

# VERIFICATION REPORT FOR GUOHUA WULATE ZHONGQI PHASE I 49.5 MW WIND FARM PROJECT



Document Prepared By SGS United Kingdom Limited

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<b>Prepared By</b>	SGS United Kingdom Limited
<b>Contact</b>	Address: SGS Climate Change Programme, SGS United Kingdom Ltd, SGS House, 217-221, London Road, Camberley Surrey, GU15 3EY, United Kingdom Phone: +44 (0) 1276 697 877 Email: ukclimatechange@sgs.com
<b>Approved By</b>	Linda HU Mudan – Technical Reviewer
<b>Work Carried Out By</b>	Simon ZHAO – Lead Assessor/Team Leader/ Local Assessor/ Sectoral Scope Expert (TA 1.2) Michael WU – Assessor

## Summary:

SGS United Kingdom Ltd has performed the periodic verification of the project Guohua Wulate Zhongqi Phase I 49.5 MW Wind farm Project against VCS Version 3. The verification includes confirming the implementation of the monitoring plan of the VCS Project Description version 04 dated 23/12/2012 and the application of the monitoring methodology as per ACM0002 version 09. A site visit was conducted to verify the data submitted in the monitoring report.

The project is a new wind power project with total installed capacity of 49.5 MW, involving 33 sets of wind turbines with unit capacity of 1,500 kW. The project is estimated to supply 124,300 MWh of electricity annually to North China Power Grid (NCPG) by utilizing wind resources, replacing fossil fuel consumption and thus reducing GHG (CO<sub>2</sub>) emissions.

The report describes a total of 3 finding which includes:

- 1 Corrective Action Requests (CARs);
- 2 Clarification Requests (CLs);
- 0 Forward Action Requests (FARs); and

All findings have been closed satisfactorily.

SGS confirms that the project is implemented in accordance with the validated VCS Project Description. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and validated project baseline and monitoring and its associated documents. Based on the information seen and evaluated we confirm that the implementation of the project has resulted in 78,402 tCO<sub>2</sub>e emission reductions during period from 01/08/2009 to 28/02/2010.

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## 1 INTRODUCTION

### 1.1 Objective

SGS United Kingdom Ltd has been contracted by Guohua CWP (Bayannaoer) Wind Power Co., Ltd to perform an independent verification of its project Guohua Wulate Zhongqi Phase I 49.5 MW Wind farm Project against VCS Version 3. The verifiers have reviewed the GHG data collected to date for the period between 01/08/2009 and 28/02/2010.

The purposes of this verification exercise are, by review of objective evidence, to independently review:

- Whether the project has resulted in emission reductions as declared by the organisation or GHG project's GHG assertion;
- The data reported are accurate, complete, consistent, transparent and free of material error or omission.

### 1.2 Scope and Criteria

This engagement covers verification of emission reductions from anthropogenic sources of greenhouse gases included within the project boundary of Guohua Wulate Zhongqi Phase I 49.5 MW Wind farm Project.

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. Our examination includes assessment, on a test basis, of evidence relevant to the amounts and disclosures in relation to the project's GHG emission reductions for the defined reporting period.

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

### 1.3 Level of assurance

The level of assurance of the verification report is reasonable assurance engagements as selected by the Client. Materiality for the project is 5%.

### 1.4 Summary Description of the Project

This engagement covers emissions and emission reductions from anthropogenic sources of greenhouse gases included within the project boundary of the following project and period.

Title of Project Activity:	Guohua Wulate Zhongqi Phase I 49.5 MW Wind farm Project
Project ID	N/A
Monitoring Period Covered in this Report	01/08/2009 to 28/02/2010
Project Proponent(s)	Guohua CWP (Bayannaoer) Wind Power Co., Ltd (Host - P. R. China)
Location of the Project Activity:	Urad Zhongqi, Bayan Nur League, Inner Mongolia

Autonomous Region, P. R. China

The project is a new wind power project with total installed capacity of 49.5 MW, involving 33 sets of wind turbines with unit capacity of 1,500 kW. The project is estimated to supply 124,300 MWh of electricity annually to North China Power Grid (NCPG) by utilizing wind resources, replacing fossil fuel consumption and thus reducing GHG (CO<sub>2</sub>) emissions.

## 2 VALIDATION PROCESS, FINDINGS AND CONCLUSION

### 2.1 Validation Process

Guohua Wulate Zhongqi Phase I 49.5 MW Wind farm Project has been registered as a CDM project. The UNFCCC registration number for the project is 2597 (<http://cdm.unfccc.int/Projects/DB/BVQI1242974549.19/view>) (/19/). The registration date for CDM is 01/03/2010 and the first crediting period for CDM is from 01/03/2010 to 28/02/2017 (renewable). The methodology applied by the project is ACM0002 version 09.

