VERIFICATION REPORT FOR

SHANDONG TAIPINGSHAN WIND FARM PROJECT

中国建材检验认证集团股份有限公司
China Building Material Test & Certification Group Co., Ltd.

Document Prepared By China Building Material Test and Certification Group Co., Ltd.
1# Guan Zhuang Dongli, Chaoyang District,
Beijing, 10024, China

www.ctc.ac.cn

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Prepared By	China Building Material Test and Certification Group Co., Ltd
Contact	1# Guan Zhuang Dongli, Chaoyang District, Beijing, 100006, P.R. China, Tel: + 86 10 51167386 Email: ccp@ctc.ac.cn www.ctc.ac.cn
Approved By	Yan Haochun 
Work Carried Out By	Mr. Lucas Dou (Team Leader), Ms. Li Shuzhen(Team Member) Ms. Zhao Jinlan (Internal Technical Reviewer)

Summary:

China Building Material Test and Certification Group Co., Ltd (CTC), commissioned by CGN Carbon Asset Management (Beijing) Co., Ltd., has performed the second periodic verification of the Shandong Taipingshan Wind Farm Project (hereafter referred to as "the Project") covering the monitoring period from 24/04/2012 to 31/12/2015, on the basis of requirements of Verified Carbon Standard (VCS) Version 4.0.

The Project involves the installation and operation of 58 wind turbines with capacity of 850kW each, which amount to a total installed capacity of 49.3MW. The project is located in Weifang City, Shandong Provinces, People's Republic of China. The Project is expected to export annual electricity of 91,030.5 MWh to the North China Power Grid (NCPG) utilizing renewable wind resources. The project activity achieves greenhouse gas (GHG) emissions reductions by displacing electricity from existing fossil fuel-based power plants and likely capacity additions within the given grid.

The Project has been registered as a VCS project (VCS Registration No. 1189) under Verified Carbon Standard (VCS) Version 3.4 using approved CDM methodology ACM0002 "Consolidated methodology for grid-connected electricity generation from renewable sources" (Version 12.2.0) with the crediting period from 27/04/2010 to 23/04/2012. And it is applied for the crediting period deviation from 27/04/2010 to 23/04/2012 to 27/04/2010 to 26/04/2020. And it was also registered as a CDM project on 24/04/2012(ref.5659) with the first renewable crediting period from 24/04/2012 to 23/04/2019 and the second crediting period from 24/04/2019 to 23/04/2026. And no Certified Emission Reductions (CERs) have been requested. This is in accordance to the eminent VCS Guidance for projects that are registered in two GHG programs.

The verification process includes three phases:

1) Desk review of documents;

2) Remote video assessment and follow-up interviews;

3) Issuance of the final verification report and opinion.

CTC appointed a qualified verification team in accordance with internal procedures to perform the verification.

In the course of the verification, four Clarification Requests (CLs) were raised.

As a result of this verification, the verification team confirms that:

-All operations of the Project are implemented and installed as planned and described in the validated Project Description;

- The deviation of crediting period is in compliance with the VCS regulations;

-The registered monitoring plan is in accordance with the applied approved CDM methodology, i.e., ACM0002 “Consolidated methodology for grid-connected electricity generation from renewable sources” (Version 12.2.0).

-The implementation of monitoring is in compliance with the registered monitoring plan.

-The monitoring system is in place and functional;

-The installed equipment for measuring parameters required for calculating emission reductions are calibrated appropriately.

Based on the information observed and evaluated, the verification team confirms that the emission reductions are correctly calculated in the MR (Version 02 dated 18/05/2021).

In conclusion, it is CTC’s opinion that the project activity “Shandong Taipingshan Wind Farm Project”, as described in the Monitoring Report (Version 02), meets all relevant requirements for VCS and all relevant host Party criteria. Hence, CTC is able to certify that the emission reductions from the Project during the monitoring period from 24/04/2012 to 31/12/2015 amount to 307,768 tCO_2e and requests issuance of the equivalent VCUs. The emission reductions of the Project in the separated years are listed below,

Year	BE_y (tCO_2e)	PE_y (tCO_2e)	LE_y (tCO_2e)	ERs (tCO_2e)
2012 (24/04/2012 – 31/12/2012)	58,780	0	0	58,780
2013 (01/01/2013 – 31/12/2013)	81,089	0	0	81,089
2014 (01/01/2014 – 31/12/2014)	83,903	0	0	83,903
2015 (01/01/2015 – 31/12/2015)	83,996	0	0	83,996
Total	307,768	0	0	307,768

1 INTRODUCTION

1.1 Objective

CGN Carbon Asset Management (Beijing) Co., Ltd. has commissioned CTC to verify and provide a verification statement of the emission reductions of the Shandong Taipingshan Wind Farm Project (hereafter referred to as "the Project") which is located in Weifang City, Shandong Province, People's Republic of China for the second monitoring period from 24/04/2012 to 31/12/2015. This monitoring period is following the first monitoring period from 24/04/2012 to 31/12/2015, on the basis of requirement of VCS Standard (Version 4.0) /5/ as well as criteria to provide for consistent project operations, monitoring and reporting.

CTC as the validation/verification body (VVB) of the Project has been accredited as a DOE by UNFCCC and also meets the competence requirements as set out in ISO 14065:2013 /10/.

Verification of emission reductions from a project activity is the independent review and ex post determination by VVB of the monitored reductions in GHG emissions during the reported monitoring period. The objectives of verification are to:

a) Ensure that the project activity has been implemented and operated as per the VCS project description (VCS-PD) /3/ and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;

b) Ensure that the monitoring report and other supporting documents provided are complete in accordance with the latest applicable version of Registration and Issuance Process /9/ and in accordance with the additional requirements stated by the VCS Association (VCSA);

c) Ensure that actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology /6/;

d) Evaluate the data recorded and stored as per the monitoring methodology /6/.

1.2 Scope and Criteria

The verification scope encompasses an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the CTC. The verification scope covers the relevant documents (e.g. the VCS-PD /3/, the monitoring plan, the VCS monitoring report (VCS-MR) /1/, the emission reduction calculation spreadsheet /2/, supporting documents available to the verifier and information collected through performing interviews and during the on-site assessment, VCS's requirements publicly available, relevant rules, including the host country legislation, etc. to be independently reviewed, the Project geographical locations to be

visited on-site, the related project local stakeholders to be interviewed with, and processes that are necessary to acquire objective evidence for the evaluation of the Project compliance to the VCS requirements and associated interpretations.

