VERIFICATION REPORT FOR

GUOHUA RONGCHENG PHASE III WIND FARM PROJECT

Document Prepared By China Classification Society Certification Co., Ltd.

Contact Information

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Summary:

China Classification Society Certification Co., Ltd. (hereafter referred to as "CCSC") has been commissioned by Guohua Energy Investment Co., Ltd. to perform the verification of greenhouse gas emission reductions of the project activity "Guohua Rongcheng Phase III Wind Farm Project" (UNFCCC Ref. No. 6580, VCS project ID: 1304, hereafter referred to as "the project activity") reported in the monitoring report during monitoring period 01/02/2014 to 31/01/2018.

The verification scope is defined as a periodic independent and objective review and ex-post determination by the Designated Operational Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up on-site visit and interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using CCSC internal procedures.

No Corrective Action Request (CAR) and two Clarification Requests (CL) were raised in the verification process and successfully closed upon the project proponent taken actions and submitted the revised monitoring report and supporting evidence. No Forward Action Request (FAR) was raised during this verification.

In summary, CCSC confirms that the Project is implemented as planned and described in the validated and approved CDM-PDD, which can be found on the VCS project webpage https://registry.verra.org/app/projectDetail/VCS/1304. Actual monitoring activities complied with the monitoring plan. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the Project reduces GHG emission. The GHG emission reduction is calculated without material misstatements, and the emission reductions verified totalize 361,920 tons of CO_2e for the monitoring period.

Our opinion relates to the Project's GHG emissions and the resulting GHG emission reductions viz. Verified Carbon Units (VCUs) reported are based on the valid project baseline, monitoring plan and associated documents. Based on the evidence and information that are considered necessary to guarantee that GHG emission reductions are appropriately calculated, CCSC confirms following statement:

Vintage	BE (tCO_2)	PE (tCO_2)	LE (tCO_2)	ER (tCO_2)
2014 (01/02/2014 to 31/12/2014)	73,238	0	0	73,238
2015 (01/01/2015 to 31/12/2015)	90,891	0	0	90,891
2016 (01/01/2016 to 31/12/2016)	94,891	0	0	94,891
2017 (01/01/2017 to 31/12/2017)	93,307	0	0	93,307
2018 (01/01/2018 to 31/01/2018)	9,593	0	0	9,593
Total	361,920	0	0	361,920

1 INTRODUCTION

1.1 Objective

Guohua Energy Investment Co., Ltd. has commissioned Classification Society Certification Company (hereafter referred to as "CCSC") to verify the emission reductions of the Verified Carbon Units (VCU) of Guohua Rongcheng Phase III Wind Farm Project (hereafter referred to as "the Project"), which is located in Chengshan Town, Rongcheng City, Shandong Province, People's Republic of China for the period from 01/02/2014 to 31/01/2018.

CCSC 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.

The objective of verification is to verify the reported voluntary emission reductions generated by the Project for the period from 01/02/2014 to 31/01/2018 and to confirm that actual monitoring systems and procedures are in compliance with that described in the monitoring plan and the additional requirements stated by Verra.

1.2 Scope and Criteria

The verification scope is defined as an independent and objective review of the registered CDM-PDD, the Project's baseline study and Monitoring Report (MR) and other relevant documents. The information in these documents is reviewed against VCS Version 4.3 requirements, UNFCCC rules and associated interpretations.

The verification is not meant to provide any consulting towards the client. However, stated requests for forward actions and/or corrective actions may provide input for improvement of the Project monitoring towards reductions in the GHG emissions.

1.3 Level of Assurance

CCSC has undertaken a reasonable assurance engagement in accordance with VCS version 4.3. 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-MR, CDM-PDD, 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

Project title	Guohua Rongcheng Phase III Wind Farm Project
UNFCCC reference number	6580
VCS reference number	1304
Crediting period (VCS)	17/10/2010 to 16/10/2020 (10 years)
Monitoring period	01/02/2014 to 31/01/2018
Applied Methodology/Version	ACM0002 version 12.3.0 Consolidated baseline methodology for grid-connected electricity generation from renewable sources
Scope/Technical Area	Scope 1 / TA 1.2
UNFCCC link:	https://cdm.unfccc.int/Projects/DB/SGS-UKL1341239637.71/view
VCS link:	https://registry.verra.org/app/projectDetail/VCS/1304
Project proponent	Guohua Resourceful (Rongcheng) Wind Power Generation Co., Ltd. (Project Owner, host country, P. R. China)
Location of the project	Located in Chengshan Town, Rongcheng City, Shandong Province, People's Republic of China Geographic coordinates: The geographic coordinates of the project: 121° 11'-122° 42' east and 36° 41'-37° 35' north