The CDM validation of the project was completed on 26/02/2010 (/3/).

In accordance with Para. 3.11.8 of VCS Standard version 3.3 (/16/), SGS performed a gap validation for the project's compliance with the VCS rules. The cover page and sections 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS Project Description Template have been completed.

### 2.2 Validation Findings

#### 2.2.1 Gap Validation

The project is registered under CDM. SGS performed a gap validation for the project's compliance with the VCS rules. The cover page and sections 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS Project Description Template have been completed.

#### Cover Page:

The PP provided a VCS Project Description for the project. Cover Page is provided as per the VCS Project Description Template.

#### Section 1.2 Sectoral Scope and Project Type:

The Project is Sectoral Scope 1: Energy industries (Renewable Energy).

It is to generate zero-emission wind power and is not a grouped project.

#### Section 1.3 Project Proponent:

The project proponent is Guohua CWP (Bayannaoer) Wind Power Co., Ltd. Contact information and roles/responsibilities for the project proponent are provided in the VCS PD.

**Section 1.5 Project Start Date:**

The start date for the project is 30/07/2009, which is the date on which the project began generating GHG emission reductions.

**Section 1.6 Project Crediting Period**

The VCS crediting period of the Project is from 01/08/2009 to 28/02/2010.

**Section 1.7 Project Scale and Estimated GHG Emission Reductions or Removals**

The scale of the project is "Project". The project is not a "Large Project".

The estimated emission reductions are provided.

**Section 1.9 Project Location**

Information of the project location is provided.

**Section 1.10 Conditions Prior to Project Initiation**

The Project is a newly built project, there is no power plant existing prior to the Project. The objective of the Project is to utilize the wind power for generating electricity, which will be sold into the North China Power Grid (NCPG) which is dominated by fossil-fuel fired power plant.

The Project was not implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction.

**Section 1.12.1 Proof of Title (Right of Use)**

The project was approved by local government on 17/09/2007 by Inner Mongolia DRC. The letter of approval for the project from the Inner Mongolia DRC is provided as an evidence for right of use. And the project's participation in CDM is also approved by the DNA of China. The LoA from the DNA of China is available at the view page of UNFCCC website.

**Section 1.12.2 Emissions Trading Programs and Other Binding Limits**

Net GHG emission reductions or removals generated by the project will not be used for compliance with an emissions trading program or to meet binding limits on GHG emissions.

**Section 1.12.3 Participation under Other GHG Programs**

The Project was registered as a CDM project on 01/03/2010 with reference No. 2597.

The CDM validation of the project was completed on 26/02/2010, within two years of the project start date.

## Section 1.12.4 Other Forms of Environmental Credit

The Project neither has nor intends to generate any other form of GHG-related environmental credit for GHG emission reductions or removals claimed under the VCS Program, or that any such credit has been or will be cancelled from the relevant program.

## Section 1.13 Additional Information Relevant to the Project

Additional information relevant to the project is provided as per the VCS template.

The CDM PDD described that the backup meter M2 is installed at Wengeng Substation, while in the monitoring report it is reported that M2 is installed at Delingshan Substation. **CL #3** was raised requesting the PP to clarify. The PP clarified that this was a typo made when completing the CDM PDD. And this was verified during the first periodic verification of CDM. The PP revised the VCS PD to correct this typo. Backup meter M2 is installed at Delingshan Substation. **CL #3** is closed based on the PP response and the VCS PD version 03 dated 13/12/2012. The PP updated the VCS PD to version 04 dated 23/12/2012 by applying the latest VCS PD template.

### 2.2.2 Methodology Deviations

N/A

### 2.2.3 New Project Activity Instances

N/A

## 2.3 Validation Conclusion

The project complies with VCS version 3 requirements (/16//17//18/).

## 3 VERIFICATION PROCESS

### 3.1 Method and Criteria

SGS' approach to the verification is a two-stage process.

In the first stage, SGS completed a strategic review and risk assessment of the projects activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.



At the end of this stage, SGS produced a Verification Checklist which, based on the risk assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

Using the Verification checklist, SGS verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved a site visit and a desk review of the monitoring report. This verification report describes the findings of this assessment.

## 3.2 Document Review

The VCS PD (/1/), and the monitoring report (/4/) submitted by the client and additional background documents related to the project performance were reviewed. A complete list of all documents reviewed is attached in section 6 of this report.

## 3.3 Interviews

On 13/11/2012, all members of the assessment team performed the onsite visit with Guohua CWP (Bayannaoer) Wind Power Co., Ltd to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan of the VCS PD (/1/).