The above verification activities are conducted according to the VCS requirements. In doing so, the principles of accuracy and completeness, relevance, reliability and credibility were followed.

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

1.3 Level of Assurance

CTC has undertaken a reasonable assurance engagement in accordance with VCS Standard (Version 4.0) /5/. It requires a reasonable level of assurance in verification that GHG assertions are free of material errors, omissions and misrepresentations. The verification conclusion is based on the VCS-PD /3/, VCS-MR /1/, and supporting evidences made available to the verifier and information collected through performing interviews and during the on-site inspection.

1.4 Summary Description of the Project

The Shandong Taipingshan Wind Farm Project involves the installation of 58 wind turbines with capacity of 850kW each, which amount to a total installed capacity of 49.3MW in Weifang City, Shandong Province, People's Republic of China.

The electricity generated from the Project will be supplied to North China Power Grid (NCPG), where geographic and system boundaries can be clearly identified and information on the grid and calculation of baseline emissions is published and public available according to China DNA's Guidance which has been provided and verified during the CDM validation /14/.

The NCPG is dominated by thermal power plants. By exporting expected annual electricity of 91,030.5MWh to the NCPG, the project activity achieves greenhouse gas (GHG) emissions reductions by displacing electricity from fossil fuel-based power plants connected to the grid.

According to the VCS website, the Project has been registered as a VCS project (VCS Registration No. 1189) and the current verification has been finalized for the monitoring period from 24/04/2012 to 31/12/2015. This monitoring period is the second monitoring period of first crediting period.

During the monitoring period from 24/04/2012 to 31/12/2015, the total GHG emission reductions generated by the Project are 307,768 tCO_2e.

2 VERIFICATION PROCESS

2.1 Method and Criteria

The overall verification, from Contract Review to Verification Report & Opinion, was conducted using CTC internal procedures.

CTC verified the Project against the requirements set in VCS /5//7//8//9/, and other relevant VCS requirements.

The following sections outline each step in more detail.

2.2 Document Review

A desk review of the monitoring report and verification report of the last monitoring period /4/, and the registered VCS-PD /15/, the applied monitoring methodology /6/, the VCS monitoring report (VCS-MR) /1/ and supporting documents was conducted by the verification team. The aim of the desk review of the documentation was to verify the completeness of the data and the information presented, to carry out the compliance check of the VCS-MR /1/ with respect to the monitoring plan and the applied methodology /6/. Particular attention was given to the quality of the metering equipment including calibration requirements, the monitored data and its evidence, and the emission reduction calculation. The evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions was also conducted.

Appendix A of this report contains a complete list of all documents and proofs reviewed by the verification team.

2.3 Interviews

Due to the COVID-19, it is impossible to conduct on-site audit work. The verification team used network communication channels and information tools, i.e. video and teleconference platforms, telephone and email, to obtain monitoring records, the operation status and the wind power generators and monitoring meters installed at the project site on 14/05/2021.

The verification team verified that the actual implementation of the Project was as described in the VCS-PD /3/ and VCS-MR /1/. This included the review of the project operation based on the evidence of video observation and presented documents.

During the assessment, the verification team has interviewed with key personnel from the Project owner (the project participant) and the consultancy.

The assessment content and topics/the persons interviewed at the video assessment were provided in the below table.

Date: 14/05/2021	
Interview topics	**Interviewed Organizations and persons**
--The status of VCS project implementation. -- Any changes of the VCS project. -- The project on-site inspection —The evidences of construction status and operation of key equipment, parameters monitoring and data processing activities, monitor equipment and calibration. -- Monitoring data. --Quality Management; organizational structure, responsibilities and competencies; Internal QA/QC Management procedures and document control. --Compliance with National Laws and Regulations.	**Anqiu Taipingshan Wind Power Co., Ltd.** Mr. Li Jiandong
-- Preparation of Monitoring Report. -- Compliance of the monitoring plan with the monitoring methodology --Compliance of monitoring with the monitoring plan -- Assessment of data and calculation of GHG emission reductions	**CGN Carbon Asset Management (Beijing) Co., Ltd.** Ms. Ji Huiying

2.4 Site Inspections

The video assessment involved following activities,

1) An assessment of the implementation and operation of the project activity as per the VCS-PD /3/;

2) A review of information flows for generating, aggregating and reporting the monitoring parameters;

3) Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the approved monitoring plan;

4) A cross-check between information provided in the monitoring report /1/ and data from other sources such as operational records or similar data sources;

5) A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the VCS-PD /3/ and the selected methodology /6/;

6) A review of calculations and assumptions made in determining the GHG data and emission reductions;

7) 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

During the verification of a project activity, to identify issues that need to be further elaborated upon, researched or added to in order to confirm that the project activity meets the VCS requirements and can achieve credible emission reductions, the verification team will issue a Corrective Action Request (CAR), a Clarification Request (CL) or a Forward Action Request (FAR) depending on different situations.

The objective of this phase of the verification is to resolve issues related to the monitoring, implementation and operations of the registered project activity that could impair the capacity of the registered project activity to achieve emission reductions or influence the monitoring and reporting of emission reductions prior to CTC's positive conclusion on the GHG emission reduction calculation.

Findings established during the verification can either be seen as a non-fulfilment of criteria ensuring the proper implementation of a project or where a risk to deliver high quality emission reductions is identified.

A Corrective Action Request (CAR) will be raised if one of the following occurs:

(a) Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;

(b) Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;

(c) Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;

(d) Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

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

A Forward Action Request (FAR) will be raised, for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.

Four CLs have been raised during the current 2nd verification.

2.5.1 Forward Action Requests

No Forward Action Requests were raised during the current 2nd verification.

2.6 Eligibility for Validation Activities

The VVB of "China Building Material Test and Certification Group Co., Ltd" commissioned by the project participant is one of eligible VVBs listed on the VCS website (https://verra.org/project/china-classification-society-certification-company-CTC/), and it holds the accreditation for validation/verification for the sectoral scope: "1. Energy (renewable/non-renewable)", to which the project activity belongs. Therefore, CTC is eligible for the validation/verification of the project activity.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The verification team has checked the official website of other GHG Programs like CDM, GS VER, and is able to confirm that the Project is not included in any GHG programs or any other mechanisms that include GHG allowance trading except VCS and CDM. The net GHG emission reductions generated by the Project during this monitoring period have not been used for compliance under any emission trading programs or mechanisms. The Project have not sought or received any other form of GHG-related environmental credit during this monitoring period.