The Guohua Rongcheng Phase III Wind Farm Project (hereafter referred to as the project) developed by Guohua Resourceful (Rongcheng) Wind Power Generation Co., Ltd. (hereafter referred to as the project proponent) is a wind power project located in Chengshan Town, Rongcheng City, Shandong Province, People's Republic of China. The total installed capacity of the Project is 49.5MW consisting of 33 sets of wind turbine with unit capacity of 1.5MW. The project started construction on 01/12/2009, and the first wind turbine started operation 17/10/2010. The electricity generated by the project is sold to the North China Power Grid. The expected annual net electricity supply is 100,263 MWh. The annual amount of emission reductions are expected to be 89,823 tCO_2e over the crediting period.

2 VERIFICATION PROCESS

2.1 Method and Criteria

The overall verification, from Contract Review to Validation Report & Opinion, was conducted using CCSC internal procedures. CCSC verified the information contained in the documents reviewed against the requirements set in VCS Standard Version 4.3, CDM M&P, the latest version of the CDM Validation and Verification Standard, and relevant UNFCCC requirements and applying standard auditing techniques.

2.2 Document Review

Verification was conducted using CCSC's procedures in line with the requirements specified in the VCS Standard version 4.3, CDM M&P, the latest version of the CDM Validation and Verification Standard, and relevant UNFCCC requirements and applying standard auditing techniques.

The Monitoring Report (VCS-MR) submitted by Guohua Energy Investment Co., Ltd., the registered CDM Project Design Document (CDM-PDD) and additional background documents related to the project design and baseline, i.e. country Law, validation report, Approved methodology, Clarifications on Validation Requirements to be Checked by a certified validation body were reviewed.

Furthermore, crosschecks were made between information provided in the CDM-PDD and information from sources other than those used.

2.3 Interviews

The follow-up interview was conducted the physical site visit on 09/07/2022 by Mr. TAN Wenbin (Team Leader) and Ms. Wang Chen (Trainee) from CCSC, which is focused on the issues identified during the desk review. The main topics of the interviews are summarized in Table 1.

Table 1. Interview topics

Interviewed Organization and Persons	Interview Topics
Guohua Rongcheng Phase III Wind Farm Project Mr. SUN Tian, Director of the plant Mr. SONG Junxiao, Operation manager of the plant Mr. YUE Zhuangzeng, Safety manager of the plant	↳ Project background information ↳ Project technology, operation, maintenance and monitoring capability. ↳ Project monitoring and management plan. ↳ 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.
Guohua Energy Investment Co., Ltd. Mr. HU Weiping	↬ Applicability of selected methodology. ↬ Baseline determination. ↬ Emission reductions calculation.
Local stakeholders: Ms. YU Xiuping Mr. QU Haibo Ms. ZHANG Yuling Mr. LIU Jun	↬ The process and participation of the stakeholder consultation ↬ The environmental and social imparts of the project ↬ Any complaints by the local stakeholders and the implementation of the mitigation measures

2.4 Site Inspections

The assessment team performed the physical on-site verification on 09/07/2022. Site inspection was conducted as follows:

Duration of on-site inspection: 09/07/2022				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	Open meeting - Scope of work - VCS rules and regulations - Verification methodology/tool/guideline - Timeframe - Procedures for verification - CCSC internal approval process - Confidentiality	project site	09/07/2022	Mr. TAN Wenbin Ms. Wang Chen
2.	Management interview - Implementation & Operation - Monitoring System - Information flow - Management & Operation Procedure - Local stakeholder consultation - Sustainable development contribution	project site	09/07/2022	Mr. TAN Wenbin Ms. Wang Chen
3.	Site visit - Inspection of installations (Turbines, Centre control room, On-site Meters, etc.) - Interviews about operation procedures, meter reading, training, etc.	Project site	09/07/2022	
4.	Documents review - Implementation	Project site	09/07/2022	

	- Calibration - QA/QC procedures - Qualification & Training - Monitoring records - Cross-check data - ER calculations			
5.	Close meeting - Summary of findings - Follow-up actions	Project site	09/07/2022	

The interviewed personnel and objective are listed in above table.

Through onsite inspection, the verification can confirm that the project is implemented as planned and described in the validated CDM-PDD. Actual monitoring activities complied with the monitoring plan. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project reduces GHG emission.

2.5 Resolution of Findings

The objective of this phase of the validation is to resolve issues that require further elaboration, research or expansion prior to CCSC's positive conclusion on the project design.