Date	Name	Position	Short Description of Subject Discussed
13/11/2012	Zhao Xuequan	Manager of wind farm	Implementation status, Management and operation system documentation, responsibility allocation
13/11/2012	Li Jia	Project Manager	Management and operation system documentation,
13/11/2012	Zhang Weidong	Operator	Monitoring and data collection
13/11/2012	Zhang Hui	Operator	Monitoring and data collection
13/11/2012	Fan Wenyan	Operator	Monitoring and data collection
13/11/2012	Li Ying	CDM Consultant	Application of methodology, ER calculation, compliance with the VCS PD, Reporting in MR

## 3.4 Site Inspections

As part of the verification, the following on-site inspections have been performed by all members of the assessment team:

<b>Location:</b> Urad Zhongqi, Bayan Nur League, Inner Mongolia Autonomous Region, P. R. China	
<b>Date:</b> 13/11/2012	
<b>Coverage:</b>	<b>Source of Information / Persons Interviewed</b>
1. Assessment of the implementation and operation of the project activity as per the VCS PD;	Zhao Xueguan, Guohua CWP (Bayannaoer) Wind Power Co., Ltd
2. Review of information flows for generating, aggregating and reporting the monitoring parameters;	Li Jia, Guohua CWP (Bayannaoer) Wind Power Co., Ltd
3. Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan.	Zhang Weidong, Guohua CWP (Bayannaoer) Wind Power Co., Ltd
4. A cross-check between information provided in the monitoring report and data from other sources such as MRRs, DRRs and sales receipts;	Zhang Hui, Guohua CWP (Bayannaoer) Wind Power Co., Ltd
5. A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PDD and the selected methodology;	Fan Wenyan, Guohua CWP (Bayannaoer) Wind Power Co., Ltd
6. Review of calculations and assumptions made in determining the GHG data and emission reductions.	Li Ying, Ruineng ZhiYuan Technology Company

## 3.5 Resolution of Any Material Discrepancy

As an outcome of the verification process, the team can raise different types of findings

In general, where insufficient or inaccurate information is available and clarification or new information is required the team shall raise a Clarification Request (CL) specifying what additional information is required.

Where a non-conformance arises the team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

- I. the verification is not able to obtain sufficient evidence for the reported emission reductions or part of the reported emission reductions. In this case these emission reductions shall not be verified and certified;
- II. the verification has identified misstatements in the reported emission reductions. Emission reductions with misstatements shall be discounted based on the verifiers ex-post determination of the achieved emission reductions

The verification process may be halted until this information has been made available to the assessors' satisfaction. Failure to address a CL may result in a CAR. Information or clarifications provided as a result of a CL may also lead to a CAR.

FARs may be raised which are for the benefit of future projects and future verification actors. These have no impact upon the completion of the verification activity.

Corrective Action Requests and Clarification Requests are detailed in Verification Checklist. The Project Developer is given the opportunity to "close" outstanding CARs and respond to CLs and FARs.

## 4 VERIFICATION FINDINGS

### 4.1 Project Implementation Status

The project has been registered as a CDM project and the CDM first crediting period is from 01/03/2010 to 28/02/2017 (renewable).

This verification is for the monitoring period prior to the crediting period of CDM. The monitoring period is from 01/08/2009 to 28/02/2010. The applied methodology of the project is ACM0002 version 09 (/2/).

The project boundary is consistent with the description in the VCS PD. 33 sets of wind turbines with unit capacity of 1,500 kW have been installed. The total installed capacity of the project is 49.5 MW. The project started operation on 30/07/2009. Physical features indicated in the VCS PD are in place and the project has been operated as per the VCS PD. The assessment team confirms the project has been implemented as per the validated VCS PD. No events or situations, which may impact the applicability of the applied methodology, happened in this monitoring period.

The actual emission reductions have been compared with the estimates in the VCS PD in the Monitoring Report version 03. The estimated ERs during this monitoring period are 77,647 tCO<sub>2</sub>e, whereas the actual emission reductions claimed by the Project during this monitoring period is 78,402 tCO<sub>2</sub>e. The actual ERs are only 0.97% higher than the estimated in the VCS PD. No significant increases in the ERs are identified in this monitoring period.

## 4.2 Accuracy of GHG Emission Reduction or Removal Calculations

### Compliance of the Monitoring Plan with the Monitoring Methodology

The project was registered against the approved CDM baseline and monitoring methodology ACM0002 version 09. Through the document review and onsite inspection, SGS confirms that the monitoring plan in the VCS PD is in accordance with the approved CDM baseline and monitoring methodology ACM0002 version 09.

### Compliance of the Actual Monitoring with the Monitoring Plan

Monitoring of reductions in GHG emissions to result from the project have been implemented in accordance with the monitoring plan contained in the VCS PD. The monitoring mechanism is effective and reliable.

