VERIFICATION REPORT AND CERTIFICATION STATEMENT

Longyuan (Beijing) Carbon Asset Management Technology Co., Ltd.

Gansu Yumen Sanshilijingzi Wind Power Project

SGS Climate Change Programme
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Date of Issue:	**Project Number:**
26-06-2009	CCP.VOL0606C
Project Title:	
Gansu Yumen Sanshilijingzi Wind Power Project	
Organisation:	**Client:**
SGS United Kingdom Limited	Longyuan (Beijing) Carbon Asset Management Technology Co., Ltd
Publication of Monitoring Report:	
Monitoring Period:	01/06/2008 - 07/01/2009
First Monitoring Version and Date:	Version 1.0, 15/04/2009
Final Monitoring Version and Date:	Version 2.0, 15/05/2009

Summary:

SGS United Kingdom Ltd has performed the first verification of the VCS2007.1 project Gansu Yumen Sanshilijingzi Wind Power Project (UNFCCC Ref. No. 2193). The verification includes confirming the implementation of the monitoring plan in the registered CDM PDD and the application of the monitoring methodology as per ACM0002 version 06. A site visit was conducted to verify the data submitted in the monitoring report.

Gansu Yumen Sanshilijingzi Wind Power Project is a grid connected renewable energy project located in Yumen Town, Yumen City, Gansu Province, China. In total 58 sets of wind turbines with a unit capacity of 850 KW have been installed, providing a total capacity of 49.3MW. The expected annual electricity generation of the project is 107,872MWh. The project will achieve CO_2 emission reductions by replacing electricity generated by fossil fuel fired power plant connected into Northwest China Power Grid.

SGS confirms that the project is implemented in accordance with the validated Project Description and revised Monitoring Plan. 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 **48,436 tCO_2e** Emission Reductions during period 01/06/2008 up to 07/01/2009.

Subject:			
VCS2007.1 Project Verification			
Verification Team:			
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2	--	--	

Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CL	Clarification Request
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
DRR	Daily reading record
GHG	Greenhouse Gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LoA	Letter of Approval
MP	Monitoring Plan
MR	Monitoring Report
MRRs	Monthly Reading Records
PP	Project Participant
PPA	Power Purchase Agreement
SGS	Société Générale de Surveillance
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard
VCS PD	VCS Project Description
VCU	Voluntary Carbon Unit
VVM	Validation and Verification Manual

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1. Introduction

1.1 Objective

SGS United Kingdom Ltd has been contracted by Longyuan (Beijing) Carbon Asset Management Technology Co., Ltd to perform an independent verification of its VCS project Gansu Yumen Sanshilijingzi Wind Power Project. The verifiers have reviewed the GHG data collected to date for the period between 01/06/2008 and 07/01/2009.

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 the Gansu Yumen Sanshilijingzi Wind Power 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 VCS project Description

Gansu Yumen Sanshilijingzi Wind Power Project is a grid connected renewable energy project located in Yumen Town, Yumen City, Gansu Province, China. Totally 58 sets of wind turbines with unit capacity of 850 KW have been installed, providing a total capacity of 49.3MW (/23/). The expected annual electricity generation of the project is 107,872MWh.The project will achieve CO_2 emission reductions by replacing electricity generated by fossil fuel fired power plant connected into Northwest China Power Grid.

1.4 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%.

1.5 Project Activity and Period Covered

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:	Gansu Yumen Sanshilijingzi Wind Power Project
SGS Reference No:	CCP.VOL0606C
Monitoring Period Covered in this Report	From 01/06/2008 to 07/01/2009
Project Owner	Gansu Jieyuan Wind Power Co., Ltd (People's Republic of China)
Location of the Project Activity:	Yumen City, Gansu Province, China

The project started operation on 01/06/2008. The net electricity delivered to the grid from 01/06/2008 to 07/01/2009 is taken into account for the calculation of emission reductions achieved by this project in this monitoring period.

2. Methodology

2.1 General Approach

SGS's 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.

2.2 Verification Team for this Assessment

Name	*Role*	*SGS Office*
Simon Zhao Xinguang	Lead Assessor	SGS China
Michael Wu Shimin	Assessor	SGS China
Grace Han Huijuan	Assessor	SGS China

2.3 Means of Verification

2.3.1 Review of Documentation

The registered PDD, the monitoring report 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 7 of this report.

2.3.2 Site Visits

As part of the verification, the following on-site inspections have been performed

Location: Yumen Town, Yumen City, Gansu Province, China	
Date: 04/05/2009-06/05/2009	
Coverage:	**Source of Information / Persons Interviewed**
Review of the monitoring report, metering reading records, invoices and monthly reading records. An interview with project participants including reviewing the installation plan and key physical components of the project, CDM monitoring report and staff training records. Collection of the calibration certificates for all the meters involved and the accreditation certificate of the calibration entity. Inspection of the control room, instrument room and step-up transformer station in the wind farm.	Mr. Zhou Jide, Gansu Jieyuan Wind Power Co., Ltd; Ms. Lu Wenjing, Gansu Jieyuan Wind Power Co., Ltd; Mr. Zhang Haichao, Gansu Jieyuan Wind Power Co., Ltd; Mr. Wei Cheng, Gansu Jieyuan Wind Power Co., Ltd; Mr. Wei Liang, Gansu Jieyuan Wind Power Co., Ltd; Ms. Yang Jingmei, Longyuan (Beijing) Carbon Asset Management Technology Co., Ltd

2.4 Reporting of Findings

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.
Forwards Action Requests 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.

2.5 Internal Quality Control

Following the completion of the assessment process and a recommendation by the Assessment Team, all documentation will be forwarded to a Technical Reviewer. The task of the Technical Reviewer is to check that all procedures have been followed and all conclusions are justified. The Technical Reviewer will either accept or reject the recommendation made by the assessment team.

3. Verification Findings

3.1 Project Documentation and Compliance with the registered PDD and VCS PD

3.1.1 Validation opinion of clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS Project Description Template

According to Section 5.2.1 of Voluntary Carbon Standard 2007.1 dated 18/11/2008 (/24/), for non-AFOLU projects, VCS 2007.1 validation shall be completed within two years of the project start date, or shall be completed or contracted before 19 November 2008. The final CDM validation report (/6/) for the project was issued by TUV SUD on 12/08/2008.

Pursuant to Section 4.1.4 of VCS Guidance Document: VCS Project Registration and VCU Issuance Process version 1.1 (/25/), a further validation has been completed of clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS Project Description Template. Such further validation is included in this verification report and details are presented as below

Clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS Project Description Template is not covered in the monitoring report version 1.0 dated 15/04/2009, **CAR #1 was raised** requesting the PP to address these clauses in the monitoring report. PP responded by providing the monitoring report version 2.0 dated 15/05/2009 (/2/) in which these requirements of VCS 2007.1 are fulfilled.

Clause 1.12: Demonstration to confirm that the project was not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction.

Through onsite visit, it is validated that the project is an energy generation project with renewable wind power. It was not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction.

Clause 1.13: Demonstration that the project has not created another form of environmental credit (for example renewable energy certificates).

Through interview with the project owner and document review of the statement (/11/) from the project owner confirming that the project doesn't create another form of environmental credit, it is validated that the project has not created another form of environmental credit.