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

(a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable, verifiable and additional emission reductions;

(b) The applicable VCS requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

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

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

To guarantee the transparency of the validation process, a summary of each finding, including the issues raised, the response(s) provided by the project proponent, and the final conclusions and any resulting changes to project documents are documented in the Appendix A. No CAR, two CLs and *no* FAR were raised and successfully closed in this verification.

2.5.1 Forward Action Requests

No FAR was raised during the verification process. Also there are no remaining from former verification and validation.

2.6 Eligibility for Validation Activities

Not applicable as China Classification Society Certification Co., Ltd. holds the accreditation for the validation and verification for projects under scope 1.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

Through reviewing the registered CDM-PDD and validation report at UNFCCC website, it was validated that the project has also been registered as a CDM project with reference No. 6580. By checking https://registry.verra.org/app/projectDetail/VCS/1304, it is confirmed that the project also registered as a VCS project. The project does not participate in the other emissions trading program by checking public information on Internet and interviewing with project owner, and it is confirmed by the verification team that the project is not registered as a CCER project in China. The project would claim for either CERs or VCUs, however CERs and VCUs would not been claimed together in the same period confirmed by checking statement issued by project owner.

The verification team reviewed issuance information in VCS/CDM registry system, and confirmed that GHG Emission Reductions Credits have been issued as follows:

Table 2. List of GHG emission reduction credits issued

Monitoring period	GHG emission reductions (tCO_2e)	Credit Type	Program
17/10/2010 to 18/07/2012	152,804	VCU	VCS
01/08/2012 to 31/01/2014	133,851	CER	CDM

Besides, the PP has issued the statement that the PP will not request the issuance of CERs under CDM and the VCUs will not be double counted./7/ Therefore, CCSC consider the project is eligible to participate under the VCS Program as there is no double counting for the emission reduction during any period.

Since China has initiated ETS in July 2021, and As per the Notice (Huan ban qi hou [2021]No.9) issued by Ministry of Ecology and Environment of P.R.China (MEE), the fossil fuel power and/or heat generation plants in Gansu Province are covered by China ETS, and also other seven industries will be included in the future. However, as per the notice, the project activity is not covered by the mandatory emission control scheme and there is no emission cap enforced for the project owner. Also, the CCSC verification team reviewed the regulation, and realises that the allowance (CEA) for power generation industries will be allocated on the basis of carbon emission intensity, i.e. the CEA allocation is not related with the components of local grid. Furthermore, the CCSC verification team checked the No Double Counting Statement issued by the project owner, and confirms the PP has not applied for and will not apply for another form of GHG-related environmental credit, including renewable energy certificates, during this monitoring period. In summary, CCSC verification team can conclude that net GHG emission reductions generated during this monitoring period have not been used and will not be used for compliance under other programs or mechanisms.

3.2 Methodology Deviations

Not applicable as no deviation for methodology.

3.3 Project Description Deviations

The project is registered under VCS 3.4, and the VCUs have been claimed since 17/10/2010. It remains eligible to apply the crediting period requirements under VCS 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 shall be updated to be 17/10/2010 to 16/10/2020. Besides, since the project has been registered under CDM, and is not eligible for VCU issuance beyond the end of the total project crediting period under CDM (31/07/2033). However the project lifetime is 20 years. Therefore the project crediting life would be 17/10/2010 – 16/10/2030. This deviation is the change on the duration of the crediting period, which does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario.

3.4 Grouped Project

Not applicable as this is not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

Project description.

CCSC verification team has performed an on-site visit and found that the Project has been put into operation and the electricity generated is supplied to North China Power Grid according to the signed Power Purchase Agreement (PPA). It's witnessed that the Project installs 33 sets of wind turbine with unit capacity of 1.5MW, and the total installed capacity of the Project is 49.5MW. The project produces clean electricity without GHG emissions for North China Power Grid as per the registered CDM-PDD. Through checking the Technical Agreement of the Wind Turbines, the verification team can confirm the information of the physically installed facilities has been consistently reported in the monitoring report. The technical parameters of the wind turbines are listed as following tables:

Table 3. Key technical data for the equipment of the Project

Parameter	Value
Model of wind turbine	GW82/1500
Manufacture	Xinjiang Goldwind Science & Technology Co., Ltd.
Rotor Diameter	82m
Amount of vane	3
Height of hub	70m
Cut-in wind speed	3m/s
Cut-out wind speed	22 m/s
PLF	0.231
Life time	20years

Therefore, the verification confirmed there is no changes from the project design to actual implementation have been identified during this verification. The operation of the project activity has been conducted in accordance with the description of the registered CDM-PDD. Therefore there is no any discrepancy between project implementation and the project description.