The project has been registered as CDM project and the registration number is 5659, the first CDM crediting period is form 24/04/2012 to 23/04/2019, and the crediting period has been successfully renewed on 27/04/2019 with the 2nd CDM crediting period from 24/04/2019 to 23/04/2026. The project has been registered as VCS project with Ref. VCS1189 under VCS Standard Version 3.4 and completed validation before 19/03/2020. Furthermore, VCUs of 180,005tCO_2e have been issued for the monitoring period from 27/04/2010- 23/04/2012. It means the gap validation for the project's compliance with the VCS rule has been implemented in the first monitoring period and no further validation is required.

Therefore, the Verification Team confirms that the project is eligible to participate under the VCS Program.

3.2 Methodology Deviations

No deviation from the methodology is needed to be submitted.

3.3 Project Description Deviations

In the registered PD, the crediting period is described as from 27/04/2010 to 23/04/2012. A deviation is requested for the crediting period. The project is registered under VCS Standard Version 3.4 /5/ and completed validation before 19/03/2020. Thus, it remains eligible to apply the crediting period requirements under VCS Standard Version 3.4 which shall be a maximum of ten years and may be renewed at most twice, so the first renewable crediting period of the project should be updated from 27/04/2010 to 23/04/2012 to 27/04/2010 to 26/04/2020.

However, as the project is also registered as a CDM project with a seven year twice renewable project crediting period and furthermore, the project has the lifetime of 20 years, it is not eligible for VCU issuance beyond 26/04/2030.

The verification team confirmed the deviation of the crediting period is correctly and in compliance with the VCS regulation.

Through interviews and document review, the verification team confirms that there are no project description deviations according to the registered PD except the crediting period /3/.

3.4 Grouped Project

N/A

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

4.1.1 Project Implementation in accordance with the VCS PD

CTC has performed a remote video assessment and found that the Project has been put into operation and the electricity generated is supplied to NCPG according to the signed Power Purchase Agreement (PPA) /19/. 58 sets of WTGs with a unit capacity of 0.85MW, providing a total installed capacity of 49.3MW as described in the registered PD have been in operation. The Project is located at the Weifang City, Shandong Province, P. R. China and the geographical coordinates are east longitude from 118°42'46''E to 118°50'27''E and north latitude from 36°10'20''N to 36°13'30''N.

The project was implemented and commissioned on 27 April 2010 when the first turbine was put into operation /3//4/. The actual implementation of the project during this verification period was verified in terms of nameplate capacities of each turbine and monitoring equipment.

Information provided in the monitoring report is in accordance with that stated in the VCS-PD and CDM-PDD. Further analysis of monitored parameters as reported in the monitoring report compared to those estimated in the CDM-PDD is developed in section 4.4 of this report.

As is shown in the diagram of the power connection system /3//19/, the electricity generated by the project and another registered VCS wind project (Ref. 1187) is transmitted to on-site 35kV/110kV transformers which boost the voltage to 110 kV, and then delivered to Muling Substation by 110kV transmission line. The electricity generated by the project is finally delivered to NCPG.

All the monitoring system in operation period is consistent with the description in the registered PD. The control system at the power plant is automated and assures continuous operation, including monitoring on malfunction of equipment. The verification team confirmed through visual inspection and document review that no serious malfunction happened and the plant was under a normal operation as expected in this monitoring period.

According to the information collected during remote video assessment and the relevant evidence provided by project owner, CTC can confirm that no project design change occurred during the monitoring period and the Project was implemented in accordance the VCS-PD /3/.

4.1.2 Compliance of monitoring with the monitoring plan

The verification team has assessed the implementation of monitoring by the project owner against the registered monitoring plan and found all the parameters have been monitored in compliance with the registered monitoring plan.

A short summary on the verification of every parameter listed in the monitoring plan and used for emission reduction calculation is provided below:

Monitoring Parameter Requirement	Assessment/ Observation by the VVB
Data / Parameter: (as in the monitoring plan of PD):	**$EG_{facility,y}$** Quantity of net electricity generation supplied by the Project to the Grid in year y. Calculated based on the measurement results of $EG_{export,y}$ minus $EG_{import,y}$ which were monitored by the electricity meters.
Measuring frequency:	Continuously measurement
Reporting frequency:	Monthly recorded
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
Type of monitoring equipment:	Electricity meters installed at the project site and another project.

Is accuracy of the monitoring equipment as stated in the PD? If the PD does not specify the accuracy of the monitoring equipment, does the monitoring equipment represent good monitoring practise?	Yes. Accuracy level of monitoring meters is as described in the registered VCS- PD /3/. For details see Table 4-1.
Calibration frequency /interval:	Annually as per relevant sectoral standards in China
Is the calibration interval in line with the monitoring plan of the PD? If the PD does not specify the frequency of calibration, does the selected frequency represent good monitoring practise?	Yes.
Company performing the calibration:	See Table 4-1
Did calibration confirm proper functioning of monitoring equipment? (Yes / No):	Yes.
Is(are) calibration(s) valid for the whole reporting period?	Yes. For details see Table 4-1.
If applicable, has the reported data been cross-checked with other available data?	Yes, the reported data has been cross-checked with the electricity sales receipts in line with the registered VCS-PD /3/.
How were the values in the monitoring report verified?	The verification details have been reported in Section 4.4 of this report.
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes.
In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	Not applicable.

Monitoring Parameter Requirement	**Assessment/ Observation by the VVB**
Data / Parameter: (as in monitoring plan of PD):	**$EG_{export,y}$** Electricity supplied to the grid by the Project in year y. Calculated based on the measurement results of the electricity meters. $EG_{export,y} = EG_{A,y}/(EG_{A,y} + EG_{B,y})* EG_{output,y}$
Measuring frequency:	Continuously measurement
Reporting frequency:	Monthly recorded

Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
Type of monitoring equipment:	Electricity meters installed at the project site and another project.
Is accuracy of the monitoring equipment as stated in the PD? If the PD does not specify the accuracy of the monitoring equipment, does the monitoring equipment represent good monitoring practise?	Yes. Accuracy level of monitoring meters is as described in the registered PD /3/. For details see Table 4-1.
Calibration frequency /interval:	Periodically as per relevant sectoral standards in China
Is the calibration interval in line with the monitoring plan of the PD? If the PD does not specify the frequency of calibration, does the selected frequency represent good monitoring practise?	Yes.
Company performing the calibration:	See Table 4-1
Did calibration confirm proper functioning of monitoring equipment? (Yes / No):	Yes.
Is(are) calibration(s) valid for the whole reporting period?	Yes. For details see Table 4-5.
If applicable, has the reported data been cross-checked with other available data?	Yes, the reported data has been cross-checked with the electricity sales receipts in line with the registered VCS-PD.
How were the values in the monitoring report verified?	The verification details have been reported in Section 4.4 of this report.
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes.
In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	Not applicable.