According to the VCS PD, the parameters need to be monitored are  $EG_y$ : Net electricity supplied to the NCPG by the project in period  $y$ ,  $EG_{export,y}$ : The electricity exported to the NCPG by the project in period  $y$ , and  $EG_{import,y}$ : The electricity imported by the project from NCPG in year  $y$ .

#### ***$EG_{export,y}$ : The electricity exported to the NCPG by the project in period $y$***

The electricity exported to the NCPG by the project in period  $y$  ( $EG_{export,y}$ ) was measured by three electricity meters installed at the on-site substation, i.e. M1.1, M1.2, M1.3 (main meters) and the backup meter (M2) installed at the Delingshan Substation (Wengeng Substation mentioned in the CDM registered PDD was a typographical error and was verified in the first periodic verification for CDM and was accepted.) The parameter was continuously measured by the meters and the meters were monthly recorded. The accuracy class of M1.1, M1.2 and M1.3 was 0.5S and the accuracy class of meter M2 was 0.2S. The accuracies of the meters meet the requirement of the monitoring plan. The four meters were calibrated annually as per the monitoring plan. Sales receipts were used for double check. It is confirmed by the assessment team that the actual monitoring of  $EG_{export,y}$  is in compliance with the monitoring plan. Monthly Reading Records (MRRs, /9/) and sales receipts (/14/) for  $EG_{export,y}$  were checked by the assessment team. It is confirmed that the reported values  $EG_{export,y}$  in the monitoring report are correct. The period for Feb. 2010 was reported as "01/02/2010-28/10/2010" in the monitoring report version 01. **CAR #1** was raised for requesting the PP to correct the dates. In the monitoring report version 02, the end date for Feb 2010 is revised to 28/02/2010, which is correct. **CAR #1** is closed.

It was observed that the value in the sale receipts for the  $EG_{export,y}$  for 01/08/2009~31/08/2009 was significantly higher than the measured value from meter reading for the same period. **CL #2** was raised for requesting the PP to clarify this difference. The PP explained that one of three-phases of Meter M1.1 was in short circuit, which resulted in M1.1 working improperly and running slower than in normal. The sale receipts were issued after double check with M2 which was operated by the grid company and worked in good condition. This problem was discovered and solved in 01/09/2009 according to the operation record. However, for conservative consideration, the smaller value was adopted for the ER calculation (/15/). As the adopted value of  $EG_{export,y}$  for the ER calculation is conservative, the clarification from the PP is accepted by the assessment team and **CL #2** is closed.

#### ***$EG_{import,y}$ : The electricity imported by the project from NCPG in year $y$***

The electricity imported by the project from NCPG in year  $y$  ( $EG_{import,y}$ ) was measured by three electricity meters installed at the on-site substation, i.e. M1.1, M1.2, M1.3 (main meters) and the backup meter (M2) installed at the Delingshan Substation, which are the same as the meters used for measuring  $EG_{export,y}$ . The parameter was continuously measured by the meters and the meters were monthly recorded. The accuracy class of M1.1, M1.2 and M1.3 was 0.5S and the accuracy class of meter M2 was 0.2S. The accuracies of the meters meet the requirement of the monitoring plan. The four meters were calibrated annually as per the monitoring plan. Sales receipts were used for double check. It is confirmed by the assessment team that the actual monitoring of  $EG_{import,y}$  is in compliance with the monitoring plan. Monthly Reading Records (MRRs) and sales receipts for  $EG_{import,y}$  were checked by the assessment team. It is confirmed that the reported values  $EG_{import,y}$  in the monitoring report are correct.

## ***EG<sub>y</sub>: Net electricity supplied to the NCPG by the project in period y***

EG<sub>y</sub> is calculated as EG<sub>export,y</sub> minus EG<sub>import,y</sub>. The calculation was carried out by using the ER calculation spreadsheet. The assessment team verified the calculation and confirmed that the calculation was correct. It is confirmed by the assessment team that the actual monitoring of EG<sub>y</sub> is in compliance with the monitoring plan.

## **Accuracy of Equipment**

Meters have been installed as per the monitoring plan. The accuracy of the meters involved is in compliance with the monitoring plan and the meters were calibrated annually as per the monitoring plan (/5//6//7//8/). The accuracy information and the calibration information of the meters are as follows:

Meter	Type	Accuracy Class	Serial Number	Calibration Date	Validity
M1.1	electricity meter	0.5S	LY806380	24/06/2009	23/06/2010
				24/01/2010	23/01/2011
M1.2	electricity meter	0.5S	LY807098	24/06/2009	23/06/2010
				24/01/2010	23/01/2011
M1.3	electricity meter	0.5S	LY807108	24/06/2009	23/06/2010
				24/01/2010	23/01/2011
M2	electricity meter	0.2S	94743524	24/06/2009	23/06/2010
				02/02/2010	01/02/2011

## **External Data**

Baseline emission factor is calculated from external data. It was determined ex-ante and fixed for this crediting period according to description of the validated VCS PD. The value of the baseline emission factor used in the monitoring report is 1.0755 tCO<sub>2</sub>e/MWh, which complies with the calculated value of the baseline emission factor in validated VCS PD.