The verification team has checked the Implementation log of the project /20/ and can confirm that the first wind turbine started operation on 17/10/2010, on which the project began generating GHG emission reductions, which is the project start date.

Monitoring plan

[Power System]

As shown in the diagram of the power connection system, the electricity generated by the Project is delivered to the onsite step-up substation, which connected to the transformer substation of the grid and then delivered to the North China Power Grid. A 10kv back-up line is connected for the emergency.

Through onsite inspection and review the diagram of grid connection, the verification team confirm that the back-up line of the project (ID: 1304) is the same line for emergency use of the other project (ID: 1301), and the meter on this back-up line measures the total power consumption through the back-up line of the projects. It is conservative that both the projects (ID 1301 and ID 1304) use the total electricity imported through the back-up line by the two projects to calculate the $EG_{facility,y}$ and the emission reductions.

[Metering System]

One bidirectional meter (M) with accuracy of 0.5 is installed at the low voltage side of onsite 110kV step-up substation at the main line to measure electricity delivered to North China Power Grid by the project in the year y and electricity consumed by the project which is imported from the North China Power Grid at the main line in the year y. One meter (m) with the accuracy of 1.0 is installed to measure the electricity imported from the back-up line.

[Information flow]

Data collection of the electricity supply will follow the steps below:

The project owner records readings of the meter M and reports to the grid company monthly, and the grid company records readings of the meter m monthly; Each month, the grid company issues Sales receipts to the project owner upon the confirmed data. The cut-off time is 24:00 of the last day of each month. The electricity data is cross-checked with the Sales receipts issued by the grid company before transaction.

The verification team can confirm that the implementation of the monitoring plan complies with the monitoring plan and the completeness of monitoring is ensured, through onsite interview, onsite inspection, and document review. There is no any material discrepancy between the actual monitoring system and the monitoring plan.

Other GHG program

Based on the PP's statement /7/, the PP will not seek request of issuance of any other kind of GHG emission reductions including CERs under CDM. Refer to the section 3.1 of this report.

The VCUs of the period 17/10/2010 to 18/07/2012 and CERs of the period 01/08/2012 to 31/01/2014 have been issued, and this monitoring period starts from 01/02/2014 to 31/01/2018. There is no gap between the previous monitoring period and this monitoring period.

Besides, the project has not participated or been rejected under any other GHG programs, and it is confirmed by the verification team that the project is not registered as a CCER project in China. The project has not received or sought any other form of environmental credit since previous verification, or has not become eligible to do so since previous verification. The GHG emission reductions or removals generated by the project have not become included in an emissions trading program or any other mechanism that includes GHG allowance trading except for VCS.

Furthermore, as per the Section 3.1 of this report, CCSC verification team can conclude that net GHG emission reductions generated during this monitoring period have not been used and will not be used for compliance under other programs or mechanisms.

Sustainable development contributions

The project contribute to sustainable development as a renewable energy generation project by means of:

- The project utilizes wind resources to generate and supply renewable electricity to the power grid during this monitoring period, which contributes to SDG 7.
- The project achieves full and productive employment and decent work for all women and men, which contributes to SDG 8.
- The project utilizes zero-emission wind power to supply electricity to the grid, and reduces GHG emissions, which contributes to SDG 13.

The verification team has checked all the related evidence, and can confirm the contributions to the sustainable development of the project.

4.2 Safeguards

4.2.1 No Net Harm

By checking the EIA summary and conclusion provided in the registered CDM-PDD, it is confirmed that the project does not have significant impacts on the environment or on the local society and economy. There is no transboundary impact involved with the project. Negative impacts are mitigated with a set of environmental protection measures in consistent with national and local laws and regulations.

After the completion of the construction, the project was put into operation after inspection and acceptance by the local environmental protection department. During the project operation, the project continues to contribute to the local society and economy.

Also, no potential environment or social economic matter was found during the site visit. The project is renewable energy project and thus no net harm observed on-site.

4.2.2 Local Stakeholder Consultation

According to the CDM-PDD, local stakeholders were invited to provide comments in 12/2008. The processes by which comments from local stakeholders have been invited and compiled, has been described within the CDM-PDD. Furthermore, representatives from the local community were interviewed, the relevant evidences were presented to CCSC for assessment. In general, the interviewees show adequate understanding of the nature of the Project and agreed that the Project would benefit the environment, society and economic development. The response is overall supportive.

The verification team has tested the on-going stakeholder communication mechanism and confirm the mechanism is functional. The local stakeholders can contact the contact person to submit their comments and the contact person will feedback in time. Furthermore, the project owner conducted regular local stakeholder consultation meeting during this monitoring period. The verification team checked the local stakeholder consultation meeting records and confirmed that no negative comments were received. The local stakeholders generally expressed their support to the project.