Monitoring Parameter Requirement	**Assessment/ Observation by the VVB**
Data / Parameter: (as in monitoring plan of PD):	$\mathbf{EG_{import,y}}$ Electricity delivered to the project by the grid in year y.
Measuring frequency:	Continuously measurement
Reporting frequency:	Monthly recorded

Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
Type of monitoring equipment:	Electricity meters installed at the Muling 220kV substation.
Is accuracy of the monitoring equipment as stated in the PD? If the PD does not specify the accuracy of the monitoring equipment, does the monitoring equipment represent good monitoring practise?	Yes. Accuracy level of monitoring meters is as described in the registered PD /3/. For details see Table 4-1.
Calibration frequency /interval:	Periodically as per relevant sectoral standards in China
Is the calibration interval in line with the monitoring plan of the PD? If the PD does not specify the frequency of calibration, does the selected frequency represent good monitoring practise?	Yes.
Company performing the calibration:	See Table 4-1
Did calibration confirm proper functioning of monitoring equipment? (Yes / No):	Yes.
Is(are) calibration(s) valid for the whole reporting period?	Yes. For details see Table 4-1.
If applicable, has the reported data been cross-checked with other available data?	Yes, the reported data has been cross-checked with the electricity sales receipts in line with the registered VCS-PD.
How were the values in the monitoring report verified?	The verification details have been reported in Section 4.4 of this report.
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes.
In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	Not applicable.

Furthermore, the verification team has verified that the accuracy of measure of the monitoring equipment was set according to the requirements and all calibration procedures were carried out according to the monitoring plan and manufacturer specifications. The calibration information of the Project in this monitoring period has been listed in Table 4-1 below. The monitoring equipment has been installed in the project activity according to registered monitoring plan. In summary, the verification team is able to verify that the accuracy the monitoring equipments were set according to the registered monitoring plan and relevant sectoral standard of China.

Table 4-1 Calibration records of the meters /17/

Meters	Serial No.	Accuracy	Calibration date	Calibration frequency	Validity
M1	1305712953	0.5S	13/01/2012 13/01/2013 13/01/2014 13/01/2015	Annually	Yes
M2	09070125900004	0.2S		Annually	Yes
M3	09090151400332	0.5S		Annually	Yes
M4	09090151400334	0.5S		Annually	Yes
M5	09090151400336	0.5S		Annually	Yes

Calibration Entity: Electricity Measurement Inspect Center of Linyi Electricity Power Bureau with accreditation certificate (Lu) Faji (2012) D018 with the valid period from 17/05/2012 to 16/05/2015 /18/.

4.1.3 Remaining Issues from Previous Validation or Verification

This is the 2nd verification and the verification team can confirm that there were no any remaining issues from the validation and previous verification report /4/.

4.2 Safeguards

4.2.1 No Net Harm

The Project consists of 58 sets wind power turbines, using clean renewable energy to generate electricity whose environmental impact comply with relevant laws and regulations in the host country. The environmental impacts of the Project are not considered as significant.

4.2.2 Local Stakeholder Consultation

This is the 2nd verification of the project activity. During this monitoring period, the project carried out the communication with local stakeholders in line with the mechanism for on-going communication with local stakeholders and the communications with local stakeholders are being carried out at periodic intervals, i.e. village committee's complaint book were quarterly checked by the contact person, and the contact person visited the villages in Aug 2012, Sep 2013, Aug 2014, Sep 2015 to communicate with stakeholders. Meanwhile, the local authority has also conducted spot checks on the implementation of the project yearly. There are no negative comments received for the project during this monitoring period. The verification team has verified the relevant evidences of the communication /20/ and confirmed the local stakeholder consultation is in line with VCS requirements and all the processed have been implemented to receive comments from local stakeholders as well as communicate with them.

4.3 AFOLU-Specific Safeguards

N/A

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

4.4.1 Parameters and information flow

The parameters required by the monitoring plan and the way CTC has verified the information flow (from data generation, aggregation, to recording, calculation and reporting for these parameters including the values) in the monitoring reports are described below:

Parameters monitored:

$EG_{facility,y}$, Quantity net electricity generation supplied by the Project to the grid

$EG_{export,y}$, electricity exported to the grid by the Project

$EG_{import,y}$, electricity imported from the grid by the Project

The quantity of net electricity supplied to the grid by the Project is the electricity exported to the grid by the Project ($EG_{export,y}$) minus the electricity imported from the grid to the Project ($EG_{import,y}$) Therefore $EG_{facility,y}$ can be calculated as below:

$$EG_{facility,y} = EG_{export,y} - EG_{import,y}$$

$$EG_{export,y} = EG_{A,y} / (EG_{A,y} + EG_{B,y}) * EG_{output,y}$$

Furthermore, the Project shares the same transformer and main transmission line to the grid with another wind farm (Shandong Yishui Tangwangshan Wind Farm project, VCS Ref. 1187). The electricity generated by the Project is transmitted to the transformer at the on-site substation via two 35 kV transmission lines, after merging the electricity generated by the proposed project and 1187 (project 1187 transmits electricity the transformer via other one 35 kV transmission line) at the transformer, the electricity is exported to the NCPG.

There are two electricity meters installed at two 35kV transmission lines that connected the Project to the transformer to monitor the electricity export to and import from the transformer by the Project ($EG_{A,y}$, meter M3 and M4, respectively); and one electricity meter to monitor the electricity export to and import from the transformer by another project 1187 ($EG_{B,y,}$ meter M5). Besides these three meters, there are two meters ($EG_{output,y}$, one as main meter M1 and the other as backup M2) installed at the Muling 220kV substation to monitor the electricity exported to and imported from the grid by both two projects.

As described above, the meters have been installed in accordance with the registered PD. The verification team has checked the location of the meters against the diagram of power connection system and found them to be consistent.