Clause 1.14: Project rejected under other GHG programs (if applicable).

Through interview with the project owner and review of the UNFCCC website, it is validated that the project has been registered as a CDM project on 08/01/2009 and has not been rejected under other GHG programs.

Clause 8.1: Proof of Title.

The DNA of China issued the LoA for the project on 20/12/2007 (/8/). In the LoA, it is indicated that Gansu Jieyuan Wind Power Co., Ltd is authorized as China's participant to voluntarily participate in and carry out the project activity. The DNA of China had examined the ownership of the project before it issued the LoA to the project participant. The LoA from the DNA of China, the valid business license of the project owner issued by Gansu Province Industrial and Commercial Administrative Management Bureau dated 14/12/2006 (/9/) and the approval of the project issued by Gansu Development and Reform Commission dated 09/04/2007 (/10/) are proofs of title for Gansu Jieyuan Wind Power Co., Ltd for the project.

Clause 8.2: Projects that reduce GHG emissions from activities that participate in an emissions trading program (if applicable).

Through interview with the project owner, it is validated that the project owner is not included in another voluntary emission trading programme listed in the website of VCS (www.v-c-s.org) during this monitoring period. The project owner has provided a statement and further confirmed in the monitoring report version 2.0 that the ERs generated from the project in this monitoring period will be sold only once.

Clauses 1.12, 1.13, 1.14, 8.1 and 8.2 have been discussed in version 2.0 of the Monitoring Report dated 15/05/2009 and relevant evidences have been provided for validation. **CAR #1 was closed.**

The project takes place in China, which has no emission reductions target and the project is not a micro or mega project. There are no mandatory emission trading programmes in China. The project is not a grouped one and the

project is a registered CDM project activity and not rejected under other GHG programs. The PP has confirmed that there is no financially sensitive information that is provided to the DOE.

The project helps improve local economy, increase local financial income and promote electricity utilization in the local area. The project is in compliance with all the relevant local laws and regulations for environmental protection, energy conservation and sustainable development. The project has obtained approvals from relevant authorities. There are no risks that may substantially affect the project's GHG emission reductions.

VALIDATION STATEMENT: As per the validation report for the project for CDM registration and the above further validation of Clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD, it is validated that the Project "Gansu Yumen Sanshilijingzi Wind Power Project" is in compliance with the VCS Program requirements as set out in the VCSA Rules.

3.1.2 Compliance with the registered PDD and VCS PD

The project is a GHG emission reductions project. The project has been registered as a CDM project activity against ACM0002 version 06(/1/). The registration date for the project is 08/01/2009 (/7/). Requirements of VCS2007.1 are fulfilled in the monitoring report version 2.0 dated 15/05/2009.

This is the first verification for the emission reductions achieved before the start of CDM crediting period for the project under VCS2007.1. The monitoring period covered in this verification is from 01/06/2008 to 07/01/2009. The end date of this monitoring period is the day before the start date of the CDM crediting period for the project. The project has not passed a ten year crediting period. According to 5.2.1 of Voluntary Carbon Standard 2007.1 dated 18/11/2008, crediting period start date for any non-AFOLU project under the VCS 2007.1 shall not be earlier than 28/03/2006; the starting date of this monitoring period of this project is verified to be 01/06/2008 which is the date that the project began reducing GHG emissions.

The monitoring report is consistent with ACM0002 version 06 against which the project was validated and registered. There are no differences between ACM0002 version 06 and the monitoring plan in registered CDM PDD (/4/). The project boundary is consistent with the registered CDM PDD version 3.0 dated 29/04/2008.

All relevant GHG emissions have been included in the calculation of Emission Reductions in version 2.0 of the Monitoring Report dated 15/05/2009.

3.2 Monitoring Results

According to the monitoring plan in the registered PDD version 3.0 dated 29/04/2008, parameters EGy and $E_{self\text{-}using}$ need to be monitored. EGy and $E_{self\text{-}using}$ will be monitored by one key meter in the transformer station and two meters in the project site. There was no backup line.

Through onsite visit, it was found that there was one backup line used to import electricity from the grid instead of no backup line as stated in the PDD and there were two meters installed at the transformer station instead of one key meter as stated in the PDD. **CAR #2 was raised** requesting the PP to revise the monitoring plan to make it in compliance with the actual situation. The revised monitoring plan (/5/) has been provided and validated to be in compliance with the actual situation.

3.2.1 Validation of the Revised Monitoring Plan:

In the revised monitoring plan of the project, it is stated that total electricity delivered to the grid by the project (EG_{ex}), electricity imported from the grid by the project through the main line ($E_{im\_main\ line}$)and electricity imported from the grid by the project through the backup line ($E_{im\_backup\ line}$) need to be monitored. EG_{ex} and $E_{im\_main\ line}$ are monitored by two meters installed in the transformer station and two cross check meters in the project site. $E_{im\_backup\ line}$ is monitored by one meter in the backup line.

The revised monitoring plan provides a solution to calculate the net electricity delivered to the grid by the project (EGy) which is used for the calculation of emission reduction. EG_y is calculated by deducting the amount of electricity imported from the grid by the project through the main line and backup line from the amount of total electricity delivered to the grid by the project. Parameters that need to be monitored have been incorporated in the revised MP. QA/QC procedures, calibration of meters and data management system have been included in the revised MP. The revised MP is validated to be in compliance with the actual situation and improve the accuracy and completeness of the information needed, consistency in the registered PDD and monitoring plan.

In compliance with Annex 34 to EB 26 meeting report and Chapter VI section E subsection 3 paragraphs 207 and 208 of the VVM (/27/), it has been validated that this revision of monitoring plan improves the accuracy and completeness of information needed, consistency in the registered PDD and the monitoring plan. The revision of monitoring plan is in accordance with the approved monitoring methodology (ACM0002 version 06) applicable to the project activity and the findings raised during the first verification of the project against VCS 2007.1 have been taken into account. **CAR #2 was closed.**

As per the revised MP, The net electricity delivered to the grid by the project (EGy) used for the calculation of the emission reductions is the total electricity delivered to the grid by the project (EG_{ex}) from which the electricity imported from the grid by the project through the main line ($E_{im\_main\ line}$) and electricity imported from the grid by the project through the backup line ($E_{im\_backup\ line}$) deducted. EG_{ex}, $E_{im\_main\ line}$ and $E_{im\_backup\ line}$ are the three parameters that need to be monitored.

3.2.2 Total electricity delivered to the grid by the project (EG_{ex}) and Electricity imported from the grid by the project through the main line ($E_{im\_main\ line}$)

As per the revised MP, total electricity delivered to the grid by the project and electricity imported from the grid by the project through the main line are measured by two meters (bidirectional, one main meter and one backup meter) installed at the transformer station for the project and two cross check meters (bidirectional, one main meter and one backup meter) at the project site. As per the PPA (/21/) signed between the project company and the grid company, sales receipts are issued based on the readings of the main meter installed at Transformer Station.

