

VERIFICATION REPORT FOR GUOHUA TONGLIAO KEZUO ZHONGQI PHASE I 49.5 MW WIND FARM PROJECT



Document Prepared By SGS United Kingdom Limited

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Summary:

SGS United Kingdom Ltd has performed the periodic verification prior to its CDM crediting period for project Guohua Tongliao Kezuo Zhongqi Phase I 49.5 MW Wind Farm Project (UNFCCC Ref.4495/SGS Ref.No.:CCP.VOL0851A) against VCS Version 3. The verification includes confirming the implementation of the monitoring plan in the CDM PDD version 07 dated 25/09/2010 which was included in VCS Project Description version 02.1 dated 29/03/2013 and the application of the monitoring methodology as per ACM0002 (Version 11) dated 12/02/2010 and the gap validation for the project's compliance with the VCS rules. A site visit was conducted to verify the data submitted in the monitoring report and information presented in the VCS Project Description.

The project involves the installation of total 33 turbines, each of which has a rated output of 1,500 kW, providing a total installed capacity of 49.5MW. The project is designed to deliver 108,830 MWh of electricity to the Northeast China Power Grid (NECPG) in China per year by using renewable energy source of wind power, replacing fossil fuel consumption and thus reducing GHG (CO₂) emissions.

The report describes a total of 2 findings which include:

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

The finding has been closed satisfactorily.

SGS confirms that the project is implemented in accordance with the 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 186,249 tCO₂e emission reductions during period 16/01/2009 up to 23/02/2011 (82,656 tCO₂e for 16/01/2009-31/12/2009 , 98,593 tCO₂e for 01/01/2010-31/12/2010, and 5,000 tCO₂e for 01/01/2011-23/02/2011).

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1 INTRODUCTION

1.1 Objective

SGS United Kingdom Ltd has been contracted by Guohua (Tongliao) Wind Power Co., Ltd. to perform an independent verification of its project Guohua Tongliao Kezuo Zhongqi Phase I 49.5 MW Wind Farm Project against VCS Version 3. The verifiers have reviewed the GHG data collected for the period between 16/01/2009 and 23/02/2011.

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 Tongliao Kezuo 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 Tongliao Kezuo Zhongqi Phase I 49.5 MW Wind Farm Project
Project ID	UNFCCC Ref, 4495
Monitoring Period Covered in this Report	16/01/2009 to 23/02/2011
Project Proponent(s)	Guohua (Tongliao) Wind Power Co., Ltd (Host - P. R. China)
Location of the Project Activity:	Kezuo Zhongqi, Tongliao City, Inner Mongolia

Autonomous Region, China.

The project involves the installation of total 33 turbines, each of which has a rated output of 1,500 kW, providing a total installed capacity of 49.5MW. The project is designed to deliver the electricity generated to the Northeast China Power Grid (NECPG) in China by using renewable energy source of wind power, replacing fossil fuel consumption and thus reducing GHG (CO₂) emissions. The construction of the project was started on 28/06/2007. The first wind turbine generator has been put into operation on 16/01/2009, and all generators were put into operation on 13/04/2009.

2 VALIDATION PROCESS, FINDINGS AND CONCLUSION

2.1 Validation Process

Based on the information on the UNFCCC website of the project, it is confirmed that the project has been registered as CDM project against the approved CDM baseline and monitoring methodology ACM0002 Version 11 - Consolidated methodology for grid-connected electricity generation from renewable sources. The monitoring period for this VCS validation and verification is from 16/01/2009 to 23/02/2011 which is prior to the starting date of the CDM crediting period for the project (24/02/2011). The validation and verification to this VCS monitoring period is conducted against VCS version 3.

Method and Criteria:

The project was registered as a CDM project on 24/02/2011. According to section 3.11.8 of VCS Standard Version 3.3(/28/), a further validation shall be completed of 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. Relevant information is discussed in Section 2.2.1 of this report.

Document Review:

The validated CDM PDD downloaded from UNFCCC website (/1/), VCS PD and the monitoring report submitted by the client and additional background documents related to the project design were reviewed. A complete list of all documents reviewed is included in Section 6 of this report.

Interview:

On 03/02/2013 to 05/02/2013, the Lead Assessor, Local Assessor and Technical expert (TA 1.2) of the assessment team performed interviews with staff members from Guohua (Tongliao) Wind Power Co., Ltd. to confirm the information in 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 (/30/). Persons Interviewed are listed in section 3.3 of this report.

Site Inspection:

The onsite inspections were conducted by members of the assessment team on 03/02/2013 to 05/02/2013 to verify the physical situation and complement the desk based assessment of the relevant gaps between CDM and VCS Version 3. See section 3.4 for detailed information.

Resolution of Any Material Discrepancy:

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

A Clarification Request (CL) is raised if Project reporting lacks transparency and further information is needed to determine if a material discrepancy is present.

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

Corrective action requests (CARs): The VVB has identified a material discrepancy or non-conformance that the project proponent must address.

The validation 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.

2.2 Validation Findings

2.2.1 Gap Validation

The project was registered as a CDM project on 24/02/2011. According to section 3.11.8 of VCS Standard Version 3.3, a further validation shall be completed of 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 (/30/).

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 were discussed in the VCS PD version 02.1 dated 29/03/2013 .

Validation of 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 are pursuant to Section 3.11.8 of VCS Standard Version 3.3 and Section 4.1.5 of Registration and Issuance Process VCS Standard Version 3.4. Requirement set out in Section 3.11.8 of VCS Standard Version 3.3 and Section 4.1.5 of Registration and Issuance Process VCS Standard Version 3.4 is fulfilled (/29/).

By reviewing the VCS PD and ER spreadsheet version 02 following concerns raised for correction:

1. Section 3.4 of the VCS PD (page 9), the estimated VCUs for the crediting period is inconsistent with the ER spreadsheet and the thousand separator is not correct.
2. Some of the information in the cover page of the ER spreadsheet is derived from the UNFCCC website without any indication of its sources. CAR #2 was raised in this regard.

By reviewing the corrections in VCS PD version 02.1 dated 29/03/2013 and revised ER spreadsheet version 03.1 dated 29/03/2013. it was confirmed that the estimated VCUs for the crediting period in the VCS PD and the ER spreadsheet are consistent. The information quoted from UNFCCC website has been clearly indicated. All concerns were addressed in the updated ER spreadsheet and VCS PD. CAR #2 was closed out.