The meter readings are continuously monitored and recorded by the PP and the grid company at 24:00 on the 24th of each month in 2012 and 24:00 on the last day of each month since 2013 /15/ for the calculation of the monthly quantity of net electricity supplied to the grid by the Project. The grid company provided the PP with the sales receipts monthly /16/, which contain the electricity exported to and imported from the grid by these two projects and the calculated value of the electricity exported to the grid by these two projects. For the period 24/04/2012, and 25/12/2012~31/12/2012, separate sales receipts are issued by the grid company.

The electricity sales receipts /16/ to the wind power company issued by the local Grid Company have been used for cross-check of electricity export and import data.

Data in the monthly reading records were used to the report, through a cross check with the sales receipts, and the conservative values from electricity export and import were applied to calculate the net electricity supplied to the grid by the project. The data reported in the monitoring report and Ers calculation spreadsheet has been verified by the verification team. Supporting references and data required to determine the net electricity supplied to the grid by the project is found to be complete and transparent.

Parameters determined ex-ante:

$EF_{grid,CM,y}$, baseline emission factor

The baseline emission factor of the crediting period of the Project has been determined ex-ante in the registered PD /3/. The emission factor of 0.9309 tCO_2e/MWh used in the monitoring period has been verified against the registered PD and found consistent.

4.4.2 Assessment Data and Calculation

A complete set of data for the specified monitoring period is available.

The critical parameter used for the determination of the Emission Reductions is the net electricity supplied to the grid by the Project. The data pertaining to the above parameter are maintained in the identified records. All the data are in compliance with that stated in the Monitoring Report version 02.

As per the methodology ACM0002 Version 12.2.0 /6/ and the VCS-PD /3/, the emission reductions for the Project are calculated as the baseline emissions minus the project emissions. Hence the emission reduction is determined by the following formula:

$ER_y = BE_y - PE_y$

Where,

ER_y: Emission reductions

BE_y: Baseline emissions

PE_y: Project emissions

[Baseline emissions]

The baseline emissions are the baseline emission reductions factor times the net electricity supplied to the grid. Therefore,

$BEy = EF_{grid,\ CM,y} \times EG_{facility,y}$

$EF_{grid,\ CM,y}$: GHG emission factor of the NCPG, calculated ex ante in the registered CDM-PDD and VCS-PD as 0.9309 tCO_2e/MWh

$EG_{facility,y}$: Quantity net electricity generation supplied by the Project to the grid

The quantity net electricity generation supplied by the Project to the grid ($EG_{facility,y}$) can be calculated as:

$EG_{facility,y} = EG_{export,y} - EG_{import,y}$

$EG_{export,\ y} = EG_{output,y} * EG_{A,y} / (EG_{A,y} + EG_{B,y})$

$EG_{import,\ y} = EG_{import,\ total}$

Where:

$EG_{output,y}$: total exported electricity to the grid based on the data metered by the main meter M1;

$EG_{import,\ total}$: total imported electricity from the grid based on the data metered by the main meter M1;

$EG_{A,y}$: the electricity generation of the proposed project based on the data metered by M3 and M4;

$EG_{B,y}$: the electricity generation of another wind farm project based on the data metered by M5;

The verification team has cross-checked the values from the monthly reading records (MRRs) /15/ with the sales receipts /16/ for the period from 24/04/2012 to 31/12/2015 and found consistent except the value on 24/04/2012 as the sales receipts was issued monthly. The verified values are shown in the following tables.

Table 4-2 The electricity generation of the proposed project ($EG_{export,y}$)

Period	Electricity generation of the proposed project and the other project by the meters						
	$EG_{B,y}$ by the meter M5	$EG_{A,y}$ by the meter M3	$EG_{A,y}$ by the meter M4	$EG_{output,y}$ by the meter M1	$EG_{export,y}$		
	B	A1	A2	C	MRR D=(A1+A2)/(A1+A2+B)*C	Sales Receipts (E)	Value (F=Min(D,E))
24/04/2012-24/04/2012	373.24	375.48	655.76	1369.94	1005.88	14705.12	1005.88
25/04/2012-24/05/2012	2614.92	4364.36	4364.92	11235.84	8645.90	8645.90	8645.90
25/05/2012-24/06/2012	2718.52	5081.44	5049.80	12731.84	10038.27	10038.27	10038.27
25/06/2012-24/07/2012	2306.92	3414.60	3405.92	9029.68	6747.47	6747.47	6747.47
25/07/2012-24/08/2012	1803.76	2834.02	2834.02	7398.16	5612.18	5612.18	5612.18
25/08/2012-24/09/2012	2191.00	3225.18	3226.86	8566.80	6395.13	6395.13	6395.13
25/09/2012-24/10/2012	3084.48	4685.24	4684.12	12359.60	9298.46	9298.46	9298.46
25/10/2012-24/11/2012	3229.52	4437.58	4433.10	12010.24	8804.73	8804.73	8804.73
25/11/2012-24/12/2012	2772.84	2746.52	2748.20	8199.84	5449.71	5449.71	5449.71
25/12/2012-31/12/2012	603.68	695.66	697.34	1981.76	1382.59	1382.59	1382.59
Subtotal 2012							**63380.31**
01/01/2013-31/01/2013	2308.32	2405.06	2401.14	7033.84	4751.70	4751.70	4751.70
01/02/2013-28/02/2013	3267.88	3377.22	3354.26	9890.32	6658.08	6658.08	6658.08
01/03/2013-31/03/2013	3360.84	3015.18	3010.98	9299.84	5970.21	5970.21	5970.21
01/04/2013-30/04/2013	4752.72	3910.20	3909.92	12453.76	7746.05	7746.05	7746.05
01/05/2013-31/05/2013	3832.92	2755.20	2747.36	9236.48	5444.21	5444.21	5444.21
01/06/2013-30/06/2013	3268.72	2864.26	2855.86	8908.24	5668.83	5668.83	5668.83
01/07/2013-31/07/2013	2800.84	4679.50	4676.70	12066.56	9286.57	9286.57	9286.57