## Calculation of Emission Reductions

The appropriate methods and formulae for calculating baseline emissions, project emissions and leakage have been followed. And the assumptions and emission factor that were applied in the calculations have been justified.

<i>Parameter</i>	<i>Reported Value (MR version 01)</i>	<i>Verified Value (MR version 03)</i>
EG <sub>export,y</sub> (01/08/2009-31/12/2009)	55,132.600 MWh	55,132.600 MWh
EG <sub>export,y</sub> (01/01/2010-28/02/2010)	18,046.570 MWh	18,046.570 MWh
EG <sub>export,y</sub> (01/08/2009-28/02/2010)	73,179.170 MWh	73,179.170 MWh
EG <sub>import,y</sub> (01/08/2009-31/12/2009)	157.960 MWh	157.960 MWh
EG <sub>import,y</sub> (01/01/2010-28/02/2010)	122.150 MWh	122.150 MWh
EG <sub>import,y</sub> (01/08/2009-28/02/2010)	280.110 MWh	280.110 MWh
EG <sub>y</sub> (01/08/2009-31/12/2009)	54,974.640 MWh	54,974.640 MWh
EG <sub>y</sub> (01/01/2010-28/02/2010)	17,924.420 MWh	17,924.420 MWh
EG <sub>y</sub> (01/08/2009-28/02/2010)	72,899.060 MWh	72,899.060 MWh
EF <sub>y</sub>	1.0755 tCO <sub>2</sub> e/MWh	1.0755 tCO <sub>2</sub> e/MWh

For Year 2009 (01/08/2009-31/12/2009):

Baseline emissions (BE<sub>y</sub>) are:

$$BE_y = EG_y \times EF_y = 54,974.640 \text{ MWh} \times 1.0755 \text{ tCO}_2\text{e/MWh} = 59,125 \text{ tCO}_2\text{e};$$

Project emissions (PE<sub>y</sub>) are 0 tCO<sub>2</sub>e;

Leakage (L<sub>y</sub>) is 0 tCO<sub>2</sub>e;

$$\text{Emission reductions are: } ER_y = BE_y - PE_y - L_y = 59,125 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} = 59,125 \text{ tCO}_2\text{e}.$$

For Year 2010 (01/01/2010-28/02/2010):

Baseline emissions (BE<sub>y</sub>) are:

$$BE_y = EG_y \times EF_y = 17,924.420 \text{ MWh} \times 1.0755 \text{ tCO}_2\text{e/MWh} = 19,277 \text{ tCO}_2\text{e};$$

Project emissions (PE<sub>y</sub>) are 0 tCO<sub>2</sub>e;

Leakage (L<sub>y</sub>) is 0 tCO<sub>2</sub>e;

$$\text{Emission reductions are: } ER_y = BE_y - PE_y - L_y = 19,277 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} = 19,277 \text{ tCO}_2\text{e}.$$

The total Emission Reductions for the monitoring period from 01/08/2009 to 28/02/2010 are 78,402 tCO<sub>2</sub>e.

### 4.3 Quality of Evidence to Determine GHG Emission Reductions or Removals

Critical parameters used for the determination of the Emission Reductions are discussed above in Section 4.2 above. All the data recorded is in compliance with the monitoring report.

### 4.4 Management and Operational System

The management system and quality assurance procedures have been stipulated in the Monitoring Manual and QA/QC procedures (/10/), and have been implemented during operation. The emergency plan is in place (/11/). The staff is well trained and qualified. This has been verified during the onsite visit and document review (/12//13/); therefore the assessment team can affirm that the management system of the project is in place; with the responsibilities properly identified and in place. The training records and staff qualification have been obtained and verified (/12//13/).

## 5 VERIFICATION CONCLUSION

SGS United Kingdom Ltd has been contracted by Guohua CWP (Bayannaoer) Wind Power Co., Ltd to perform the verification of the emission reductions reported for the Guohua Wulate Zhongqi Phase I 49.5 MW Wind farm Project for the period from 01/08/2009 to 28/02/2010 in the monitoring report version 03 dated 26/12/2012.

The verification is based on the validated VCS Project Description, the applied methodology ACM0002 version 09 and the monitoring report for this project. The verification is performed in accordance with the VCS version 3.

The management of the Guohua CWP (Bayannaoer) Wind Power Co., Ltd is responsible for the preparation, calculation and determination of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project Monitoring Report version 03 dated 26/12/2012.