The cover page:

The project title “Guohua Tongliao Kezuo Zhongqi Phase I 49.5 MW Wind Farm Project” has been validated to be the same as the registered CDM project and the project name indicated in the Letter of Approval (LoA) from China (/27/). The version, date of issue, the entity preparing the relevant sections of VCS PD, and the corresponding contact information has been validated to be correct.

Section 1.2 Sectoral Scope and Project Type: *Indicate the sectoral scope(s) applicable to the project, the AFOLU project category and activity type (if applicable), and whether the project is a grouped project.*

Through the onsite visit, interviewing the project owner and reviewing the project design, it was confirmed that the project was implemented to generate electricity using renewable wind resources and replace the electricity which would otherwise be generated by grid connected power plants. Therefore, it was confirmed that the sectoral scope is scope 1 Energy industries (renewable - / non-renewable sources). It was confirmed that the project is not a grouped project.

Section 1.3 Project Proponent: *Provide contact information and roles/responsibilities for the project proponent(s).*

The project proponent (Guohua (Tongliao) Wind Power Co., Ltd.) and the contact information reported in section 1.3 of the VCS PD have been confirmed to be correct through checking the LoA and interviewing with the project owner through onsite visit.

Section 1.5 Project Start Date: *Indicate the project start date, specifying the day, month and year.*

The indicated project start date is 16/01/2009, which is confirmed to be the date on which the project began generating GHG emission reductions by checking the operation log (/13/).

As per information available on the UNFCCC website, the CDM registration date of the project is 24/02/2011 (UNFCCC Ref. No.:4495) with the first CDM crediting period from 24/02/2011 to 23/02/2018(/4/). The start date of the project was 16/01/2009 which was the day when the project began reducing GHG emissions. The first version of CDM validation report of the project was completed on 20/10/2010, the final revision of the validation report was issued on 15/12/2010 (/4/) for CDM registration. The time between the start date of the project (16/01/2009) and validation completion date (15/12/2010) is less than two years. Thus in compliance with the requirement that non-AFOLU projects shall complete validation within two years of the project start date as per Section 3.7.2 of VCS Standard Version 3.3.

Section 1.6 Project Crediting Period: *Indicate the project crediting period, specifying the day, month and year for the start and end dates and the total number of years.*

As per information available on the UNFCCC website, the CDM registration date of the project is 24/02/2011 (UNFCCC Ref. No.:4495) with the first CDM crediting period from 24/02/2011 to 23/02/2018(/4/). The start date of the project was 16/01/2009 which was the day when the project began reducing GHG emissions. The end date of the project crediting period of VCS is 23/02/2011 which was prior to the CDM registration date and the start date of CDM crediting period (24/02/2011). The project crediting period covers 3 calendar years, i.e., 2009, 2010 and 2011. It is the periods from 16/01/2009 to 31/12/2009 for year 2009, from 01/01/2010 to 31/12/2010 for year 2010, and 01/01/2011 to 23/02/2011 for year 2011.

Section 1.7 Project Scale and Estimated GHG Emission Reductions or Removals: *Indicate the scale of the project (project or mega project) and the estimated annual GHG emission reductions or removals for the project crediting period.*

The ERs of each vintage indicated below are based on the annual ERs in the CDM registered PDD. The average annual ERs of the project are 111,877 tCO₂e, which is less than 300,000 tCO₂e per year. Therefore the project falls in the category of “Project” as per definition.

Project	Yes
Large project	N/A

Years	Estimated GHG emission reductions or removals (tCO ₂ e)
Year 2009	107,279
Year 2010	111,877
Year 2011	16,552
Total estimated ERs	235,708
Total number of crediting years	3
Average annual ERs	111,877

Section 1.9 Project Location: *Indicate the project location and geographic boundaries (if applicable).*

The project is located at Kezuo Zhongqi, Tongliao City, Inner Mongolia Autonomous Region, P. R. China. The geographical coordinates of the proposed project is N41°13' and E122°57'. The location of the project is verified to be consistent with the one in the VCS PD and also confirmed through onsite visit.

Section 1.10 Conditions Prior to Project Initiation: *Describe the conditions existing prior to project initiation and demonstrate that the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction.*

There is no power plant existing prior to the project at the project site, the project is the installation of new grid connected wind power plant. The conditions prior to project initiation has been validated to be the same as the baseline scenario identified in the VCS PD, i.e., supply of equivalent annual power output by the Northeast China Power Grid to which the project is

connected. Therefore, the project is deemed not to be implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction.

Section 1.12.1 Proof of Title: *Provide evidence of proof of title.*

Business license of Guohua (Tongliao) Wind Power Co., Ltd. dated 28/12/2006 (/24/), the Letter of Approval (LoA) issued by the Chinese DNA (/27/) on the UNFCCC website of the project, and the Power Purchase Agreement (PPA, /11/) signed with the grid company were provided to confirm the ownership of the project. It is clearly indicated in the LoA that the project owner is authorized as Chinese participant to voluntarily participate in and carry out the project activity. The Chinese DNA had examined the ownership of the project before it issued the LoA to the project proponent. The business license and the PPA also indicated that Guohua (Tongliao) Wind Power Co., Ltd. is the owner of this project and responsible for the operation and maintenance of this project. Thus, it was confirmed that the project owner has the ownership of the project.

Section 1.12.2 Emissions Trading Programmes and Other Binding Limits: *Where applicable, demonstrate that net GHG emission reductions or removals generated by the project will not be used for compliance with an emissions trading programme or to meet binding limits on GHG emissions.*

Through interview with the project owner, it is confirmed that the project does not take part in emission trading programmes other than the CDM under which it is registered as a CDM project (UN reference number 4495). The VCUs claimed are related to a different period (before the start of the CDM Crediting Period) and therefore there is no double counting.

Section 1.12.3 Participation under Other GHG Programmes: *Indicate whether the project has been registered, or is seeking registration under any other GHG programmes. Where the project has been registered under any other GHG programme, provide the registration number and details.*

Through interview with the project owner, it is validated that the project owner is not included in another voluntary emission trading programme listed on the website of VCS during this monitoring period and the ERs generated from the project will be sold only once.