Through onsite visit, it is verified that the above mentioned four meters have been correctly installed. Detailed information is as follows:

Meters	SN	Accuracy level	Position
Key meter (main)	206659690	0.2S	Transformer Station
Key meter (backup)	207651734	0.2S	Transformer Station
Cross check meter (main)	36088335	0.2S	Project Site
Cross check meter (backup)	36088336	0.2S	Project Site

As per the page 25 of the registered PDD and revised MP, the metering instruments will be calibrated annually. **CL #3 was raised** for the unavailability of the calibration information in the monitoring report version 1.0. The PP clarified by providing the calibration information in the monitoring report version 2.0. Detailed calibration information of the four meters is as following:

The PP clarified by providing the calibration information in monitoring report version 2. Detailed information is as follows:

SN	Calibration date	Effective till	Certificate No.
206659690	25/04/2008	24/04/2013	QJJL-NAS08-No. 071
207651734	25/04/2008	24/04/2013	QJJL-NAS08-No. 072
36088335	11/01/2008	10/01/2013	QJJL-NAS08-No. 008
36088336	11/01/2008	10/01/2013	QJJL-NAS08-No. 009

Four meters were calibrated by Electric Energy Metrological Center of Gansu Power Company which was accredited by Gansu Province Quality and Technology Supervision Bureau. (Accreditation Certificate No.: (Gan) metro (2006)-62055 dated 05/01/2006). The calibration certificates (/12/) and accreditation certificate of Electric Energy Metrological Center of Gansu Power Company (/13/) were provided to and verified by the verification team. It was verified that four meters have been calibrated by a qualified third party and were within the accuracy level in this monitoring period. **CL #3 was closed.**

Total electricity delivered to the grid by the project and electricity imported from the grid by the project through the main line is continuously monitored by the four meters mentioned above. Designated personnel of the grid company and project company respectively read and record the meter reading of the main key meter installed at the transformer station and the main cross check meter installed at the project site at 0:00 of every day into daily reading record (DRR) and aggregated the data into monthly reading record (MRR) (0:00 of 1st of each month to the 0:00 of the 1st of subsequent month). The grid company issues Electricity Transaction Note (ETN) to the project company after both parties check and confirm the amount of total electricity delivered to the grid by the project and electricity imported from the grid by the project through the main line. The project company issues sales invoices to

the grid company for the amount of total electricity delivered to the grid by the project. Sales invoices for the amount of electricity imported from the grid by the project through the main line are issued by the grid company accordingly. The electricity output of each wind turbine generator is monitored continuously and recorded daily by the computer system installed at the project site.

Data from MRRs of the main key meter (/16/) were used to calculate the net electricity delivered to the grid by the project. Sales receipts for the total electricity delivered to the grid by the project and electricity imported from the grid by the project through the main line (/20/) were used for double check. Data from the MRRs of the main cross check meter (/17/) were used for cross reference. Data in DRRs (/18/) and the wind turbine generation logbooks (/19/) were randomly check for assurance.

CAR #4 was raised because the reported values of electricity delivered to the grid in July and September of 2008 in MR version 1.0 were different from the values verified by the assessor. The PP corrected the values in the MR version 2.0 and VCU calculation spreadsheet (/4/). It was verified that the values used in MR version 2.0 and VCU calculation spreadsheet were correct, conservative and consistent. **CAR #4 was closed.**

CAR #5 was raised because the reported value of electricity imported from the grid by the project in the monitoring report version 1.0 was different from the value verified by the assessor. The PP corrected the value in the MR version 2.0 and VCU calculation spreadsheet. It was verified that the value in MR version 2.0 and VCU calculation spreadsheet was correct, conservative and consistent. **CAR #5 was closed.**

Supporting references and data required to determine total electricity delivered to the grid by the project and electricity imported from the grid by the project through the main line are found to be complete and transparent.

3.2.3 $E_{im\_backup\ line}$: Electricity imported from the grid by the project through the backup line

As per the revised MP, electricity imported from the grid by the project through the backup line was monitored by one backup meter installed in the backup line.

Through onsite visit, it was verified that one meter (SN: 04485178, 0.5S) was installed in the backup line which is owned, operated and controlled by the local electric power bureau. **CL #3 was raised** for the unavailability of the calibration information in monitoring report version 1.0. The PP clarified by providing the calibration information in the monitoring report version 2.0. Detailed calibration information of the meter in the backup line is as following:

SN	Calibration date	Effective till	Certificate No.
04485178	25/03/2008	24/03/2012	YJ08-2006-No.0904(DT)

It was calibrated by Electric Energy Metrological Center of Yumen Electric Power Bureau accredited by Quality and Gansu Province Quality and Technology Supervision Bureau. (Accreditation Certificate No.: (Gan) metro (2007)-62081 dated 09/09/2007)

The calibration certificate (/15/) of the meter in the backup line and accreditation certificate of Electric Energy Metrological Center of Yumen Electric Power Bureau (/16/) were provided to and verified by the verification team. It was verified that the meter measuring the electricity imported from the grid by the project through the backup line have been calibrated by qualified third party and were within the accuracy in this monitoring period. **CL #3 was closed.**

Electricity imported from the grid by the project through the backup line is continuously monitored the meter in the backup line. Designated personnel of local electric power bureau read and record the meter reading of the meter installed at the backup line each month and issues sales receipts to the project company for the amount of electricity imported through the backup line.

Data from the monthly meter readings of the meter in the backup line were used to calculate the net electricity delivered to the grid by the project. Sales receipts for the electricity imported from the grid through the backup line were used for double checking.

There were no fossil fuels used for electricity generation by the project activity during the monitoring period.

Supporting references and data required to determine the electricity imported from the grid by the project through the backup line are found to be complete and transparent.

3.3 Remaining Issues, CAR's, CL's from Previous Validation or Verification

This is the first verification for the project against VCS2007.1. There are no remaining issues from previous validation or verification.

3.4 Project Implementation

Project was implemented and equipment was installed as described in the registered PDD and revised MP.

3.5 Completeness of Monitoring

The reporting procedures reflect the content of the monitoring plan. The monitoring mechanism is effective and reliable.

3.6 Accuracy of Emission Reductions Calculations

The calculation of emission reductions is found to be correct. CAR #4, CAR #5 and CL #6 regarding the accuracy of emission reductions calculations were raised. The responses to CAR #4, CAR #5 and CL #6 were satisfactory and they were closed. The details of the reported and the verified values for all parameters are listed in section 4.

3.7 Quality of Evidence to Determine Emission Reductions

Critical parameters used for the determination of the Emission Reductions are discussed above in section 3.2 above. All the data recorded is in compliance with the monitoring report.

3.8 Management and Operational System and Quality Assurance

Management system and quality assurance procedures have been stipulated in the CDM monitoring manual and monitoring plan and have been implemented during daily operation. (/22/) This has been verified by on-site visit and document review. Therefore we can affirm that the management system of the VCS project is in place; with the responsibilities properly identified and in place.

3.9 Data from External Sources

The baseline emission factor 0.9878 tCO_2/MWh was used in the calculation of baseline emission in MR version 1.0 as per PDD, but it was stated in page 22 and 37 of the validation report for the project that the emission factor 0.9369 tCO_2/MWh may be accepted as it is more conservative. **CL #6 was raised** in this regard. The PP clarified that the baseline emission factor 0.9878 tCO_2/MWh was calculated based on the up-to-date data at the time of submitting the PDD for registration. The emission factor 0.9369 tCO_2/MWh was calculated based on the up-to-date data used in the PDD for the global stakeholder consultation (GSC). The baseline emission factor used in the MR version 2.0 has been revised to be 0.9369 for conservativeness. The PDD version 2.0 for GSC, registered PDD version 3.0 and validation report have been reviewed by the verification team to confirm the baseline emission factor. The baseline emission factor 0.9369 tCO2/MWh is used in the calculation of emission reductions in the MR version 2.0 and VCU calculation spreadsheet. **CL #6 was closed**.