4.3 AFOLU-Specific Safeguards

Not applicable as this is a non-AFOLU project.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

[Fixed ex-ante parameters]

The data and parameters fixed ex-ante have been reported in the MR, and have been checked against the monitoring plan and the applied methodology by the verification team.

$EF_{grid,CM,y}$, combined margin grid emission factor

The emission factor of the grid has been determined ex-ante in the monitoring plan for the crediting period and thus is applicable to this monitoring period. $EF_{grid,CM,y}$ in the monitoring report is 0.895875 tCO_2/MWh, which has been verified against the CDM-PDD and confirmed as consistent.

[Monitoring parameters]

The monitoring parameters have been carried out in accordance with the monitoring plan. All parameters were monitored and determined as per the monitoring plan which is listed in below table:

Means of verification	The verification team has performed the following activities to determine whether the monitoring of parameters related to the GHG emission reductions has been implemented in accordance with the monitoring plan. • Through the on-site inspection of the monitoring system, interview with the operation staff, document review including relevant records, procedures and technical specifications, the verification team has assessed the implementation of the monitoring plan followed by the PP; • The parameters stated in the monitoring plan have been checked by means above; • The verification team has checked the installation of the electricity meter by onsite inspection against PPA, diagram of power connection system and calibration reports by qualified third party; • The Meter Reading Records and Sales receipts were checked by the team to confirm the monitoring results; • Based on the interview with the top management and operation staff and the review of the VCS Monitoring & Management Manual, the verification team has assessed the quality assurance and quality control procedures applied by the PP. No sampling plan was involved in the project activity.
Findings	According to the monitoring plan, the parameters which need to be monitored include: **Baseline emission parameters:** The baseline emissions are the baseline emission factor times the net electricity supplied to the grid. Therefore, $BE_y = EF_{grid,CM,y} \times EG_{facility,y} = EF_{grid,CM,y} \times (EG_{out,y} - EG_{in,y} - EG_{backup,y})$ $EF_{grid,CM,y}$: combined margin emission factor of the North China Power Grid, calculated ex-ante in the registered CDM-PDD as 0.895875 tCO_2/MWh $EG_{facility,y}$: Quantity of net electricity generation supplied by the project to the grid in year y $EG_{out,y}$: Electricity generation supplied to the North China Power Grid by the project in year y $EG_{in,y}$: Electricity consumed by the project which is imported from the North China Power Grid through the main line in year y $EG_{backup,y}$: Electricity consumed by the project which is imported from the North China Power Grid through the backup line in year y As described above, the meter has been installed in accordance with the approved monitoring plan. The verification team has on-site checked the location of the meters against the diagram of power connection system and found them to be consistent. The project owner records readings of the meter M and reports to the

	grid company monthly, and the grid company records readings of the meter m monthly; Each month, the grid company issues Sales receipts to the project owner upon the confirmed data. The cut-off time is 24:00 of the last day of each month. The electricity data is cross-checked with the Sales receipts issued by the grid company before transaction. The verification team has verified the values provided in the monitoring report and emission reductions calculation spreadsheet against the relevant documented evidences i.e. the Meter Reading Records and Sales receipts, and found them consistent with the provided evidences. Conservative data of electricity between Meter Reading Records and Sales receipts, i.e. lower values of $EG_{out,y}$, and higher values of $EG_{in,y}$ and $EG_{backup,y}$, are used to calculate the emission reductions. **(2) Project emission parameters:** As per the methodology and registered CDM-PDD, the project emission is 0. No parameters are to be monitored regarding the project emissions. **(3) Leakage emission parameters:** No parameters related to leakage need to be considered according to the methodology and the registered CDM-PDD. No parameters are to be monitored regarding the leakage emissions. **Management and operational system:** The PP has the responsibility of overall monitoring, which has established a monitoring team for monitoring of power generation, maintenance and operation of the CDM Project activity. All the records related to generation and maintenance have been satisfactorily maintained. Responsibilities have been allocated to well-trained monitoring staff as per the monitoring plan. The QA/QC procedures are part of management system and are documented in management procedures. The records and all relevant paper-based information are well archived by the project owner and available for verification. The responsibilities and the procedures included in the VCS Monitoring & Management Manual have been verified. VCS Monitoring & Management Manual and internal training records have been provided and verified by the verification team.
Conclusion	CCSC verification team confirms that: • The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD. • All parameters required by the monitoring plan have been sufficiently monitored and correctly listed. The monitored data for required parameters have been verified by checking the whole information flow.