Section 1.12.4 Other Forms of Environmental Credit: *Demonstrate that 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 Programme, or that any such credit has been or will be cancelled from the relevant programme.*

The project was registered as CDM project (Ref 4495) with a registration date of 24/02/2011 and the start date of the first CDM crediting period is 24/02/2011. The project does not take part in emission trading programmes besides their status under CDM. The VCUs claimed is related to a different period (before the start of the CDM Crediting Period) and therefore there is no double counting.

Through interview with the project owner, it is validated that the project has not created another form of environmental credit.

Section 1.13 Additional Information Relevant to the Project

Eligibility Criteria: *For grouped projects, identify eligibility criteria for inclusion of new instances of each project activity.*

N/A

Leakage Management: *Where applicable, describe the leakage management plan and implementation of leakage and risk mitigation measures.*

According to the applied consolidated methodology ACM0002 (Version 11, /2/), the leakage of the Project is not considered.

Commercially Sensitive Information: *Indicate whether any commercially sensitive information has been excluded from the public version of the project description and briefly describe the items to which such information pertains.*

It is confirmed in the VCS PD (/3/) that no commercially sensitive information relevant to the project description has been excluded from the public version of the project description.

Further Information: *Include any additional relevant legislative, technical, economic, sectoral, social, environmental, geographic, site-specific and/or temporal information that may have a bearing on the eligibility of the project, the net GHG emission reductions or removals, or the quantification of the project's net GHG emission reductions or removals.*

It is confirmed that there is no further information that may have a bearing on the eligibility of the project, the net GHG emission reductions or removals, or the quantification of the project's net emission reductions or removals.

2.2.2 Methodology Deviations

NA

2.2.3 Project Description Deviations

N/A

2.2.4 New Project Activity Instances

NA

2.3 Validation Conclusion

According to the validation report for the project for CDM registration and the above further validation of 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, it is validated that Guohua (Tongliao) Wind Power Co., Ltd. is in compliance with the VCS Programmes requirements as set out in the VCS Rules.

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 validated CDM PDD downloaded from UNFCCC website, VCS PD, the monitoring report, and ER calculation spreadsheet 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 03/02/2013 to 05/02/2013, Lead Assessor, Local Assessor and Technical expert (TA 1.2) performed onsite visit with the Guohua (Tongliao) 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.

Date	Name	Position	Short Description of Subject Discussed
03-05/02/2013	Li Jia	CDM Project Manager	Implementation status, Management and operation system documentation, responsibility allocation, internal audit
03-05/02/2013	Lambert Zhang	CDM Project Manager	Application of methodology, ER calculation, compliance with the VCS PD
03-05/02/2013	Han Chang you	Engineer	Monitoring system, data collection & archive procedure, meters calibration
03-05/02/2013	Zhang Jing	Project manager	Implementation status, Management and operation system documentation, responsibility allocation, internal audit

3.4 Site Inspections

As part of the verification, the following on-site inspections have been performed by the Lead Assessor, Local Assessor and Technical expert (TA 1.2) of the assessment team:

Location: Kezuo Zhongqi, Tongliao City, Inner Mongolia Autonomous Region, P. R. China.	
Date: 03-05/02/2013	
Coverage:	Source of Information / Persons interviewed
1. Assessment of the compliance with the requirement of 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.	Li Jia, Guohua (Tongliao) Wind Power Co., Ltd. Lambert Zhang , REDOX International Consulting Co.,Ltd
2. Assessment of the implementation and operation of the project activity as per VCS PD (with the CDM PDD included.);	Han Chang You, Guohua (Tongliao) Wind Power Co., Ltd. Zhang Jing, Guohua (Tongliao) Wind Power Co., Ltd.
3. Review of information flows for generating, aggregating and reporting the monitoring parameters;	
4. Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan.	
5. A cross-check between information provided in the monitoring report and data from other sources such as MRRs, DRRs and sales receipts;	
6. A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the CDM PDD and the selected methodology;	
7. Review of calculations and assumptions made in determining the GHG data and emission reductions.	
8. 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.	

3.5 Resolution of Any Material Discrepancy

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

A Clarification Request (CL) is raised if Project reporting lacks transparency and further information is needed to determine if a material discrepancy is present.

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

Corrective action requests (CARs): The VVB has identified a material discrepancy or non-conformance that the project proponent must address.

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.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

4.1.1 Implementation status of the project activity

As per information available on the UNFCCC website, <http://cdm.unfccc.int/Projects/DB/DNV-CUK1297673136.16/view>, the CDM registration date of the project is 24/02/2011 (UNFCCC Ref. No.:4495) with the first CDM crediting period from 24/02/2011 to 23/02/2018(/5/). This VCS monitoring period is period before its CDM registration covering period from 16/01/2009 to 23/02/2011, which is verified under VCS version 3.

The project was registered against ACM0002 Version 11 under CDM. The project is a new 49.5 MW wind energy plant by using renewable wind resources to generate electricity and connects to Northeast China Power Grid (NECPG). The project does not involve switching from fossil fuels to renewable energy at the site of the project activity. The geographic and system boundaries for NECPG can be clearly identified and information on the characteristics of the grid is available. Thus, the applied methodology of ACM0002 Version 11 is still applicable to the project.

By reviewing the Financial Audit Report (/16/), it was confirmed that the construction of the project was started on 28/06/2007. The first wind turbine generator has been put into operation on 16/01/2009, and all generators were put into operation on 13/04/2009. Through on site visit, it has been confirmed that the project was implemented and the equipments were installed as described in the VCS PD. All 33 sets of wind turbines with unit capacity of 1.5 MW as well as auxiliary equipments had been set up. It has been confirmed by the assessment team through on-site visit that all physical features of the project activity proposed in the VCS PD are in place.

Through interviewing with the project proponent and reviewing the operation logs (/13/), the project operated smoothly and normally during this monitoring period. Because other projects were put into operation, and the range of measurement had to be expanded, the magnification of meter M has been changed twice. On 17/09/2010, the magnification of meter M was changed from 132,000 to 264,000, the and on 23/12/2010, the magnification of meter M was changed from 264,000 to 528,000 Corresponding evidence magnification upgrades were provided for verification during the site visit (/26/). Besides, the monitoring meters were also changed twice; on 13/07/2009 for M1 and M2, and on 22/12/2010 for M3. Please refer to section 4.1.3 for the detailed information on the meter replacements. It was verified that all the changes are normal operation and maintenance requirement. All the changes were carried with

officially authorised work orders. No events or situations occurred during the monitoring period which may impact the applicability of the methodology.