It is our responsibility to express an independent GHG verification opinion on the GHG emissions and on the calculation of GHG emission reductions from the project for the period from 01/08/2009 to 28/02/2010 based on the reported emission reductions in the Monitoring Report version 03 dated 26/12/2012 for the same period.

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

SGS confirms that the project is implemented in accordance with the validated project description. The monitoring system is in place and the emission reductions are calculated without material misstatements. Based on the information we have seen and evaluated, we confirm the following:

Reporting period: from 01/08/2009-31/12/2009

Verified GHG emission reductions or removals in the above reporting period:

GHG Emission Reductions or Removals	tCO <sub>2</sub> e
Baseline Emissions	59,125 tCO <sub>2</sub> e
Project Emissions	0 tCO <sub>2</sub> e
Leakage	0 tCO <sub>2</sub> e
<b>Net GHG emission reductions or removals</b>	<b>59,125 tCO<sub>2</sub>e</b>

Reporting period: From 01/01/2010 to 28/02/2010

Verified GHG emission reductions or removals in the above reporting period:

GHG Emission Reductions or Removals	tCO <sub>2</sub> e
Baseline Emissions	19,277 tCO <sub>2</sub> e
Project Emissions	0 tCO <sub>2</sub> e
Leakage	0 tCO <sub>2</sub> e
<b>Net GHG emission reductions or removals</b>	<b>19,277 tCO<sub>2</sub>e</b>

**Signed on behalf of the Verification Body by Authorized Signatory**

**SGS United Kingdom Limited**

Dated: 04-01-2013

Signature:



**Lead Assessor**

Simon Zhao

Dated: 04-01-2013

Signature:



**Technical Reviewer**

Linda HU Mudan



**ANNEX 1: DOCUMENT REFERENCES**

- /1/ VCS PD version 02 dated 16/11/2012 (first version submitted to SGS); version 03 dated 13/12/2012, version 04 dated 23/12/2012
- /2/ ACM0002 version 09 dated 13/02/2009
- /3/ CDM Validation report for Guohua Wulate Zhongqi Phase I 49.5 MW Wind farm Project, issued by Bureau Veritas Certification Holding SAS, version 2, dated 26/02/2010
- /4/ Monitoring report of the periodic verification:

MR Version	Date	Main changes reason for Revision
Version 01	08/10/2012	The first version provided to DOE for verification
Version 02	21/11/2012	Revised the dates of Feb. 2010 (CAR #1);
Version 03	26/12/2012	PP updated the MR by applying the latest MR template

- /5/ Calibration records of M1.1, M1.2 and M1.3 dated 24/06/2009 and 24/01/2010, issued by Bayannaoer Power Administration Electric Energy Measurement and Verification Center.
- /6/ Calibration certificate of M2 dated 24/06/2009, issued by Inner Mongolia Electric Power Science Research Institute Energy Measurement and Verification Center
- /7/ Calibration certificate of M2 dated 02/02/2010, issued by Inner Mongolia UHV Power Supply Bureau Energy Measurement and Verification Center
- /8/ Accreditation Certificates of the calibration entities
- /9/ Monthly Reading Records of the Project covering this monitoring period from 01/08/2009 to 28/02/2010
- /10/ Monitoring Manual and QA/QC Procedures of the project.
- /11/ Emergency Plan of the project.
- /12/ Staff Training Records of the project.
- /13/ Staff Qualification Certificate of the project.
- /14/ Sales receipts covering this monitoring period from 01/08/2009 to 28/02/2010.
- /15/ ER Spreadsheet version 01, dated 18/10/2012
- /16/ VCS standard, version 3.3 dated 04/10/2012.
- /17/ VCS Program Guide, version 3.4, dated 04/10/2012
- /18/ Registration & Issuance Process, version 3.4, dated 04/10/2012
- /19/ CDM registration information of the project  
(<http://cdm.unfccc.int/Projects/DB/BVQI1242974549.19/view> )

## ANNEX 2: OVERVIEW OF FINDINGS

### Findings Overview Summary

	CARs	CLs	FARs
<b>Total Number raised</b>	1	2	0

Date:	16/11/2012	Raised by:	Assessment team		
Type:	CAR	Number:	#1	Reference:	Verification checklist
<b>Lead Assessor Comment:</b>				<b>Date:</b> 16/11/2012	
The period for Feb. 2010 was reported as “01/02/2010-28/10/2010”. Please make necessary correction in the monitoring report.					
<b>Project Participant Response:</b>				<b>Date:</b> 21/11/2012	
It was a typo, “01/02/2010-28/10/2010” was changed to “”01/02/2010-28/02/2010” in MR v2.					
Revise was made to Table E-2.					
<b>Documentation Provided as Evidence by Project Participant:</b>					
Monitoring Report version 02 dated 21/11/2012					
<b>Information Verified by Lead Assessor:</b>					
Monitoring Report version 02 dated 21/11/2012					
<b>Reasoning for not Acceptance or Acceptance and Close Out:</b>					
The dates in the Monitoring Report version 02 are correct. CAR #1 is closed.					
<b>Acceptance and Close out by Lead Assessor:</b>				<b>Date:</b> 04/12/2012 by Simon Zhao	