[Calibration information]

Meter ID	Serial number	Accuracy	Calibration date	Validity	Calibrator
M	10030265270082	0.5	02/06/2013	OK	Center of Electricity Measurement, Weihai Power Grid Company
m	10030265270067	0.5	02/06/2013	OK	
M	10030265270082	0.5	28/05/2014	OK	
m	10030265270067	0.5	28/05/2014	OK	
M	10030265270082	0.5	22/05/2015	OK	
m	10030265270067	0.5	22/05/2015	OK	
M	10030265270082	0.5	13/05/2016	OK	
m	10030265270067	0.5	13/05/2016	OK	
M	10030265270082	0.5	04/05/2017	OK	
m	10030265270067	0.5	04/05/2017	OK	

The monitoring plan requires that the accuracy of the meter (M) for monitoring $EG_{out,y}$ and $EG_{in,y}$ is 0.5, while the accuracy of the meter (m) for monitoring $EG_{backup,y}$ is 1.0. Accuracy of the meters is not lower than required in the monitoring plan. The meters have been yearly calibrated, which complies with the monitoring plan.

[Calculation of baseline GHG emissions]

Means of verification	The verification team has performed the following activities to assess the data and calculations of GHG emission reductions achieved by the Project as per the methodology: • Through desk review and on-site inspection on the monthly electricity reports and electricity invoice, to verify that a complete set of data for the specified monitoring period is available. • Information provided in the monitoring report has been cross-checked with other sources such as Meter Reading Records, Sales receipts. • Review the calculations of baseline GHG emissions have been carried out in accordance with the formulae and methods described in the registered CDM-PDD, and the methodology; • Review emission factors, IPCC default values, GWPs and other reference values as per the registered CDM-PDD.
Findings	According to the registered CDM-PDD and the applied methodology, the baseline emissions are the baseline emission factor times the net electricity supplied to the grid. Therefore, $BE_y = EF_{grid,CM,y} \times EG_{facility,y} = EF_{grid,CM,y} \times (EG_{out,y} - EG_{in,y} - EG_{backup,y})$ $EF_{grid,CM,y}$: combined margin emission factor of the North China Power Grid, calculated ex-ante in the registered CDM-PDD as 0.895875 tCO_2/MWh $EG_{facility,y}$: Quantity of net electricity generation supplied by the

project to the grid in year y

$EG_{out,y}$: Electricity generation supplied to the North China Power Grid by the project in year y

$EG_{in,y}$: Electricity consumed by the project which is imported from the North China Power Grid through the main line in year y

$EG_{backup,y}$: Electricity consumed by the project which is imported from the North China Power Grid through the backup line in year y

The verification team has cross-checked the values from the Meter Reading Records /13/ with the Sales receipts /14/ for the this monitoring period. Conservative data of electricity between Meter Reading Records and Sales receipts, i.e. lower values of $EG_{out,y}$ and higher values of $EG_{in,y}$ & $EG_{backup,y}$, are used to calculate the emission reductions.

The net electricity supply ($EG_{facility,y}$) is calculated as:

The verified $EG_{facility,y}$ of the Project (MWh)

Year	$EG_{out,y}$	$EG_{in,y}$	$EG_{backup,y}$	$EG_{facility}$
2014 (01/02/2014 to 31/12/2014)	82,240.900	487.600	2.994	81,750.306
2015 (01/01/2015 to 31/12/2015)	102,038.500	582.380	0.936	101,455.184
2016 (01/01/2016 to 31/12/2016)	106,476.070	553.880	1.192	105,920.998
2017 (01/01/2017 to 31/12/2017)	104,684.850	530.760	1.350	104,152.740
2018 (01/01/2018 to 31/01/2018)	10,727.270	19.010	0.018	10,708.242
Total	406,167.590	2,173.630	6.490	403,987.470

The baseline emissions are calculated as:

Year	$EG_{facility,y}$	$EF_{grid,CM,y}$	BE_y
	MWh	tCO_2e/MWh	tCO_2e
2014 (01/02/2014 to 31/12/2014)	81,750.306	0.895875	73,238
2015 (01/01/2015 to 31/12/2015)	101,455.184	0.895875	90,891
2016 (01/01/2016 to 31/12/2016)	105,920.998	0.895875	94,891
2017 (01/01/2017 to 31/12/2017)	104,152.740	0.895875	93,307
2018 (01/01/2018 to 31/01/2018)	10,708.242	0.895875	9,593
total	403,987.470	/	361,920

	The verification team confirmed the calculation of baseline emissions as reported in the MR and the ER spreadsheet is correct and rounded down to integers.
Conclusion	CCSC verification team confirms that: • A complete set of data for the monitoring period is available. • Information on the baseline GHG emission calculation provided in the monitoring report has been cross-checked with other sources. • Calculations of baseline emissions have been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document. • There are no assumptions applied. • Appropriate emission factor of the power grid has been correctly applied.