Through reviewing the Power Purchase Agreement (PPA, /11/), and line connection schematic of the electricity system of the wind farm (/12/), it is confirmed that the electricity generated by the project is supplied to the Northeast China Power Grid and the project boundary is consistent with the VCS PD. As per the VCS PD, there are no other sources of GHG emissions attributable to the project activity which has been verified through onsite visit and interview with the project proponent (PP). No fossil fuels were observed to be used for power generation by the project.

The project proponent (PP) has set up a CDM management manual for monitoring of the project. During this monitoring period, the project has been well operated following the monitoring manual and the management procedure (/8/). The staffs are well trained and are qualified (/10/). Through document review and on-site visit, it has been confirmed by the assessment team that the PP has operated the project activity as per the VCS PD. All the information (data and variables) provided in the monitoring report (/6/) are in compliance with that is stated in the VCS PD.

The calculated emission reductions (ERs) according to estimation in the VCS PD for this monitoring period of 769 days (from 16/01/2009 to 23/02/2011) is 235,708 tCO₂e (235,708 tCO₂e= 111,877 tCO₂e / 365days * 769 days). The verified actual emission reduction in this monitoring period is 186,249 tCO₂e, which is 20.98% lower than the estimated ERs for the same period as per the VCS PD. It is deemed reasonable as the estimation in the VCS PD is based on long-term data while the actual wind resources can fluctuate over years and the turbines were put into operation gradually at the beginning of the implementation of the project.

4.1.2 Verification of monitoring of parameters

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, including the data collection system, is effective and reliable. According to the applied methodology and the monitoring plan, project emission and leakage of the project are zero. Parameters that need to be monitored are EG_{Total,y}: The total net electricity supply to the NECPG by “P” and “X” in year y, E_{P,y}: Electricity generation by “P” (the project) in year y, and E_{X,y}: Electricity generation by “X” in year y. Project “X” consists of following two parts for this monitoring period:

- a) Project “2” stands for “Guohua Tongliao Kezuo Zhongqi Phase II 49.5 MW Wind Farm Project (UNFCCC Ref. No.: 1825)”;
- b) Project “3” stands for “Inner Mongolia Tongliao Wind Farm Project Phase III (UNFCCC Ref. No.: 3264) and Inner Mongolia Tongliao Wind Farm Project Phase IV (UNFCCC Ref. No.: 3287)”;

According to the monitoring plan, the net electricity supplied from the “P” (EG_{P,y}) is calculated as follows:

$$EG_{P,y} = EG_{Total,y} \times E_{P,y} / (E_{P,y} + E_{X,y})$$

$$= (EG_{export,y} - EG_{import,y}) \times E_{P,y} / (E_{P,y} + E_{2,y} + E_{3,y})$$

Where,

EG_{P,y}: the net electricity supplied from the “P”;

EG_{Total,y}: the total net electricity supplied to the NECPG by project “P”, project “2”, and project “3” in year y, calculated from directly measured EG_{export,y} and EG_{import,y};

EG_{export,y}: the electricity exported to the grid by project “P” and “X”, measured by the main meter M;

EG_{import,y}: the electricity imported from the grid by project “P” and “X”, measured by the main meter M;

E_{P,y}: the electricity exported by the project “P” in year y, measured by onsite meter M1;

E_{X,y}: the electricity export to the NECPG by the other projects (projects “2” and “3”) owned by the same

project owner in year y , calculated from directly measured $E_{2,y}$, and $E_{3,y}$;

$E_{2,y}$: the electricity exported by the project “2” owned by the same project owner in year y , measured by onsite meter M2;

$E_{3,y}$: the electricity exported by the project “3” owned by the same project owner in year y , measured by onsite meter M3;

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 and was verified as follows.

(1) $EG_{Total,y}$: The total net electricity supply to the NECPG by “P” and “X” in year y

In accordance with the monitoring plan, the total net electricity supply to the NECPG by project “P”, and “X” (“X” consists of project “2” project “3”) is continuously measured and monthly recorded by the main meter M and backup meter with the accuracy of 0.2S which are installed at the 220kV substation.

Both meters are bi-directional meters, which can measure the total electricity exported to the grid by project “P”, project “2” and project “3” ($EG_{export,y}$) and the total electricity imported from the grid by project “P”, project “2”, and project “3” ($EG_{import,y}$). $EG_{Total,y}$ is the difference between $EG_{export,y}$ and $EG_{import,y}$. The backup meter is planned to be used when main meter M is not functioning. During this monitoring period, the main meter M was under a well operation.

Designated personnel from the grid company and the wind farm company were in charge of monitoring and data recording. The meter readings of the main meter M were read on a daily basis and recorded in the Daily Reading Records (DRRs, /14/) and accumulated data were transcribed into Monthly Reading Records (MRRs, /15/) on a monthly basis. The monthly cut-off time for $EG_{Total,y}$ is 24:00 of the last day of each month. As per the Power Purchase Agreement (PPA, /11/) signed between the project owner and the grid company, the grid company issued Electricity Transaction Notes (ETNs, /17/) serving as sales receipts to the project owner to confirm the amount of $EG_{Total,y}$, $EG_{export,y}$, and $EG_{import,y}$.

Conservative data (smaller value) of $EG_{total,y}$ between the MRRs and sales receipts were used in the $EG_{P,y}$ calculation. During this monitoring period, there are separated sales receipts in July, August, September, in 2009, December 2010 and February 2011 which was provided and reviewed by the assessment team. Data in DRRs were checked for cross reference. It has been verified that the reported monthly values of $EG_{total,y}$ in the MR version 03 dated 27/03/2013 and the ER spreadsheet version 03.1 dated 29/03/2013 (/6//7/) are consistent with the evidences verified. Supporting references and data required to determine $EG_{total,y}$ are found to be complete and transparent.

(2) $E_{P,y}$: Electricity generation by project “P” in year y

In accordance with the monitoring plan, the electricity generation by project “P” in year y ($E_{P,y}$) is continuously measured and monthly recorded by the onsite meter M1 which is installed at the lower voltage side of the on-site 220kV transformers.

The onsite meter M1 are read and recorded by designated personnel from the wind farm company. The daily readings of onsite meters were recorded in DRRs (/14/). The meter readings at 24:00 on the last day of every month were recorded in the MRRs (/15/).