4. Calculation of Emission Reductions

Table 1 Reported and Verified Data of Total Electricity Delivered to the Grid by the Project (EG_{ex})

Period	Reported Value(MWh)	Verified Value(MWh)
01/06/2008-30/06/2008	5,726.820	5,726.820
01/07/2008-31/07/2008	9787.800	9,763.100
01/08/2008-31/08/2008	7,382.364	7,382.364
01/09/2008-30/09/2008	6,053.784	6,004.484
01/10/2008-31/10/2008	5,310.756	5,310.756
01/11/2008-30/11/2008	6,874.164	6,874.164
01/12/2008-31/12/2008	9,037.512	9,037.512
Subtotal of year 2008	50,173.200	50,099.200
01/01/2009-07/01/2009*	1,767.744	1,767.744
Subtotal of year 2009	1,767.744	1,767.744
Total	51,940.944	51,866.944

Note: * The meter readings of the main key meter on 01/01/2009 and 07/01/2009 were used to calcualted EG_{ex} in this period, which is double checked with the sale receipts issued by the grid company covering the period from 01/01/2009 to 31/01/2009 in which the amount of total electricity delivered to the grid by the project from 01/01/2009 to 07/01/2009 is specifically addressed.

Table 2 Reported and Verified Data of Electricity Imported from the grid by the project ($E_{im\_main\ line}$)

Period	Reported Value(MWh)	Verified Value(MWh)
01/06/2008-30/06/2008	15.906	15.576
01/07/2008-31/07/2008	20.13	11.484
01/08/2008-31/08/2008	12.144	12.012
01/09/2008-30/09/2008	12.804	12.804
01/10/2008-31/10/2008	26.796	26.796
01/11/2008-30/11/2008	16.5	16.500
01/12/2008-31/12/2008	20.988	20.988
Subtotal of year 2008	125.268	116.160
01/01/2009-07/01/2009*	23.628	23.628
Subtotal of year 2009	23.628	23.628
Total	148.896	139.788

Note: * The amount of electricity imported from the grid by the project through the main line from 01/01/2009 to 31/01/2009 is considered as the electricity imported from the grid by the project from 01/01/2009 to 07/01/2009 for conservativeness.

Table 2 Reported and Verified Data of Electricity Imported from the grid by the project ($E_{im\_backup\ line}$)

Period	Reported Value(MWh)	Verified Value(MWh)
01/06/2008-30/06/2008	0	2.460
01/07/2008-31/07/2008	0	2.880
01/08/2008-31/08/2008	0	4.080
01/09/2008-30/09/2008	0	6.360
01/10/2008-31/10/2008	0	3.180
01/11/2008-30/11/2008	0	4.260

Period	Reported Value(MWh)	Verified Value(MWh)
01/12/2008-31/12/2008	0	3.180
Subtotal of year 2008	0	26.400
01/01/2009-07/01/2009*	0	1.620
Subtotal of year 2009	0	1.620
Total	0	28.020

Note: * The amount of electricity imported from the grid by the project through the backup line from 01/01/2009 to 31/01/2009 is considered as the electricity imported from the grid by the project from 01/01/2009 to 07/01/2009 for conservativeness.

Table 3 Reported and Verified Data of Net Electricity Delivered to the Grid by the Project (EGy)

Period	Reported Value(MWh)	Verified Value(MWh)
01/06/2008-30/06/2008	5,708.784	5,708.784
01/07/2008-31/07/2008	9,748.736	9,748.736
01/08/2008-31/08/2008	7,366.272	7,366.272
01/09/2008-30/09/2008	5,985.320	5,985.320
01/10/2008-31/10/2008	5,280.780	5,280.780
01/11/2008-30/11/2008	6,853.404	6,853.404
01/12/2008-31/12/2008	9,013.344	9,013.344
Subtotal of year 2008	49,956.640	49,956.640
01/01/2009-07/01/2009	1,742.496	1,742.496
Subtotal of year 2009	1,742.496	1,742.496
Total	51,699.136	51,699.136

For the monitoring period from 01/06/2008 to 07/01/2009:

The net electricity delivered to the grid by the project (EGy) during the monitoring period from 01/06/2008 to 07/01/2009 is 51,699.136 MWh;
The baseline emission factor (EFy) is 0.9369 tCO_2e/MWh;

Baseline emissions (BEy) for the monitoring period from 01/06/2008 to 07/01/2009 is

BEy=EGy×EFy= 51,699.136 MWh×0.9369 tCO_2e/MWh= 48,436 tCO_2e;

Project emissions (PEy) is 0;

Leakage(Ly) is 0;

Emission Reductions for the monitoring period from 01/06/2008 to 07/01/2009 (ERy) is:

ERy=BEy = 48,436 tCO_2e.

For the monitoring period in Year 2008:

The net electricity delivered to the grid by the project (EGy) during the monitoring period from 01/06/2008 to 31/12/2008 is 49,956.640 MWh;

The baseline emission factor (EFy) is 0.9369 tCO_2e/MWh;

Baseline emissions (BEy) for the monitoring period from 01/06/2008 to 31/12/2008 is

BEy=EGy×EFy=49,956.640 MWh×0.9369 tCO_2e/MWh= 46,804 tCO_2e;

Project emissions (PEy) is 0;

Leakage(Ly) is 0;

Emission Reductions for the monitoring period from 01/06/2008 to 31/12/2008 (ERy) is:

ERy,2008=BEy= 46,804 tCO_2e.

For the monitoring period in Year 2009:

The net electricity supplied to the grid by the project (EGy) during the monitoring period from 01/01/2009 to 07/01/2009 is 1,742.496 MWh;

The baseline emission factor (EFy) is 0.9369 tCO_2e/MWh;

Baseline emissions (BEy) for the monitoring period from 01/01/2009 to 07/01/2009 is

$BEy=EGy \times EFy=1,742.496\ MWh \times 0.9369\ tCO_2e/MWh= 1,632\ tCO_2e$;

Project emissions (PEy) is 0;

Leakage(Ly) is 0;

Emission Reductions for the monitoring period from 01/01/2009 to 07/01/2009 (ERy) is:

$ERy,2009=BEy = 1,632\ tCO_2e$.

5. Recommendations for Changes in the Monitoring Plan

CAR #2 was raised requesting PP to revise the monitoring plan. The revised monitoring plan has been provided and validated to be compliance with the actual situation and CAR #2 was closed.

6. VCU Certification Statement

The scope of the verification

We, SGS have been engaged by Longyuan (Beijing) Carbon Asset Management Technology Co., Ltd to certify that the greenhouse gas (GHG) emission reductions reported for Gansu Yumen Sanshilijingzi Wind Power Project for the period from 01/06/2008 to 07/01/2009 in the verification report and the monitoring report version 2.0 dated 15/05/2009 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 Gansu Yumen Sanshilijingzi Wind Power Project, as well as an additional confirmation of the compliance of the registered PDD with the requirements of VCS 2007.1.