[Calculation of emission reductions]

As per the methodology and registered CDM-PDD, the emission reductions are calculated as $ER_y=BE_y-PE_y$:

Year	BE_y	PE_y	ER_y
	tCO_2e	tCO_2e	tCO_2e
2014 (01/02/2014 to 31/12/2014)	73,238	0	73,238
2015 (01/01/2015 to 31/12/2015)	90,891	0	90,891
2016 (01/01/2016 to 31/12/2016)	94,891	0	94,891
2017 (01/01/2017 to 31/12/2017)	93,307	0	93,307
2018 (01/01/2018 to 31/01/2018)	9,593	0	9,593
total	361,920	0	361,920

The verification team confirm that the actual emission reductions achieved during this monitoring period are 0.66% higher than the estimated ex-ante amount, as indicated in the monitoring report, which is reasonable.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

The monitoring has been carried out in accordance with the monitoring plan.

As a result of verification of the ER calculation process, the assessment team confirmed that all the parameters required for the determination of the emission reductions have been included in the MR and ER Calculation Spreadsheet and are consistent with the applied methodology and

the monitoring plan. The parameters are complete in this monitoring period.

After verifying the reported figures with the raw data sources, it's confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the ER Calculation Spreadsheet and the MR. The verification process for the same has been clearly described above in section 4.4 of the report.

Electricity data was continuously metered and monthly recorded. On the appointed day of each month, the grid company and the project proponent read the electricity meters and records the readings. Data on the Meter Reading Records are crosschecked with the Sales receipts and conservative data of electricity between Meter Reading Records and Sales receipts, i.e. lower values of $EG_{out,y}$ and higher values of $EG_{in,y}$ & $EG_{backup,y}$, are used to calculate the emission reductions. All the evidence of the electricity data are external and documented. All data monitored are to be kept electronically for two years after the end of the crediting period.

The monitoring plan specifies the yearly calibration frequency for the electricity meters and this calibration requirement was fulfilled during this monitoring period.

Therefore, the verification team concluded that the evidence is sufficient and the quality is appropriate and thus the evidence can be used to determine the GHG emission reductions and removals for this monitoring period.

4.6 Non-Permanence Risk Analysis

Not applicable as a renewable project.

5 VERIFICATION CONCLUSION

CCSC has been commissioned by Guohua Energy Investment Co., Ltd. to perform the verification of greenhouse gas emission reductions of the project activity "Guohua Rongcheng Phase III Wind Farm Project" (UNFCCC Ref. No. 6580, VCS Ref. No. 1304).

The management of Guohua Resourceful (Rongcheng) Wind Power Generation Co., Ltd. is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project's Monitoring Plan in the registered CDM-PDD.

Our verification approach was based on the requirements as defined under the applicable VCS standards and relevant UNFCCC requirements. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:

- the project is implemented and operated as per the registered CDM-PDD;

- the monitoring plan in the registered CDM-PDD is as per the applied methodology;

- the monitoring activities comply with the monitoring plan in the CDM-PDD;

- the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS standard version 4.3 and CDM requirements;

- the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately;

- the monitoring system is in place and generates GHG emission reductions data;

- the GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for "Guohua Rongcheng Phase III Wind Farm Project" during the monitoring period 01/02/2014 to 31/01/2018 as reported in Monitoring Report, prepared on the basis of the project's Monitoring Plan are fairly stated. Based on the information we have seen and evaluated, we confirm the following statement:

Verification period: 01/02/2014 to 31/01/2018

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

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)
2014 (01/02/2014 to 31/12/2014)	73,238	0	0	73,238

2015 (01/01/2015 to 31/12/2015)	90,891	0	0	90,891
2016 (01/01/2016 to 31/12/2016)	94,891	0	0	94,891
2017 (01/01/2017 to 31/12/2017)	93,307	0	0	93,307
2018 (01/01/2018 to 31/01/2018)	9,593	0	0	9,593
Total	361,920	0	0	361,920