It has been verified that the reported values of $E_{P,y}$ in the MR version 03 dated 27/03/2013 and ER spreadsheet version 03.1 dated 29/03/2013 (/6//7/) are consistent with the evidences verified. Supporting references and data required to determine $E_{P,y}$ are found to be complete and transparent.

(3) $E_{X,y}$: Electricity generation by project “X” in year y , consists of electricity generation by project “2”, and “3” in year y

In accordance with the registered monitoring plan, the electricity generation by project “X” in year y , consists of electricity generation by project “2” and “3” in year y ($E_{X,y}$) is continuously measured and

monthly recorded by the onsite meters (M2 and M3) which is installed at the lower voltage side of the on-site 220kV transformers.

The onsite meters (M2 and M3) are read and recorded by designated personnel from the wind farm company. The daily readings of onsite meters were recorded in DRRs (/14/). The meter readings at 24:00 on the last day of every month were recorded in the MRRs (/15/).

It has been verified that the reported values of $E_{2,y}$, and $E_{3,y}$ in the MR version 03 dated 27/03/2013 and ER spreadsheet version 03.1 dated 29/03/2013 (/6//7/) are consistent with the evidences verified. Supporting references and data required to determine $E_{x,y}$ are found to be complete and transparent.

4.1.3 Accuracy of Equipment

As per the registered monitoring plan of the project, the accuracy of main meter M and backup meter is 0.2S, and the onsite meter is 0.5, in line with relevant national standard. Meter will be calibrated annually according to national standard.

Information on monitoring meters and calibration details has been verified by the assessment team. By verifying the calibration certificates of electricity meters, the assessment team confirmed that the accuracy of all meters is in compliance with the monitoring plan. The on-site meters (M1, M2 and M3) were replaced by new ones on 13/07/2009 and on 22/12/2010, which has been recorded by a formal work order (/25/). The meter replacement was detailed as below:

Meter	Serial number	Accuracy class	Meter replacement date	Service period
M	95173915	0.2S	NA	16/01/2009~23/02/2011
Backup meter of M	95173914	0.2S		16/01/2009~23/02/2011
M1(Old meter)	20071204060087	0.5	13/07/2009	16/01/2009~13/07/2009
M1(new meter)	09030048740091	0.5		13/07/2009~23/02/2011
M2(Old meter)	20071204060083	0.5	13/07/2009	16/01/2009~13/07/2009
M2(new meter)	09030048740098	0.5		13/07/2009~23/02/2011
M3(Old meter)	09030048740067	0.5	22/12/2010	01/06/2010~22/12/2010
M3(new meter)	10110473910122	0.5S*		22/12/2010~23/02/2011

*The new meter of M3 is 0.5s which was confirmed during site visit.

In MR Version 02, page 13, the service period of M3 after replacement was indicated to be starting on 22/12/2010 while the corresponding meter reading in the ER spreadsheet was starting on 23/02/2010. **CAR #1** was raised for correction.

It was confirmed that the meter were replaced and implemented on 22/12/2010. Thus, the service period of M3 in page 13 of the MR Version 03 is consistent with the real fact. In response to this finding, the meter reading reported method in the ER spreadsheet was revised.

In this monitoring period, the calibrations were carried out following the *JIG596-1999 Verification Regulation of Electrical Energy Meters with Electronics (/23/)*. Please refer to table below.

Monitoring equipment	Main meter M	Backup meter
Monitoring parameter	EG _{Total,y}	
S/N	95173915	95173914
Type	Electricity meter	Electricity meter
Level	0.2S	0.2S
Calibration requirement	frequency	Annually

Calibration date	05/09/2008* 04/09/2009 13/06/2010	05/09/2008* 04/09/2009 13/06/2010
Validity	12/06/2011	12/06/2011
Are there delays in calibration?	No	No
Calibration Entity	Tongliao Electric Power Bureau Electric Measurement Office *Northeast Electric Power Design Institute Co., Ltd.	
Accreditation Certificate for the calibration entity Issuing authority Relevant	Tongliao Electric Power Bureau Electric Measurement Office is accredited by Inner Mongolia Autonomous Region Quality and Technical Supervision Bureau with Accreditation Certificate No.: (Meng)Faji(2004)15027 and (Meng)Faji(2009)15027 *Northeast Electric Power Design Institute Co., Ltd is accredited by China National Accreditation Service for Conformity Assessment (CNAS) with Accreditation Certificate No.: CNAS L0440	

Monitoring equipment	M1		M2		M3	
	Old meter	New meter	Old meter	New meter	Old meter	New meter
Monitoring parameter	E _{P,y}		E _{x,y}		E _{x,y}	
S/N	200712040 60087	090300487 40091	200712040 60083	090300487 40098	090300487 40067	101104739 10122
Type	Electricity meter	Electricity meter	Electricity meter	Electricity meter	Electricity meter	Electricity meter
Level	0.5	0.5	0.5	0.5	0.5	0.5S
Calibration frequency requirement	Annually	Annually	Annually	Annually	Annually	Annually
Calibration date	20/12/2008	10/07/2009 30/12/2009 28/12/2010*	20/12/2008	10/07/2009 30/12/2009 28/12/2010*	01/09/2009 13/06/2010	07/12/2010
Validity	19/12/2009	27/12/2011	19/12/2009	27/12/2011	12/06/2011	06/12/2011
Are there delays in calibration ?	No	No	No	No	No	No
Calibration Entity	Tongliao Electric Power Bureau Electric Measurement Office *Northeast Electric Power Design Institute Co., Ltd.					
Accreditation Certificate	Tongliao Electric Power Bureau Electric Measurement Office is accredited by Inner Mongolia Autonomous Region Quality and Technical Supervision Bureau with					

for the calibration entity Issuing authority Relevant	<p>Accreditation Certificate No.: (Meng)Faji(2004)15027 and (Meng)Faji(2009)15027</p> <p>*Northeast Electric Power Design Institute Co., Ltd is accredited by China National Accreditation Service for Conformity Assessment (CNAS) with Accreditation Certificate No.: CNAS L0440</p>
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4.1.4 Summary of compliance with the calibration frequency requirements for measuring instruments.