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.

Conclusions of the verification

(a) We are an entity accredited by the United Nations Framework Convention for Climate Change (UNFCCC) to undertake certification and verification services in the sector in which the Project is undertaken. The accreditation is accepted by VCS Board as indicated in Clause 9 of VCS 2007.1.

(b) The monitoring report, together with other information examined, was prepared in full substance and form as required by the Voluntary Carbon Standard version 2007.1, published by the Climate Group as approved by the Voluntary Carbon Standard Steering Committee on 18/11/2008.

(c) The information in the Project's monitoring report together with other information examined by us, including all the information necessary for us to determine that the emission reductions achieved have been determined correctly.

(d) Based on our examination of the monitoring report and other relevant information, the Project meets all the requirements of the Voluntary Carbon Standard verification criteria contained in the VCS 2007.1.

(e) Based on our examination of the monitoring report and other relevant information, the claiming emission reductions during the monitoring period from 01/06/2008 to 07/01/2009 are verified as 48,436 tonnes CO_2 equivalent.

Liability statement with regards to the accuracy of the verification statement

The management of the project 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.

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 registered CDM PDD, were consistently and appropriately applied

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 2.0 dated 15/05/2009 on emission reductions for Gansu Yumen Sanshilijingzi Wind Power Project during the reporting period from 01/06/2008 to 07/01/2009 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 were calculated correctly on the basis of ACM0002 version 06 dated 19/05/2006.

Therefore, SGS is able to certify that the project is in full compliance with the Voluntary Carbon Standard 2007.1, and the quantity of the reported emission reductions during below reporting period are completely, comparably, accurately and correctly reported.

Reporting period: From 01/06/2008 to 07/01/2009

Verified emission in the above reporting period:

Project emissions	**0**	t CO_2 equivalents
Baseline emissions	48,436	t CO_2 equivalents
Emission reductions	48,436	t CO_2 equivalents

Wherein:

Unit: tCO_2 equivalents

Reporting Period	01/06/2008 to 31/12/2008	01/01/2009 to 07/01/2009
Project emissions	**0**	**0**
Baseline emissions	**46,804**	**1,632**
Emission reductions	**46,804**	**1,632**

Statement of Confidentiality

SGS will hold all information confidential until the client instructs otherwise or until it has been released in accordance with the VCS2007.1 modalities and procedures.

Signature of Authorised Signatory:
Name of Authorised Signatory: Siddharth Yadav
Date: 8th July 2009

7. Document References

/1/ ACM0002 Version 06 dated 19/05/2006
/2/ VER Monitoring Report of the project version 1.0 dated 15/04/2009 and version 2.0 dated 15/05/2009
/3/ VCU calculation spreadsheet for the project in this monitoring period
/4/ The registered PDD version 3.0 dated 29/04/2008;
The PDD version 2.0 dated 26/08/2007 for GSC
/5/ Revised Monitoring Plan for the project
/6/ Validation report for Gansu Yumen Sanshilijingzi Wind Power Project dated 12/08/2008 Rev No. 3 Report No. 1159769
/7/ http://cdm.unfccc.int/Projects/DB/TUEV-SUED1218655051.51/view
/8/ LoA from the DNA of China dated 20/12/2007 (No. 819)
/9/ Business license of the project owner issued by Gansu Province Industrial and Commercial Administrative Management Bureau dated 14/12/2006
/10/ Approval of the project issued by Gansu Province Development and Reform Commission dated 09/04/2007
/11/ The statement from the PP stating that the project has not created any other form of environmental credit and the emission reductions in this monitoring period will be sold only once
/12/ Calibration certificates of the key meter, backup meter and cross check meters issued by Electric Energy Metrological Center of Gansu Power Company:
Certificate No.: QJJL-NAS08-No. 071 dated 25/04/2008
Certificate No.: QJJL-NAS08-No. 072 dated 25/04/2008
Certificate No.: QJJL-NAS08-No. 008 dated 11/01/2008
Certificate No.: QJJL-NAS08-No. 009 dated 11/01/2008
/13/ Accreditation Certificate of Electric Energy Metrological Center of Gansu Power Company issued by Quality and Gansu Province Quality and Technology Supervision Bureau
Certificate No.: (Gan) Metro(2006)-62055 dated 05/01/2006
/14/ Calibration certificate of the meter in the backup line issued by Electric Energy Metrological Center of Yumen Electric Power Bureau.
Certificate No.: YJ08-2006-No. 0904(DT) dated 25/03/2008
/15/ Accreditation Certificate of Electric Energy Metrological Center of Yumen Electric Power Bureau issued by Quality and Gansu Province Quality and Technology Supervision Bureau
Certificate No.: (Gan) Metro(2007)-62081 dated 09/09/2007
/16/ Monthly Reading Records of the main key meter and meter in the backup line of the project from 01/06/2008 to 07/01/2009
/17/ Monthly Reading Records of the main cross check meter from 01/06/2008 to 07/01/2009
/18/ Daily reading records of the main key meter and cross check meter from 01/06/2008 to 07/01/2009
/19/ Wind turbine generation logbooks of the wind farm from 01/06/2008 to 07/01/2009
/20/ Sales receipts for total electricity delivered to grid by the project and electricity imported from the grid by the project through the main line and backup line covering the period from 01/06/2008 to 07/01/2009
/21/ Power Purchase Agreement signed between the grid company and the project company in 2008.
/22/ CDM monitoring manual, Monitoring plan and staff training records
/23/ Installation schematic of the project
/24/ Voluntary Carbon Standard 2007.1 dated 18/11/2008
/25/ VCS Guidance Document: VCS Project Registration and VCU Issuance Process version 1.1
/26/ Further Guidance for Projects that are Registered in Two GHG Programs (19 March 2008, see VCS Website)
/27/ Validation and Verification Manual Version 01 dated 28/11/2008

A.1 Appendix 1: Findings Overview

Findings Overview Summary

	CARs	CLs	FARs
Total Number raised	4	2	0

Date:	08/05/2009		Raised by:	Michael Wu Shimin and Simon Zhao Xinguang		
Type:	CAR	Number:	CAR #1		Reference:	AU4i A.1
Lead Assessor Comment:				**Date:** 08/05/2009		
Requirements of VCS PD 1.12, 1.13, 1.14, 8.1 and 8.2 were not covered in the monitoring report version 01. Correction is requested.						
Project Participant Response:				**Date:** 15/05/2009		
The monitoring report has been revised and requirements of VCS PD 1.12, 1.13, 1.14, 8.1 and 8.2 has been added to the monitoring report.						
Documentation Provided as Evidence by Project Participant:						
Business license of the project company, 14/12/2006 Approval of the project from Gansu Development and Reform Commission (Gansu DRC), 09/04/2007 Letter of Approval for the project as a CDM project by Chinese NDRC, 20/12/2007						
Information Verified by Lead Assessor:						
Monitoring report version 2.0, LoA from DNA of China, Approval of the project from local DRC, Business license of the project company.						
Reasoning for not Acceptance or Acceptance and Close Out:						
Additional requirements of VCS2007.1 are clearly addressed in version 2.0 of the Monitoring Report dated 15/05/2009 and relevant evidences have been provided for validation. The LoA from the DNA of China, the valid business license of the project owner issued by Gansu Province Industrial and Commercial Administrative Management Bureau dated 14/12/2006 and the approval of the project issued by Gansu Development and Reform Commission dated 09/04/2007 are proofs of title for Gansu Jieyuan Wind Power Co., Ltd for the project. The project is not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction and the project has not created another form of environmental credit other than carbon emission reductions credits. The PP has provided a statement and further confirmed in the monitoring report version 2.0 that the PP during this monitoring period is not included in another voluntary emission trading programme listed in the website of VCS (www.v-c-s.org) during this monitoring period. The ERs generated from the project will be sold only once. CAR #1 was closed.						
Acceptance and Close out by Lead Assessor:				**Date:** 16/05/2009 [Simon Zhao Xinguang]		