01/08/2013-31/08/2013	2716.84	3281.46	3284.82	9200.40	6507.77	6507.77	6507.77
01/09/2013-30/09/2013	1397.48	3677.38	3677.38	8689.12	7301.72	7301.72	7301.72
01/10/2013-31/10/2013	3759.84	5578.58	5574.10	14824.48	11086.84	11086.84	11086.84
01/11/2013-30/11/2013	2850.12	4155.76	4151.28	11068.64	8241.13	8241.13	8241.13
01/12/2013-31/12/2013	3382.68	4515.00	4510.80	12317.36	8959.52	8959.52	8959.52
Subtotal 2013							**87622.61**
01/01/2014-31/01/2014	2878.68	3951.36	3947.16	10686.72	7832.21	7832.21	7832.21
01/02/2014-28/02/2014	3851.96	5416.60	5413.80	14587.76	10760.62	10760.62	10760.62
01/03/2014-31/03/2014	6983.48	5544.42	5536.58	17935.28	11001.75	11001.75	11001.75
01/04/2014-30/04/2014	1835.68	2896.32	2893.52	7569.76	5747.50	5747.50	5747.50
01/05/2014-31/05/2014	6064.52	5142.20	5137.44	16247.44	10218.81	10218.81	10218.81
01/06/2014-30/06/2014	2738.96	4070.92	4074.28	10786.16	8071.86	8071.86	8071.86
01/07/2014-31/07/2014	1867.32	2932.86	2933.14	7659.52	5810.02	5810.02	5810.02
01/08/2014-31/08/2014	1259.72	1497.02	1500.10	4214.32	2967.18	2967.18	2967.18
01/09/2014-30/09/2014	836.92	1459.92	1459.08	3720.64	2891.58	2891.58	2891.58
01/10/2014-31/10/2014	3311.00	4148.34	4152.82	11492.80	8215.83	8215.83	8215.83
01/11/2014-30/11/2014	2724.12	3548.72	3544.24	9726.64	7027.62	7027.62	7027.62
01/12/2014-31/12/2014	3750.60	5192.04	5188.12	14039.52	10313.14	10313.14	10313.14
Subtotal 2014							**90858.12**
01/01/2015-31/01/2015	3192.56	4438.98	4438.98	11978.56	8810.32	8810.32	8810.32
01/02/2015-28/02/2015	2932.44	3596.32	3591.84	10027.60	7122.11	7122.11	7122.11
01/03/2015-31/03/2015	5336.24	5061.28	5056.80	15363.92	10058.89	10058.89	10058.89

01/04/2015-30/04/2015	6027.56	6065.78	6062.98	18047.04	12055.76	12055.76	12055.76
01/05/2015-31/05/2015	3411.24	4935.42	4930.66	13180.64	9794.24	9794.24	9794.24
01/06/2015-30/06/2015	2816.52	4325.86	4324.74	11366.96	8575.04	8575.04	8575.04
01/07/2015-31/07/2015	910.56	1740.76	1743.56	4363.04	3459.08	3459.08	3459.08
01/08/2015-31/08/2015	1680.84	2567.74	2564.94	6750.48	5085.19	5085.19	5085.19
01/09/2015-30/09/2015	1182.72	1617.42	1613.22	4377.12	3204.11	3204.11	3204.11
01/10/2015-31/10/2015	2226.00	3265.36	3260.88	8663.60	6460.14	6460.14	6460.14
01/11/2015-30/11/2015	3767.68	4259.50	4260.06	12200.32	8459.29	8459.29	8459.29
01/12/2015-31/12/2015	2843.12	4016.32	4008.48	10772.08	7954.03	7954.03	7954.03
Subtotal 2015							**91038.21**
Total							**332,899.25**

Table 4-3 Calculation of net electricity supplied to the gird ($EG_{import,y}$)

Period	$EG_{import,y}$		
	MRR	Sales Receipts	Value
	G	H	I=Max(G,H)
24/04/2012-24/04/2012	-	-	-
25/04/2012-24/05/2012	32.56	32.56	32.56
25/05/2012-24/06/2012	29.04	29.04	29.04
25/06/2012-24/07/2012	31.68	31.68	31.68
25/07/2012-24/08/2012	28.16	28.16	28.16
25/08/2012-24/09/2012	30.80	30.80	30.80
25/09/2012-24/10/2012	22.88	22.88	22.88
25/10/2012-24/11/2012	22.00	22.00	22.00
25/11/2012-24/12/2012	30.80	30.80	30.80
25/12/2012-31/12/2012	8.80	8.80	8.80
Subtotal 2012			**236.72**
01/01/2013-31/01/2013	25.52	25.52	25.52
01/02/2013-28/02/2013	34.32	34.32	34.32

01/03/2013-31/03/2013	39.60	39.60	39.60
01/04/2013-30/04/2013	41.36	41.36	41.36
01/05/2013-31/05/2013	51.04	51.04	51.04
01/06/2013-30/06/2013	58.08	58.08	58.08
01/07/2013-31/07/2013	44.00	44.00	44.00
01/08/2013-31/08/2013	42.24	42.24	42.24
01/09/2013-30/09/2013	48.40	48.40	48.40
01/10/2013-31/10/2013	43.12	43.12	43.12
01/11/2013-30/11/2013	41.36	41.36	41.36
01/12/2013-31/12/2013	44.88	44.88	44.88
Subtotal 2013			**513.92**
01/01/2014-31/01/2014	58.08	58.08	58.08
01/02/2014-28/02/2014	66.88	66.88	66.88
01/03/2014-31/03/2014	63.36	63.36	63.36
01/04/2014-30/04/2014	66.00	66.00	66.00
01/05/2014-31/05/2014	51.92	51.92	51.92
01/06/2014-30/06/2014	50.16	50.16	50.16
01/07/2014-31/07/2014	64.24	64.24	64.24
01/08/2014-31/08/2014	59.84	59.84	59.84
01/09/2014-30/09/2014	68.64	68.64	68.64
01/10/2014-31/10/2014	51.92	51.92	51.92
01/11/2014-30/11/2014	58.96	58.96	58.96
01/12/2014-31/12/2014	66.88	66.88	66.88
Subtotal 2014			**726.88**
01/01/2015-31/01/2015	66.88	66.88	66.88
01/02/2015-28/02/2015	63.36	63.36	63.36
01/03/2015-31/03/2015	66.00	66.00	66.00
01/04/2015-30/04/2015	51.92	51.92	51.92
01/05/2015-31/05/2015	76.56	76.56	76.56
01/06/2015-30/06/2015	64.24	64.24	64.24
01/07/2015-31/07/2015	59.84	59.84	59.84
01/08/2015-31/08/2015	68.64	68.64	68.64
01/09/2015-30/09/2015	69.52	69.52	69.52
01/10/2015-31/10/2015	73.92	73.92	73.92

01/11/2015-30/11/2015	69.52	69.52	69.52
01/12/2015-31/12/2015	76.56	76.56	76.56
Subtotal 2015			**806.96**
Total			**2,284.48**