Calibration was carried out annually by qualified calibrating entities (Tongliao Electric Power Bureau Electric Measurement Office and Northeast Electric Power Design Institute Co., Ltd. Calibration certificates of the meters (/20/) and accreditation certificates for the calibration entities (/21//22/) have been checked by the verification team. The period of validity of the calibrations has covered this monitoring period. It can be confirmed by the assessment team that the meters were calibrated as per the registered monitoring plan.

4.1.5 Remaining Issues from Previous Validation or Verification

VCS validation and verification was combined as the project is already registered under the CDM programmes. This is the VCS verification prior to CDM registration. There are no remaining issues for this project.

4.2 Accuracy of GHG Emission Reduction or Removal Calculations

4.2.1 Accuracy of Emission Reduction Calculations

According to the assessment in section 4.1 of this report, it is confirmed by the assessment team that:

- (a) A complete set of data for this monitoring period is available. All the data requested for the ERs calculation of this monitoring period were monitored and recorded in a complete manner;
- (b) All the reported data in the MR version 03 and the ER spreadsheet version 03.1 have been checked against the original records where they were quoted from;
- (c) The methods and formulae for calculation baseline emissions, project emissions, leakage and emission reductions in the VCS PD have been followed in MR version 03 and ER spreadsheet version 03.1;
- (d) The emission factor has been correctly applied in the calculations in accordance with the VCS PD.

In MR Version 02, page 13 and page 19, the formula for the calculation of ER is not consistent with the methodology as the leakage is not involved in the calculation in the methodology. CAR #1 was raised for correction and closed after the mistake in page 19 of the MR Version 03 was revised and verified to be consistent with the methodology.

4.2.2 Data from External Sources

Based on the information in the VCS PD, the combined margin emission factor of NECPG (EF) was ex-ante determined according to Tool to calculate the emission factor for an electricity system; Version 01.1 and is fixed for the first crediting period. The value of combined margin emission factor of NECPG used in the monitoring report is 1.0280 tCO₂e/MWh, which is the same as the one in the registered CDM PDD. No findings were raised in this regard.

4.2.3 Calculation of Emission Reductions

For each parameter in the MR, the comparison between reported value and verified value is listed as follows:

Parameter	Reported Value in MR version 01	Verified Value in MR version 03
EG _{Total, y} (MWh)	659,972.412	659,972.412
E _{P, y} (MWh)	182,768.040	182,768.040
E _{X, y} (MWh)	483,040.880	483,040.880
EF _{Grid,CM,y} (tCO ₂ e/MWh)	1.0280	1.0280
EG _{P,y} (MWh) in year 2009*	/	80,405.111
EG _{P,y} (MWh) in year 2010*	/	95,907.660
EG _{P,y} (MWh) in year 2011*	/	4,864.433

*EG_{P,y} is calculated as per $EG_{P,y} = EG_{Total,y} * E_{P,y} / (E_{P,y} + E_{X,y})$

The Baseline Emissions (BE_y) is calculated as follows:

$$BE_y = EG_{P,y} \times EF_{Grid,CM,y}$$

The baseline emissions BE_y (tCO₂e) during monitoring period (16/01/2009-31/12/2009) is calculated as following:

$$BE_y = EG_{P,y} * EF_{grid,CM,y} = 80,405.111 \text{ MWh} * 1.0280 \text{ tCO}_2\text{e/MWh} = 82,656 \text{ tCO}_2\text{e}$$

The baseline emissions BE_y (tCO₂e) during monitoring period (01/01/2010-31/12/2010) is calculated as following:

$$BE_y = EG_{P,y} * EF_{grid,CM,y} = 95,907.660 \text{ MWh} * 1.0280 \text{ tCO}_2\text{e/MWh} = 98,593 \text{ tCO}_2\text{e}$$

The baseline emissions BE_y (tCO₂e) during monitoring period (01/01/2011-23/02/2011) is calculated as following:

$$BE_y = EG_{P,y} * EF_{grid,CM,y} = 4,864.433 \text{ MWh} * 1.0280 \text{ tCO}_2\text{e/MWh} = 5,000 \text{ tCO}_2\text{e}$$

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

$$ER_y = BE_y - PE_y$$

The emission reductions during monitoring period (16/01/2009-31/12/2009) are calculated as following:

$$ER_y = BE_y - PE_y = 82,656 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} = 82,656 \text{ tCO}_2\text{e}$$

The emission reductions during monitoring period (01/01/2010-31/12/2010) are calculated as following:

$$ER_y = BE_y - PE_y = 98,593 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} = 98,593 \text{ tCO}_2\text{e}$$

The emission reductions during monitoring period (01/01/2011-23/02/2011) are calculated as following:

$$ER_y = BE_y - PE_y = 5,000 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} = 5,000 \text{ tCO}_2\text{e}$$

Thus, emission reductions generated in this whole monitoring period is 186,249tCO₂e.

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 4.1 and 4.2 above. All the data reported in the MR are verified against the original data such as the MRR, DRR and sales receipts etc. Thus, it can be confirmed that the quality of evidence to determine GHG emission reductions of the project is high.

4.4 Management and Operational System

There are Management and operational system including in the VCS PD. Though reviewing the CDM management manual of this project, the assessment team confirmed that the management and operational system including QA/QC procedures has been implemented in accordance with the monitoring plan in the VCS PD. All staffs were confirmed to be trained and qualified (9/10).

5 VERIFICATION CONCLUSION

The scope of the verification

We, SGS, have been contracted by Guohua (Tongliao) Wind Power Co., Ltd. to certify that the greenhouse gas (GHG) emission reductions reported for the Guohua Tongliao Kezuo Zhongqi Phase I 49.5 MW Wind Farm Project for the period from 16/01/2009 to 23/02/2011 in the monitoring report version 03 dated 27/03/2013 are eligible for registration as Voluntary Carbon Units.

This engagement covers the verification of emission reductions from anthropogenic sources of greenhouse gases included within the project boundary of the Guohua Tongliao Kezuo Zhongqi Phase I 49.5 MW Wind Farm Project as well as an additional confirmation of the compliance of the VCS PD with the requirements of VCS Version 3.

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.

Conclusions of the verification

(a) SGS is an entity accredited by the United Nations Framework Convention for Climate Change (UNFCCC) to undertake validation, certification and verification services in the sector in which the Project is undertaken. The accreditation is accepted by VCSA as indicated in Clause 5 of VCS Programmes Guide Version 3.4 (/29/).