Date:	08/05/2009		Raised by:	Michael Wu Shimin and Simon Zhao Xinguang		
Type:	CAR	Number:	CAR #2		Reference:	1.1
Lead Assessor Comment:				**Date:** 08/05/2009		
During onsite visit, it was found that there was one backup line used to import electricity from the grid instead of no backup line as stated in the PDD and there were two key meters installed at the transformer station instead of one key meter as stated in the PDD. Please revise the monitoring plan to make it in compliance with the actual situation.						
Project Participant Response:				**Date:** 15/05/2009		
The monitoring plan has been revised accordingly and delivered to the DOE.						
Documentation Provided as Evidence by Project Participant:						
Revised Monitoring Plan, 15/05/2009 Electricity Sales Receipts Monthly Metering Record Data						
Information Verified by Lead Assessor:						

Revised Monitoring Plan	
Reasoning for not Acceptance or Acceptance and Close Out:	
In the revised monitoring plan of the project, it is stated that total electricity delivered to the grid by the project (EG_{ex}), electricity imported from the grid by the project through the main line ($E_{im\_main\ line}$)and electricity imported from the grid by the project through the backup line ($E_{im\_backup\ line}$) need to be monitored. EG_{ex} and $E_{im\_main\ line}$ are monitored by two key meters installed in the transformer station and two cross check meters in the project site. $E_{im\_backup\ line}$ is monitored by one meter in the backup line. The revised monitoring plan provides a solution to calculate the net electricity delivered to the grid by the project (EGy) which is used for the calculation of emission reduction, which is the total electricity delivered to the grid by the project from which the electricity imported from the grid by the project through the main line and backup line is deducted. Parameters that need to be monitored have been incorporated in the revised PDD. QA/QC procedures, calibration of meters and data management system have been included in the revised monitoring plan. The revised monitoring plan is validated to be in compliance with the actual situation and improve the accuracy and completeness of the information needed, consistency in the registered PDD and monitoring plan. In compliance with Annex 34 to EB 26 meeting report and Chapter VI section E subsection 3 paragraphs 207 and 208 of the VVM, it has been validated that this revision of monitoring plan improves the accuracy and completeness of information needed, consistency in the registered PDD and the monitoring plan. The revision of monitoring plan is in accordance with the approved monitoring methodology (ACM0002 version 06) applicable to the project activity and the findings raised during the first verification of the project against VCS 2007.1 have been taken into account. CAR #2 was closed.	
Acceptance and Close out by Lead Assessor:	**Date:** 16/05/2009 [Simon Zhao Xinguang]

Date:	08/05/2009		Raised by:	Michael Wu Shimin and Simon Zhao Xinguang		
Type:	CL	Number:	CL #3		Reference:	1.1 and 1.2
Lead Assessor Comment:				**Date:** 08/05/2009		
The information about calibration of monitoring meters is not available in the monitoring report version 1. Please provide the calibration information in the monitoring report and provide related evidences.						
Project Participant Response:				**Date:** 15/05/2009		
The information about calibration of monitoring meters has been added into the monitoring report and the evidence have been delivered to DOE for verification. The detail information of calibration is listed in the following table:						

Meters	Serial No.	Calibration date	Valid until
Key meters	206659690	25/04/2008	24/04/2013
	207651734	25/04/2008	24/04/2013
Check meters	36088335	11/01/2008	10/01/2013
	36088336	11/01/2008	10/01/2013
Meter in backup line	04485178	25/03/2008	24/03/2012

Documentation Provided as Evidence by Project Participant:	
Calibration report of meter 206659690, 25/04/2008; Calibration report of meter 207651734, 25/04/2008 Calibration report of meter 36088335, 11/01/2008; Calibration report of meter 36088336, 11/01/2008 Calibration report of meter 04485178, 25/03/2008, Monitoring report version 2.0	
Information Verified by Lead Assessor:	
Monitoring report version 2.0, calibration certificates of the five meters and the accreditation certificates of the calibration entity valid in this monitoring period.	
Reasoning for not Acceptance or Acceptance and Close Out:	
The calibration certificates and accreditation certificate were provided and verified to be consistent with the monitoring report version 2.0. It was verified that all the meters have been calibrated by qualified third parties and were within their accuracy in this monitoring period. CL #3 was closed.	
Acceptance and Close out by Lead Assessor	**Date:** 16/05/2009 [Simon Zhao Xinguang]

Date:	08/05/2009		Raised by:	Michael Wu Shimin and Simon Zhao Xinguang		
Type:	CAR	Number:	CAR #4		Reference:	1.1

Lead Assessor Comment:	**Date:** 08/05/2009
The reported value of total electricity delivered to the grid by the project is verified to be different from the value verified by the assessor in July and September of 2008. Correction is requested.	
Project Participant Response:	**Date:** 15/05/2009
The value of electricity delivered to the grid by the project in July, September of 2008 in the version1 of monitoring report is consistent with the value of monthly record data of electricity delivered by the project. The electricity delivered to the grid by the project in July, September of 2008 is a little higher than the power requirement of the grid company. The excess of electricity delivered to the grid is not paid by the grid company. Therefore, the electricity value in the electricity sales invoice is a little lower than the value in the electricity transaction note. However, the value of electricity delivered has been calculated with the lower value between the electricity transaction note and electricity sales invoice which is conservative. The monitoring report has been revised accordingly.	
Documentation Provided as Evidence by Project Participant:	
Electricity Sales Receipts Monthly Metering Record Data	
Information Verified by Lead Assessor:	
Monthly reading records of the main key meter, sales receipts for the electricity delivered to the grid by the project. Monitoring report version 2.0, VCU calculation spreadsheet.	
Reasoning for not Acceptance or Acceptance and Close Out:	
PP corrected the value in July and September of 2008 in the MR version 2 and VCU calculation spreadsheet. It was verified that the value used in MR version 2.0 and VCU calculation spreadsheet was correct, conservative and consistent. CAR #4 was closed.	
Acceptance and Close out by Lead Assessor:	**Date:** 16/05/2009 [Simon Zhao Xinguang]