Table 4-4 Calculation of baseline emission reductions

Period	$EG_{export,y}$ (MWh)	$EG_{import,y}$ (MWh)	$EG_{facility,y}$ (MWh)	$EF_{grid,CM,y}$ (tCO_2e/MWh)	BE_y (tCO_2e)
24/04/2012 – 31/12/2012	63,380.31	236.72	63,143.59	0.9309	58,780
01/01/2013-31/12/2013	87,622.61	513.92	87,108.69	0.9309	81,089
01/01/2014-31/12/2014	90,858.12	726.88	90,131.24	0.9309	83,903
01/01/2015-31/12/2015	91,038.21	806.96	90,231.25	0.9309	83,996
Total	**332,899.25**	**2,284.48**	**330,614.77**	**0.9309**	**307,768**

The verification team has confirmed the project emissions are regarded as zero and no leakage would be accounted for the Project according to the methodology ACM0002 version 12.2.0.

The verification team has also confirmed the emission reductions of the project have been conservatively calculated in line with above mentioned Formulas in the emission reduction calculation spreadsheet /2/. The total emission reductions have been summarized in the emission reduction calculation spreadsheet /2/ and checked to be correctly accounted.

Table 4-5 Verified Emission Reductions of the Project

Period	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
24/04/2012 – 31/12/2012	58,780	0	0	58,780
01/01/2013 – 31/12/2013	81,089	0	0	81,089
01/01/2014 – 31/12/2014	83,903	0	0	83,903
01/01/2013 – 31/12/2013	83,996	0	0	83,996
Total	307,768	0	0	307,768

By cross-check with the electricity sale receipts /16/, the verification team confirms that the monitoring results as listed in the Monitoring Report /1/ and emission reductions calculation spread sheet /2/ are conservative. The verification team confirms that the applied spreadsheet

formulas and connections are correct and in line with the indicated emission reduction calculation in the monitoring plan contained in the VCS-PD /3/ and the applied methodology /6/.

Comparison of Ers

Based on the above assessment, CTC can conclude that the emission reduction during the monitoring period from 24/04/2012 to 31/12/2015 have been quantified correctly in accordance with the project description and applied methodology /6/, and the emission reduction during the monitoring period is verified as 307,768 tCO_2e. Compared with the estimated emission reductions under the same days of 1,347 from 24/04/2012 to 31/12/2015 in the VCS-PD /3/, 312,725(=84,740*1,347/365) tCO2e, the verified emission reduction is (1.59%) less than the estimated value.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

The evidences used to determine the GHG emission reductions are assessed as follows:

Assessment of the Evidence Quality	
Parameters monitored	(i) $EG_{export,y}$ (ii) $EG_{import,y}$ (iii) $EG_{facility,y}$
Monitoring method	The quantity of electricity supplied to the gird ($EG_{export,y}$) and electricity imported from the grid ($EG_{import,y}$) by the project are measured by bi-direction meters. The net electricity supplied by the project (Egfacilitu,y) is calculated as $EG_{export,y}$ minus $EG_{import,y}$.
Measuring/Reading/ Recording frequency	The parameters are continuously measured and monthly recorded.
Calibration frequency/ interval	See Table 4-5 Verified calibration information of monitoring meters. Through on-site observation and checking the calibration records of meters, the team confirmed that all the monitoring meters meet the rated accuracy level and the calibration frequency fulfils the requirement as described in the monitoring plan.
Calibration cover the monitoring period	The verification team confirms that the validity period of all conducted calibrations covers this monitoring period from 24/04/2012 to 31/12/2015.
Data reported	Through cross checking with the electricity sale receipts, the monitored data can be confirmed as acceptable to calculate emission reductions.

In summary, all necessary documentation is collected, referenced and is easily accessible in hard-copy or electronic format. The data pertaining to the monitored parameters are maintained in the identified internal records and consistent with the values stated in the Monitoring Report /1/ and ER calculation spreadsheet /2/. Key data have been cross-checked via external sources,

such as electricity sale receipts.

4.6 Non-Permanence Risk Analysis

The Project has set up a complete data management system to keep safely the record of the data collected during monitoring. The project will perfect the whole monitoring procedure by developing the CDM manual, tracking information from the primary source to the end-data calculations in paper document format. It is the responsibility of the proposed project owner to provide additional necessary data and information for validation and verification requirements of respective DOE. Physical documentation such as paper-based maps, diagrams and environmental assessment are collated in a central place, together with this monitoring plan. All paper-based information is stored by the proposed project owner and kept at least one copy.

At the end of each month, the monitoring data are filed in a spreadsheet, and the paper-based printout are also archived as well. Furthermore, the project owner collects the sales receipts for the electricity supplied to the grid as a cross-check, and compiled the monitoring report including the monitoring data and relevant evidence at the end of each crediting year.

All the monitoring system has been verified during remote video assessment. It was also confirmed during the assessment that all the staff involved in the individual projects has received periodic training on operation and maintenance of the hydropower plant.

In summary, the verification team has ensured that the quality management system for the Project is in place. The documented instructions including the responsibilities have been properly implemented and in line with the monitoring report /1/ and VCS-PD /3/. The internal review at a regular interval ensures the quality assurance of the monitoring procedures.

5 VERIFICATION CONCLUSION

CTC has carried out the 2nd periodic verification of the project “Shandong Taipingshan Wind Farm Project”. The verification was performed based on the requirements set by Voluntary Carbon Standard (VCS) Version 4.0 /5/, as well as criteria given to provide for consistent project operations, monitoring and reporting. This verification covers the period from 24/04/2012 to 31/12/2015 inclusive.

In the course of the verification four Clarification Requests (CL) were raised. The verification is based on the VCS-MR /1/, the VCS-PD /3/, ER calculation spread sheet /2/ and supporting documents available to CTC.

As the result of the verification, CTC confirms that:

- The project activity has been implemented and operated as per the VCS-PD /3/ and that all physical features (technology, project equipment, and monitoring and metering equipment) of the Project are in place;

- The VCS-MR /1/ and other supporting documents provided are complete in accordance with the latest applicable version of the VCS Registration & Issuance Process /9/ and in accordance with the additional requirements stated by the VCS Association (VCSA);

- The actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology i.e. ACM0002 version 12.2.0 /6/;

- The GHG emission reductions are calculated without material misstatements and in a conservative and appropriate manner.