(b) The monitoring report, together with other information examined, was prepared as per the VCS Monitoring Report Template, Version 3.2.

(C)The information in the monitoring report together with other information examined by the assessment team, including all the information necessary to determine that the emission reductions achieved have been determined correctly.

(d) Based on the examination of the monitoring report and other relevant information, the project meets all the requirements of the VCS Version 3.

(e) Based on our examination of the monitoring report and other relevant information, the claiming emission reductions during the monitoring period from 16/01/2009 to 23/02/2011 are verified as 186,249 tonnes CO₂ equivalent.

Liability statement with regards to the accuracy of the verification statement

The management of Guohua (Tongliao) Wind Power Co., Ltd. is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions. SGS is responsible for verification and confirming emission estimates for the project, as described in the monitoring report.

Our certification approach draws on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. Our examination includes an assessment of evidence, through desk review, and where necessary, interviews, stakeholder discussions and site visits, relevant to certifying the rightfulness of the amounts and disclosures in relation to the Project's GHG emission reductions. 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.

We planned and performed our work to obtain the information and explanations that we considered necessary to provide sufficient evidence for us to give reasonable assurance that the amount of GHG emission reductions for the given period, prepared on the basis of the monitoring report, are fairly stated.

This assessment included:

- Collection of evidence supporting the reported data;
- Checking whether the provisions of the Monitoring Plan in the VCS PD, were consistently and appropriately applied;
- Site visit and interview of relevant staff.

We have verified whether the information included in the monitoring report representing the emission reductions achieved has been determined correctly for the given period from the baseline figure.

Certification statements

Based on process and procedures conducted, in our opinion, the monitoring report version 03 dated 27/03/2013 on emission reductions for Guohua Tongliao Kezuo Zhongqi Phase I 49.5 MW Wind Farm Project during the reporting period from 16/01/2009 to 23/02/2011 is materially correct and is a fair representation of the GHG data and information and the emission reductions are fairly stated. All relevant facts have been found correct by our examination. The GHG emission reductions calculation is correct.

Therefore, SGS is able to certify that the project is in full compliance with the VCS Standard Version 3.3, and the quantity of the reported emission reductions during below reporting period are completely, comparably, accurately and correctly reported.

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

GHG Emission Reductions or Removals	tCO ₂ e(ER achieved in period from 16/01/2009 to 31/12/2009)	tCO ₂ e(ER achieved in period from 01/01/2010 to 31/12/2010)	tCO ₂ e(ER achieved in period from 01/01/2011 to 23/02/2011)
Baseline Emissions	82,656 tCO ₂ e	98,593 tCO ₂ e	5,000 tCO ₂ e
Project Emissions	0 tCO ₂ e	0 tCO ₂ e	0 tCO ₂ e
Net GHG emission reductions or removals	82,656 tCO₂e	98,593 tCO₂e	5,000 tCO₂e

Signed on behalf of the Verification Body by Authorized Signatory

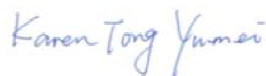
SGS United Kingdom Limited

Dated: 29/03/2013

Dated: 29/03/2013

Signature:

Signature:




Lead Assessor

Technical Reviewer

Karen Tong Yumei

Michael WU Shimin

ANNEX 1: DOCUMENT REFERENCES

- /1/ Registered CDM PDD version 07 dated 25/09/2010, available at: <http://cdm.unfccc.int/Projects/DB/DNV-CUK1297673136.16/view>
- /2/ ACM0002 Consolidated methodology for grid-connected electricity generation from renewable sources Version 11 dated 12/02/2010
- /3/ VCS PD version 01 dated 19/10/2012 and version 02 dated 22/03/2013(Revision voluntarily supplied by the PP by adding information on project scale of the project as per the VCS requirement); version 02.1 dated 29/03/2013 (Revision in section 3.4 in response to CAR #2)
- /4/ Validation Report, issued by DNV, Report No. 2010-1547, Revision No. 01, dated 15/12/2010
- /5/ Project Registration Information on UNFCCC website: <http://cdm.unfccc.int/Projects/DB/DNV-CUK1297673136.16/view>
- /6/ Monitoring Report of the project

MR Version	Date of Revision	Main changes reason for Revision
Version 01	15/11/2012	Initial version issued to DOE
Version 02	22/03/2013	Revision voluntarily supplied by the PP: ER was calculated in calendar year and with other words edition to the monitoring report.
Version 03	27/03/2013	Page 19 , the calculation of ER was revised in respond to CAR #1

- /7/ ERs Calculation Spreadsheet version 01 dated 15/11/2012 and version 02 dated 22/03/2013(Revision voluntarily supplied by the PP: ER was calculated in calendar year in version 02 of the ER sheet.) version 03 dated 27/03/2013(in response to CAR #1.)); version 03.1 dated 29/03/2013 (Cover page revised in response to CAR #2)
- /8/ CDM Monitoring Plan and Management Manual (For Tongliao Wind Farm Project Phase I and II), version 0, dated 12/2008. Version 1 dated 07/2009, and version 2 dated 02/2011.
- /9/ Training Plan and Training Records of the staff of the wind farm
- /10/ Qualification Certificates of the staff of wind farm
- /11/ Power Purchase Agreement (PPA) signed by project owner and grid company date 11/16/2008 ,06/06/2009, and 10/10/2010
- /12/ Turbine Installation diagram and key equipment configuration, schematic diagram of power connection
- /13/ Wind Farm Daily Logbook covering this VCS monitoring period.
- /14/ Daily Reading Records of all meters covering this VCS monitoring period.
- /15/ Monthly Reading Records of all meters covering this VCS monitoring period.
- /16/ Financial Audit Report issued by Beijing Huatongjian Accounting Firm (2009) No.30
- /17/ Sales receipts of the net electricity supplied by the project activity to the grid for this VCS monitoring period
- /18/ Additional clarification issued by the grid company for period from 16/01/2009 to 31/01/2009 and 01/02/2011 to 23/02/2011.
- /19/ The calculation spreadsheet about the values of EG_y from sales receipts.
- /20/ Calibration certificates of three meters, issued by Tongliao Electric Power Bureau Electric Measurement Office and Northeast Electric Power Design Institute Co., Ltd, dated 05/09/2008, 04/09/2009, 13/06/2010 20/12/2008, 10/07/2009,30/12/2009,28/12/2010,01/09/2009, 07/12/2010