Date:	08/05/2009		Raised by:	Michael Wu Shimin		
Type:	CAR	Number:	CAR #5		Reference:	1.2 and 1.3
Lead Assessor Comment:				**Date:** 08/05/2009		
The reported value of electricity imported from the grid by the project is verified to be different from the value verified by the assessor. Correction is requested.						
Project Participant Response:				**Date:** 15/05/2009		
The reported value of electricity imported from grid is different from the verified value because there is some mistake in data transmission and the electricity imported from the grid through backup line was not included in the electricity imported from the grid in the monitoring report (version 1.0). The inaccurate value of electricity imported through main line has been corrected. In addition, the electricity imported from the backup line has been included into the electricity into the electricity imported from the grid. Therefore, the value of electricity imported from the grid has been corrected in the monitoring report (version2.0) which includes the power imported from main line and backup line.						
Documentation Provided as Evidence by Project Participant:						
Electricity Sales Receipts Monthly Metering Record Data						
Information Verified by Lead Assessor:						
Monthly reading records of the main key meter and meter in the backup line, sales receipts for the electricity used by the project. Monitoring report version 2.0, VCU calculation spreadsheet.						
Reasoning for not Acceptance or Acceptance and Close Out:						
PP corrected the value of power imported in the MR version 2.0 and VCU calculation spreadsheet. It was verified that the value in MR version 2.0 and VCU calculation spreadsheet was correct, conservative and consistent. CAR #5 was closed.						
Acceptance and Close out by Lead Assessor:				**Date:** 16/05/2009 [Simon Zhao Xinguang]		

Date:	08/05/2009		Raised by:	Michael Wu Shimin		
Type:	CL	Number:	CL #6		Reference:	1.1
Lead Assessor Comment:				**Date:** 08/05/2009		
The baseline emission factor 0.9878 tCO_2/MWh is used in MR as per PDD, but it was stated in page 22 and 37 of the validation report for the project that the emission factor 0.9369 tCO_2/MWh may be accepted as it is more conservative. Please clarify in this regard.						
Project Participant Response:				**Date:** 15/05/2009		

The baseline emission factor 0.9878 tCO2/MWh is the up-to-date data at the time of submitting the PDD for registration. The emission factor 0.9369 tCO2/MWh is the up-to-date data used in the PDD for the GSC. The baseline emission factor used in the MR has been revised and 0.9369 has been used in the MR (version 2) for conservativeness.
Documentation Provided as Evidence by Project Participant:
The registered PDD, the PDD for GSC, Monitoring report (version 2)
Information Verified by Lead Assessor:
The registered PDD version 3.0 dated 29/04/2008; Validation report for the project dated 12/08/2008; http://cdm.unfccc.int/Projects/DB/TUEV-SUED1218655051.51/view The PDD version 2.0 dated 26/08/2007 for GSC; http://www.netinform.net/KE/Wegweiser/Guide2_3.aspx?ID=3692&Ebene1_ID=26&Ebene2_ID=1111&mode=0 Monitoring report version 2.0 dated 15.05.2009.
Reasoning for not Acceptance or Acceptance and Close Out:
The baseline emission factor 0.9369 tCO2/MWh used in the PDD for GSC was calculated based on the up-to-date data at the time of GSC. The baseline emission factor The baseline emission factor has been used in the calculation of emission reductions in the MR version 2.0 and VCU calculation spreadsheet. CL #6 was closed.
Acceptance and Close out by Lead Assessor: **Date:** 16/05/2009 [Simon Zhao Xinguang]

A.2 Appendix 2: Competency Statements of Team Members

Statement of Competence

Name: Simon Zhao Xinguang SGS Affiliate: China

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☐

	Validation	Verification
- Local Assessor	☒	☒
- Lead Assessor	☒	☒
- Assessor / Trainee Lead Assessor	☒	☒

Scopes of Expertise

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

Approved Member of Staff by Siddharth Yadav Date: 20/10/2008

Simon Zhao Xinguang is a Lead Assessor in scopes 1, 3 and 11 for the SGS Climate Change with extensive experience in the validation and verification of CDM, Gold Standard and VCS 2007 projects in China. He is assigned on the verification of this project.

Statement of Competence

Name:Michael Wu Shimin SGS Affiliate: China

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☐

	Validation	Verification
- Local Assessor	☒	☒
- Lead Assessor	☐	☐
- Assessor / Trainee Lead Assessor	☒	☒

Scopes of Expertise

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

Approved Member of Staff by Joe Sun Date: 01/05/2009

Michael Wu Shimin is an Assessor in scope 1 and 5 for the SGS Climate Change with experience in the validation and verification of CDM and VCS projects in China. He is assigned on the verification of this project.

Statement of Competence

Name:Grace Han SGS Affiliate: China

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☐

	Validation	Verification
- Local Assessor	☒	☒
- Lead Assessor	☐	☐
- Assessor / Trainee Lead Assessor	☒	☒

Scopes of Expertise

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

Approved Member of Staff by Joe Sun Date: 04/05/2009

Grace Han Huijuan is an Assessor in scope 1 and 11 for the SGS Climate Change with experience in the validation and verification of CDM and VCS projects in China. She is assigned on the verification of this project.

A.3 Appendix 3: Monitoring Report

MONITORING REPORT

Gansu Yumen Sanshilijingzi Wind Power Project

Monitoring period: Jun. 01st , 2008 to Jan. 7th, 2009

Date: May. 15th, 2009

Version: 2.0

1. Introduction

This document reports the emission reductions generated by Gansu Yumen Sanshilijingzi Wind Power Project (hereinafter referred as the project) which has been registered successfully as a CDM project on Jan. 08th, 2009 with the CDM registration reference number of 2193 before which on Jun 01st, 2008, however, the project had commenced with real, quantifiable, additional and permanent emissions reductions which can be considered as Verified Emission Reductions (VERs) under the Voluntary Carbon Standard 2007 (VCS 2007) after being verified. The monitoring period is from Jun 01st, 2008 (start date of the operation) to Jan. 07th, 2009.

2. General description of the project

2.1 Project activity

Gansu Yumen Sanshilijingzi Wind Power Project involves the installation of 58 sets of 850KW wind turbines, for a total installed capacity of 49.3MW. The project is estimated that the annual generation of the project will be 107,872MWh. As a result, annual 106,556 tones of CO_2 emission reduction will be achieved by replacing equivalent electricity generated by Gansu Power Grid, an integral part of the Northwest China Power Grid, which is dominated by thermal power plants.

The project can reduce GHG emissions by replacing the generation from fuel-fired power plants by which the Northwest China Power Grid is dominated. And also, it contributes to sustainable development in the region by reducing pollutants discharge (e.g. SO_2, NO_x and dust), creating employment opportunities, promoting the local economic development, and serving as a demonstration for wider deployment of wind power technology in local and national level.

2.2 Technical description of the project

Location of the project activity

The Project is located in Yumen Town,Yumen City, Gansu Province, Northwest China. The site of the project is trapezium. Its five geographical vertex coordinates are (E:96°54□45″, N:40°08□13″), (E:96°58□54″, N:40°10□03″), (E:96°58□54″, N:40°13□44″), (E:96°58□41″, N:40°13□44″), and (E:96°54□45″, N:40°09□00″).

Technology employed by the project activity

Totally 58 Gamesa58-850KW wind turbines with a nominal capacity of 850 kW was installed, providing a total capacity of 49.3MW. All wind turbines are produced in Tianjin factory which is invested by Gamesa EóLICA of Spain.

The auxiliary electric system of wind farm includes onsite control, protection, measure, signalling and surveillance in central control room of wind farm. The targets to be surveilled include 58 wind turbines and transformers. The wind turbines and transmission facility could be monitored and controlled either by onsite central control room or remotely through Internet.