Date:	16/11/2012	Raised by:	Assessment team		
Type:	CL	Number:	#2	Reference:	Verification checklist
<b>Lead Assessor Comment:</b>				<b>Date:</b> 16/11/2012	
It was observed that the value in the sale receipts for the EG <sub>export,y</sub> for 01/08/2009~31/08/2009 was significantly higher than the measured value from meter reading for the same period. Clarification is requested.					
<b>Project Participant Response:</b>				<b>Date:</b> 21/11/2012	
One of three-phase of Meter M1.1 was in short circuit, which resulted in M1.1 working improperly and running slower than in normal. The sale receipts were issued after double check with M2 which was operated by the grid company and worked in normal. This problem was discovered and solved in 01/09/2009 according to the operation record. However, for conservative consideration, the smaller value was adopted.					
No changed was made in MR.					
<b>Documentation Provided as Evidence by Project Participant:</b>					
Operation Record-20090901.pdf					
<b>Information Verified by Lead Assessor:</b>					
Operation Record-20090901.pdf					
<b>Reasoning for not Acceptance or Acceptance and Close Out:</b>					
The difference between the measured value of EG <sub>export,y</sub> and the value on sales receipts is properly explained. Conservative approach is applied. CL #1 is closed.					
<b>Acceptance and Close out by Lead Assessor:</b>				<b>Date:</b> 04/12/2012 by Simon Zhao	

Date:	13/12/2012		Raised by:	Assessment team	
Type:	CL	Number:	#3	Reference:	Verification checklist
<b>Lead Assessor Comment:</b>				<b>Date:</b> 13/12/2012	
<p>The CDM PDD described that the backup meter M2 is installed at Wengeng Substation, while in the monitoring report it is reported that M2 is installed at Delingshan Substation. Please clarify and make necessary revision.</p>					
<b>Project Participant Response:</b>				<b>Date:</b> 13/12/2012	
<p>The design and investment of transmission system isn't contained in the FSR of the project, which was completed by Inner-Mongolian Investigation and Design Institute of Water Conservancy and Hydropower in August 2007, and it is described in the FSR that the transmission system determined by the transmission system design report and co-responding approval.</p> <p>According to the transmission system design report and co-responding approval, the project is connected into delingshan substation which is a part of NCPG.</p> <p>Hence, the Wengeng substation, which described in diagram of the registered PDD, is a mistake. Actually, the project is connected into delingshan substation.</p> <p>Relevant change has been made to Further Information in section 1.12 of VCS Project Description-Bameng I V3.</p>					
<b>Documentation Provided as Evidence by Project Participant:</b>					
<p>FSR of Wulate phase I</p> <p>Transmission system design report</p> <p>Transmission system approval</p> <p>VCS Project Description, version 03 ,dated 13/12/2012</p>					
<b>Information Verified by Lead Assessor:</b>					
<p>FSR of Wulate phase I</p> <p>Transmission system design report</p> <p>Transmission system approval</p> <p>VCS Project Description, version 03 ,dated 13/12/2012</p>					
<b>Reasoning for not Acceptance or Acceptance and Close Out:</b>					
<p>It is confirmed that Wengeng Substation mentioned in the CDM registered PDD is a typo. And the correct substation should be Delingshan Substation. And this is described in the VCS PD version 03. CL #3 is closed.</p>					
<b>Acceptance and Close out by Lead Assessor:</b>				<b>Date:</b> 13/12/2012 by Simon Zhao	

ANNEX 3: TEAM MEMBERS STATEMENTS OF COMPETENCY

Statement of Competence

Name: Simon Zhao

- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	China	- Technical Reviewer	x

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	x
Technical Area(s): TA 1.2 Energy generation from renewable energy	
2. Energy Distribution	
Technical Area(s):	
3. Energy Demand	
Technical Area(s):	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	

Approved Member of Staff by: Siddharth Yadav

04/07/2012

## Statement of Competence

Name: Michael Wu

### Status

- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	China	- Technical Reviewer	x