APPENDIX A: ABBREVIATIONS

Abbreviations	Full texts
AFOLU	Agriculture, Forestry and Other Land Use
BM	Build Margin
CAR	Corrective Action Request
CCSC	China Classification Society Certification Co., Ltd.
CCER	China Certified Emission Rrductions
CDM	Clean Development Mechanism
CER	Certified Emission Reduction (CDM)
CL	Clarification Request
CM	Combined Margin
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DNA	Designated National Authority
CDM-EB	CDM Executive Board
EF	Emission Factor
EIA	Environmental Impact Assessment
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG(s)	Greenhouse gas(es)
GS	Golden Standard
IPCC	Intergovernmental Panel on Climate Change
MEE	Ministry of Ecology and Environment of the People's Republic of China
MP	Monitoring Plan
OM	Operating Margin

PD	Project Description
PDD	Project Design Document
PP	Project Participant
PPA	Power Purchase Agreement
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VCU	Voluntary Carbon Unit
VVB	Validation / Verification Body
VVS	Verification and Validation Standard (CDM)

APPENDIX B: COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS

CCS 认证公司

Appendix 9

CERTIFICATE OF COMPETENCE

Date of issue: 20/01/2022

Mr. Tan Wenbin

Has been qualified in accordance with *CDM Personnel Competence Requirements and Professional Competence Evaluation Instructions* (CDMI0301) as

■ CDM validator for Technical Area(s): TA1.2/TA5.2/TA8.1/TA10.1

■ CDM verifier for Technical Area(s): TA1.2/TA5.2/TA8.1/TA10.1

□ Technical expert for Technical Area(s):_____

Li Honglin
CCSC General Manager

CCS 认证公司 CERTIFICATION

Appendix 9

CERTIFICATE OF COMPETENCE

Date of issue: 20/01/2022

Mr. Li Xingtong

Has been qualified in accordance with *CDM Personnel Competence Requirements and Professional Competence Evaluation Instructions* (CDMI0301) as

■ CDM validator for Technical Area(s):
TA1.1/TA1.2/TA3.1/TA9.2/TA13.1/TA14.1

■ CDM verifier for Technical Area(s):
TA1.1/TA1.2/TA3.1/TA9.2/TA13.1/TA14.1

☐ Technical expert for Technical Area(s):_____

Li Honglin
CCSC General Manager

APPENDIX C: DOCUMENTS REVIEWED OR REFERENCED

/1/ Monitoring report, Version 01 dated 22/06/2022, Version 02 dated 15/11/2022

/2/ ER calculation spreadsheet

/3/ Registered CDM-PDD, version 01.2, dated 08/03/2012

/4/ CDM Validation report, Version 1, dated 11/06/2012

/5/ Previous VCS verification report

/6/ VCS Standard version 4.3

/7/ No Double Counting Statement, issued by the Project Owner on 02/07/2022

/8/ Methodology ACM0002 version 12.3.0 Consolidated baseline methodology for grid-connected electricity generation from renewable sources

/9/ VCS Monitoring Manual

/10/ Internal training records

/11/ Technical Agreement of the Wind Turbines

/12/ Diagram of the power connection system

/13/ Meter Reading Records

/14/ Sales receipts

/15/ Signed Power Purchase Agreement (PPA) with grid company

/16/ Calibration certificates of meters covering the whole monitoring period issued by Center of Electricity Measurement, Weihai Power Grid Company

/17/ Accreditation Certificate of Metrological Authorization to Center of Electricity Measurement, Weihai Power Grid Company, issued by China National Accreditation Service for Conformity Assessment

/18/ Accreditation certificates for Center of Electricity Measurement, Weihai Power Grid Company

/19/ Huanbanqihou[2021]No.9, http://www.mee.gov.cn/xxgk2018/xxgk/xxgk05/202103/t20210330_826728.html

/20/ Implementation log of the project

APPENDIX D: RESOLUTION OF CORRECTIVE ACTION REQUESTS AND CLARIFICATION REQUESTS

No CAR, two CLs and no FAR were raised in this verification.

Findings	PP's response	Verification teams conclusion
CL1: As per the VCS-Monitoring-Report-Template-v4.1, each of the monitoring parameters required in the monitoring plan shall be included in the section 4.2 of the monitoring report.	The monitoring report has been revised and each of the monitoring parameters required in the monitoring plan has been included in the section 4.2 of the monitoring report.	Revised monitoring report has been checked and it is confirmed that the related information of each of the monitoring parameters has been included in the section 4.2 of the monitoring report. This CL is closed.
CL2: As per the VCS-Monitoring-Report-Template-v4.1, the calibration information, including calibration dates and validity, shall be included in the section 4.2 of the monitoring report.	The monitoring report has been revised and the information on calibration information, including calibration dates and validity, has been included in the section 4.2 of the monitoring report.	Revised monitoring report has been checked and it is confirmed that the related calibration information has been included in the section 4.2 of the monitoring report, which is consistent with the documented evidence. This CL is closed.