- /21/ Accreditation Certificate of Tongliao Electric Power Bureau Electric Measurement Office, issued by Inner Mongolia Autonomous Region Quality and Technical Supervision Bureau, (Certificate No.: (Meng) Faji (2004)15027) issued on 02/01/2004 ,valid till 01/01/2009 ,(Meng) Faji (2009)15027), issued on 02/01/2009, valid till 01/01/2014.
- /22/ Accreditation Certificate of Northeast Electric Power Design Institute Co., Ltd issued by China National Accreditation Service for Conformity Assessment (CNAS) with Accreditation Certificate No.: CNAS L0440 date 15/01/2007 valid till 14/01/2012.
- /23/ JJG 596-1999 Verification Regulation of Electrical Energy Meters with Electronic
- /24/ Business License of Guohua (Tongliao) Wind Power Co., Ltd.dated 28/12/2006
- /25/ Work orders of the meters replace on 13/07/2009 and 22/12/2010
- /26/ Work orders of the magnification change from 132,000 to 264,000 on 17/09/2010 and the magnification change from 264,000 to 528,000 on 23/12/2010.
- /27/ Letter of Approval (LoA) for the project as a CDM project by China DNA date 30/09/2007
- /28/ VCS Standard Version 3.3 dated 04/10/2012
- /29/ VCS Programmes Guide Version 3.4 dated 04/10/2012
- /30/ VCS Project Description Template version 3.1 dated 04/10/2012

ANNEX 2: OVERVIEW OF FINDINGS

Findings Overview Summary

	CARs	CLs
Total Number raised	2	0

Date:	27/03/2013		Raised by:	Karen Tong	
Type:	CAR #1	Number:	#1	Reference:	Section 3.5.5
Lead Assessor Comment:					
For the monitoring report, following corrections were required :					
<ol style="list-style-type: none"> Page 13, the service period of M3 after replacement was indicated to be starting on 22/12/2010 while the corresponding meter reading in the ER spreadsheet was starting on 23/02/2010. Please take correction. Page 19, the formula for the calculation of ER is not consistent with the methodology as the leakage is not involved in the calculation in the methodology. 					
Project Participant Response:				Date: 27/03/2013	
<ol style="list-style-type: none"> The replacement of M3 was implemented on 22/12/2010. In the ER; the meter reading reported method in the ER spreadsheet was revised. This is a mistake. The formula for the calculation of ER has been revised which is consistent with the methodology as the leakage is not involved in the calculation in the methodology. 					
Documentation Provided by Project Participant:					
Updated MR version 03 dated 27/03/2013.					
The updated ER spread sheet version 03 dated 27/03/2013					
Information Verified by Lead Assessor:					
Updated MR version 03 dated 27/03/2013.					
ER spread sheet version 03 dated 27/03/2013					
Reasoning for not Acceptance or Acceptance and Close Out:				Date:	
<p>It was confirmed that the meter were replaced and implemented on 22/12/2010. Thus, the service period of M3 in page 13 of the MR is consistent with the real fact. In response to this finding, the meter reading reported method in the ER spreadsheet was revised.</p> <p>The mistake in page 19 of the MR was revised and verified to be consistent with the methodology. CAR #1 was closed out.</p>					
Acceptance and Close out by Lead Assessor: Karen Tong.				Date: 27/03/2013	

Date:	29/03/2013	Raised by:	Karen Tong		
Type:	CAR #2	Number:	#2	Reference:	Section 2.2.2
Lead Assessor Comment:					
<p>Section 3.4 of the VCS PD (page 9) estimated VCUs for the crediting period is inconsistent with the ER spreadsheet and the thousand separated is not correct. Please check and take correction.</p> <p>Some of the information in the cover page of the ER spreadsheet is derived from the UNFCCC website. Please include a statement of this in the cover page for transparency.</p>					
Project Participant Response:				Date: 29/03/2013	
<p>The estimated VCUs for the crediting period in Section 3.4 of the VCS PD (page 9) have been revised which are consistent with the ER spreadsheet and the thousand separated has been revised as well.</p> <p>The statement that “the information on the cover page is taken from the UNFCCC website http://cdm.unfccc.int/Projects/DB/DNV-CUK1297673136.16/view” has been added in the cover page of ER spreadsheet.</p>					
Documentation Provided by Project Participant:					
<p>Updated PD version 02.1 dated 29/03/2013.</p> <p>Updated ER version 03.1 dated 29/03/2013.</p>					
Information Verified by Lead Assessor:					
<p>Updated VCS PD version 02.1 dated 29/03/2013.</p> <p>Updated ER spreadsheet version 03.1 dated 29/03/2013.</p>					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 29/03/2013	
<p>By reviewing the corrections in VCS PD version 02.1 dated 29/03/2013 and revised ER spreadsheet version 03.1 dated 29/03/2013 it was confirmed that the estimated VCUs for the crediting period in the VCS PD and the ER spreadsheet are consistent. The information quoted from the UNFCCC website has been clearly indicated. All concerns were addressed in the updated ER spreadsheet and VCS PD. CAR #2 was closed out.</p>					
Acceptance and Close out by Lead Assessor: Karen Tong				Date: 29/03/2013	

ANNEX 3: TEAM MEMBERS STATEMENTS OF COMPETENCY

Statement of Competence

Name: Karen Tong

Status

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

Scopes of Expertise

- 1. Energy Industries (renewable / non-renewable)**
- Technical Area(s): TA 1.2 Energy generation from renewable energy sources
- 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): TA 11.2 GHG capture and destruction
- 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 Date: 06/02/2012

Statement of Competence

Name: Jack Xing

Status

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

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	x
Technical Area(s): TA 1.2 Energy generation from renewable energy sources	
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 Date: 25/04/2012

Statement of Competence

Name: Peter Liu

Status

- Lead Assessor	x	- Expert	<input type="checkbox"/>
- Assessor	x	- Financial Expert	<input type="checkbox"/>
- Local Assessor	China	- Technical Reviewer	<input type="checkbox"/>

Scopes of Expertise

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

Approved Member of Staff by: Siddharth Yadav Date: 27/09/2012

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

1. Energy Industries (renewable / non-renewable)	x
Technical Area(s): TA 1.2 Energy generation from renewable energy sources	
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 Date: 19/10/2012