### Scopes of Expertise

<b>1. Energy Industries (renewable / non-renewable)</b>	x
Technical Area(s): TA 1.2 Energy generation from renewable energy sources	
<b>2. Energy Distribution</b>	
Technical Area(s):	
<b>3. Energy Demand</b>	
Technical Area(s):	
<b>4. Manufacturing</b>	
Technical Area(s):	
<b>5. Chemical Industry</b>	
Technical Area(s):	
<b>6. Construction</b>	
Technical Area(s):	
<b>7. Transport</b>	
Technical Area(s):	
<b>8. Mining/Mineral Production</b>	
Technical Area(s):	
<b>9. Metal Production</b>	
Technical Area(s):	
<b>10. Fugitive Emissions from Fuels (solid, oil and gas)</b>	
Technical Area(s):	
<b>11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride</b>	
Technical Area(s):	
<b>12. Solvent Use</b>	
Technical Area(s):	
<b>13. Waste Handling and Disposal</b>	
Technical Area(s):	
<b>14. Afforestation and Reforestation</b>	
Technical Area(s):	
<b>15. Agriculture</b>	
Technical Area(s):	

Approved Member of Staff by: Siddharth Yadav Date: 19/10/2012

## Statement of Competence

Name: Linda Hu

### Status

- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	China	- Technical Reviewer	x

### Scopes of Expertise

<b>1. Energy Industries (renewable / non-renewable)</b>	x
<i>Technical Area(s): 1.2 Energy generation from renewable energy sources</i>	
<b>2. Energy Distribution</b>	
<i>Technical Area(s):</i>	
<b>3. Energy Demand</b>	
<i>Technical Area(s):</i>	
<b>4. Manufacturing</b>	
<i>Technical Area(s):</i>	
<b>5. Chemical Industry</b>	
<i>Technical Area(s):</i>	
<b>6. Construction</b>	
<i>Technical Area(s):</i>	
<b>7. Transport</b>	
<i>Technical Area(s):</i>	
<b>8. Mining/Mineral Production</b>	
<i>Technical Area(s):</i>	
<b>9. Metal Production</b>	
<i>Technical Area(s):</i>	
<b>10. Fugitive Emissions from Fuels (solid, oil and gas)</b>	
<i>Technical Area(s):</i>	
<b>11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride</b>	x
<i>Technical Area(s): TA 11.2 GHG capture and destruction</i>	
<b>12. Solvent Use</b>	
<i>Technical Area(s):</i>	
<b>13. Waste Handling and Disposal</b>	
<i>Technical Area(s):</i>	
<b>14. Afforestation and Reforestation</b>	
<i>Technical Area(s):</i>	
<b>15. Agriculture</b>	
<i>Technical Area(s):</i>	

Approved Member of Staff by: Siddharth Yadav Date: 10/09/2012

## ANNEX 4: PHOTOGRAPHIC EVIDENCE

Unique reference number: LY806380

Parameter:  $EG_{\text{export},y}$  and  $EG_{\text{import},y}$

Name of equipment: M1.1

Date: 13/11/2012



Unique reference number: LY807098

Parameter:  $EG_{\text{export},y}$  and  $EG_{\text{import},y}$

Name of equipment: M1.2

Date: 13/11/2012



Unique reference number: LY807108

Parameter:  $EG_{\text{export},y}$  and  $EG_{\text{import},y}$

Name of equipment: M1.3

Date: 13/11/2012



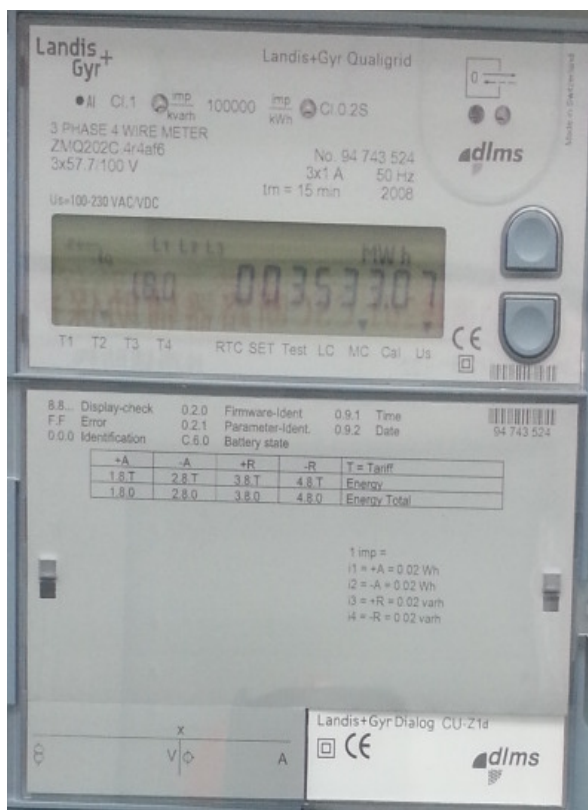


Unique reference number: 94743524

Parameter:  $EG_{\text{export},y}$  and  $EG_{\text{import},y}$

Name of equipment: M2

Date: 13/11/2012



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