Based on the evidence and information that are considered necessary to guarantee that GHG emission reductions are appropriately calculated, CTC confirms the following statement:

Verification period: From 24/04/2012 to 31/12/2015

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
2012 24/04/2012-31/12/2012	58,780	0	0	58,780
2013 01/01/2013-31/12/2013	81,089	0	0	81,089
2014 01/01/2014-31/12/2014	83,903	0	0	83,903
2015 01/01/2015 – 31/12/2015	83,996	0	0	83,996
Total	307,768	0	0	307,768

APPENDIX A: REFERENCES

Documents provided by the Project Participant and relevant background documents have been reviewed or referenced for the periodic verification conclusions.

Ref no.	Reference Document
/1/	CGN Carbon Asset Management (Beijing) Co., Ltd. , VCS Monitoring report Version 01 dated 09/03/2021 CGN Carbon Asset Management (Beijing) Co., Ltd. , VCS Monitoring report Version 02 dated 18/05/2021
/2/	CGN Carbon Asset Management (Beijing) Co., Ltd., ER calculation spreadsheet
/3/	CGN Carbon Asset Management (Beijing) Co., Ltd., registered VCS-PD dated 28/12/2013
/4/	Shenzhen CTI International Certification Co., Ltd, Verification Report Version 01 dated 06/01/2014
/5/	VCS Association, Voluntary Carbon Standard Version 3.4 and Version 4.0
/6/	CDM Executive Board, ACM0002 Consolidated baseline methodology for grid-connected electricity generation from renewable sources Version 12.2.0
/7/	VCS Association, Monitoring Report Template Form Version 4.0
/8/	VCS Board, VCS Program Guide Version 4.0
/9/	VCS Association, Registration & Issuance Process Version 4.0
/10/	International Organization for Standardization, ISO 14064-2:2006, ISO 14064-3:2006 and ISO 14065:2013 (ISO, www.iso.org).
/11/	CDM Executive Board, Tool to calculate the emission factor for an electricity system, Version05.0
/12/	IPCC: Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories Reference Manual
/13/	China National Economic Trading Commission, Technical Administrative Code of Electric Energy Metering, DL/T 448-2016
/14/	The registered CDM PDD and the validation report
/15/	The electricity monthly monitoring records covering this monitoring period

/16/	The electricity sale receipts covering this monitoring period
/17/	Calibration Certificates for Meter Measurement with the validity covering this monitoring period
/18/	Metrological Authorization Certificate of the calibration entity
/19/	Power Purchasing Agreement
/20/	The relevant local stakeholder communication evidences provided by the PP

APPENDIX B: RESOLUTION OF CORRECTIVE ACTION REQUESTS AND CLARIFICATION REQUESTS

0 CAR, 3 CLs and 0 FAR were raised in this 2nd verification.

Findings	PP's response	Verification teams conclusion
CL-1: The crediting period is changed in this monitoring period. More detailed explanation should be provided to identify the relevant change is in compliance with the VCS regulations.	In the registered PD, the crediting period is described as from 27/04/2010 to 23/04/2012. A deviation is requested for the crediting period. The project is registered under VCS Standard Version 3.4 and completed validation before 19/03/2020. Thus, it remains eligible to apply the crediting period requirements under VCS Standard Version 3.4 which shall be a maximum of ten years and may be renewed at most twice, so the first renewable crediting period of the project should be updated from 27/04/2010 to 23/04/2012 to 27/04/2010 to 26/04/2020. Therefore, the project crediting period is ten years, twice renewable for a total of 30 years. However, as the project is also registered as a CDM project with a seven year twice renewable project crediting period and furthermore, the project has the lifetime of 20 years, it is not	The verification team has checked the relevant VCS regulations, and confirmed the deviation of the crediting period is in compliance with the VCS regulation. Hence, this CL is closed.

	eligible for VCU issuance beyond 26/04/2030. Please refer to the monitoring report (Version 02, 18/05/2021).	
CL-2: The calibration information of the monitoring equipments is not provided in the monitoring report. And the calibration records of M2-M5 in 2014 is not provided.	The calibration information of the monitoring equipments had been provided in the monitoring report (Version 02, 18/05/2021). The calibration records of M2-M5 in 2014 had been provided.	The verification team has checked the provided evidences and confirmed all the necessary evidences of the calibration have been provided and the relevant information has been correctly provided in the revised MR. Hence, this CL is closed.
CL-3: The evidences for the monitoring records of 24/04/2012 are not provided and the value of $EG_{export,y}$ on 24/04/2012 is different between the monitoring report and Ers calculation sheet	The evidences for the monitoring records of 24/04/2012 had been provided. The value of $EG_{export,y}$ on 24/04/2012 in the monitoring report had been consistent with the Ers calculation sheet.	The verification team has checked the provided evidences and confirmed all the necessary evidences of the monitoring records have been provided and the relevant information has been correctly applied in the ER's calculation. Hence, this CL is closed.
CL-4: The information on the local stakeholder consultation during the monitoring period is not provided in the MR.	The relevant information has been provided in the revised monitoring report and the relevant evidences have been provided.	The verification team has checked the revised MR and the provided evidences and confirmed all the necessary information and evidences has been provided and the local stakeholder consultation during the monitoring period is correctly implemented. Hence, this CL is closed.

APPENDIX C: CERTIFICATES OF COMPETENCE

ctc 中国建材检验认证集团股份有限公司

CERTIFICATE OF APPOINTMENT

Ms. Zhao Jinlan

Satisfies the requirements as specified in the CTC CCP and is hereby appointed as

CDM Validator/verifier.

The present appointment will terminate on 31/12/2023.

Date of Issue: 01/01/2021

Zhu Lianbin
CTC General Manager

ctc 中国建材检验认证集团股份有限公司

CERTIFICATE OF APPOINTMENT

Mr. Dou Yonghua (Lucas)

Satisfies the requirements as specified in the CTC CCP and is hereby appointed as

CDM Validator/verifier.

The present appointment will terminate on 31/12/2023.

Date of Issue: 01/01/2021.

Zhu Lianbin
CTC General Manager

ctc 中国建材检验认证集团股份有限公司

CERTIFICATE OF APPOINTMENT

Ms. Li Shuzhen

Satisfies the requirements as specified in the CTC CCP and is hereby appointed as

CDM Validator/verifier.

The present appointment will terminate on 31/12/2023.

Date of Issue: 01/01/2021.

Zhu Lianbin
CTC General Manager