested to provide to the audit team the evidence of the review by the General Manager.	10.7	Evidence of the review by the General Manager has been provided.	CL is closed.