The wind turbine finally adopted by the project is Gamesa58 - 850kW imported from Spain. Due to its advantage on fully utilizing wind resources and improving efficiency, Gamesa58 - 850kW has been adopted worldwide. The development of the project contributes to promoting application of such type of wind turbine, accelerating the accumulation of experiences and absorption of this kind of technology and advancement of domestic wind power technology.

3. Monitoring methodology and plan

The monitoring methodology in this report refers to the CDM monitoring methodology ACM0002 (ver.06) – "Consolidated monitoring methodology for grid-connected electricity generation from renewable sources". In keeping with the monitoring methodology, the following parameter needs to be monitored for the project:

ID	Data type	Data variable	Data unit	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/ paper)	For how long is archived data kept?
EG_{ex}	Electricity	total electricity delivered to the grid by the project	MWh	Continuously measuring and monthly recording	100 %	Electronic	During the crediting period and two years later
$E_{im\_main\ line}$	Electricity	Electricity imported from the grid by the project through main line	MWh	Continuously measuring and monthly recording	100 %	Electronic	During the crediting period and two years later
$E_{im\_backup\ line}$	Electricity	Electricity imported from the grid by the project through backup line	MWh	Continuously measuring and monthly recording	100 %	Electronic	During the crediting period and two years later

4. Quality Control (QC) and Quality Assurance (QA)

ID	Uncertainty level of data (High/Medium/Low)	Explain QA/QC procedures planned for these data, or why such procedures are not necessary.

EG_{ex}	Low	The total electricity delivered to the grid is monitored accurately by the metering equipment (1+1 configuration, one for metering, and the other for backup usage) installed at the transformer station of the grid. There is another metering equipment (1+1 configuration, one for metering, and the other for backup usage) installed at ht project site which can cross check the electricity. The meters are bidirectional function with the accuracy of 0.2s. Total electricity deliver to the grid by the project is measured continuously and recorded monthly. The project owner and the grid company are responsible for reading and calibration of the metering ammeter, recording of the readings, and reporting of readings. The designated personnel recorded the reading of the meters at 0:00 daily, and then the electricity will be aggregated monthly (from 0:00 o'clock on the 1st of every month to 0:00 o'clock on the 1st of the subsequent month). After reading the main meter and confirming the reading with the project owner, the grid issues the Electricity Sales Receipts based on the checked electricity amount. Furthermore, electricity sales receipts will be provided for double check.
$E_{im\_main\ line}$	Low	The electricity imported from the grid through main line is monitored accurately by the metering equipment (1+1 configuration, one for metering, and the other for backup usage) installed at the transformer station of the grid. There is another metering equipment (1+1 configuration, one for metering, and the other for backup usage) installed at the project site which can cross check the electricity. The meters are bidirectional function with the accuracy of 0.2s. Furthermore, electricity sales receipts will be provided for double check.
$E_{im\_main\ line}$	Low	There is a backup meter (0.5s) installed in a 10kv backup line which can be used to meet emergency. The electricity imported from the backup line can be monitored by the backup meter which is owned, operated and controlled by the local electric power bureau. Furthermore, electricity sales receipts will be provided for double check.

Meters have been calibrated according to the national power industry regulations, standards. The detail information of calibration is listed in the following table:

Meter	Serial No.	Calibration date	Valid until
Key meters	206659690	25/04/2008	24/04/2013
	207651734	25/04/2008	24/04/2013
Check meters	36088335	11/01/2008	10/01/2013
	36088336	11/01/2008	10/01/2013
Meter in backup line	04485178	25/03/2008	24/03/2012

5. GHG Calculations

According to the methodology ACM0002: *ERy=BEy-PEy-Ly*

5.1 Project activity emissions

According to the methodology ACM0002 (ver.06), the project activity does not have any GHG emissions.

PEy=0

5.2 Leakages

According to the methodology ACM0002 (ver.06), the leakage from the project is zero.

$Ly=0$

5.3 Baseline emissions

The baseline emission *BEy* during the monitoring period results from:

$$BEy = EGy \times EFy$$

$$EG_{y} = EG_{ex} - E_{im\_main\ line} - E_{im\_backup\ line}$$

Where:

EGy –Net electricity delivered to the grid by the project in the year y (MWh);
EG_{ex} – the total electricity delivered to the grid by the project (MWh);
$E_{im\_main\ line}$ – the electricity imported from the grid by the project through main line (MWh);
$E_{im\_backup\ line}$ – the electricity imported from the grid by the project through backup line (MWh);
EFy – the emission factor of the grid in the year y (calculated ex-ante, fixed for the first crediting period).

Period	Total electricity delivered to the grid by the project*(EGex)* (MWh)	Electricity imported from the grid by the project ($E_{im\_main\ line}$) (MWh)	Electricity imported from the grid by the project ($E_{im\_backup\ line}$) (MWh)	Net electricity delivered to the grid by the project (EGy) (MWh)
01/06/2008-30/06/2008	5,726.820	15.5760	2.4600	5,708.784
01/07/2008-31/07/2008	9,763.100	11.4840	2.8800	9,748.736
01/08/2008-31/08/2008	7,382.364	12.0120	4.0800	7,366.272
01/09/2008-30/09/2008	6,004.484	12.8040	6.3600	5,985.32
01/10/2008-31/10/2008	5,310.756	26.7960	3.1800	5,280.78
01/11/2008-30/11/2008	6,874.164	16.5000	4.2600	6,853.404
01/12/2008-31/12/2008	9,037.512	20.9880	3.1800	9,013.344
subtotal of year 2008	**50,099.200**	**116.1600**	**26.4000**	**49,956.64**

01/01/2009-07/01/2009	1,767.744[1]	23.6280[2]	1.6200[3]	1,742.496
subtotal of year 2009	**1,767.744**	**23.6280**	**1.6200**	**1,742.496**
Total	**51,866.944**	**139.7880**	**28.0200**	**51,699.1360**

The net electricity delivered to the grid by the project (EGy) is 51,699.136MWh, including 49,956.64 MWh in 2008 and 1,742.496 MWh in 2009.

The baseline emission factor of the project (EFy) is 0.9369tCO$_2$e/MWh [4] (the weights of OM and BM of the East China Power Grid are 0.75 and 0.25, respectively).

The baseline emission (BE$_y$) can be calculated by the formula below:

BEy=EGy×EFy=51699.136MWh×0.9369tCO$_2$e/MWh=48,436tCO$_2$e.
Year 2008: *BEy=EG$_y$*×EF$_y$= 49956.64MWh×0.9369tCO$_2$e/MWh=46,804tCO$_2$e.
Year 2009: *BEy=EG$_y$*×EF$_y$=1742.496MWh×0.9369tCO$_2$e/MWh=1,632 tCO$_2$e.

5.4 Emission reductions

As the emissions and leakage from the project activity are zero, emission reduction is equal to baseline emission.

Emission reduction during the monitoring period is:

ERy=BEy=EGy×EFy=51699.136MWh×0.9369tCO$_2$e/MWh=48,436tCO$_2$e.

Emission reduction during year 2008 is:
ERy=BEy=EG$_y$×EF$_y$= 49956.64MWh×0.9369tCO$_2$e/MWh=46,804tCO$_2$e.
Emission reduction during year 2009 is:
ERy=BEy=EG$_y$×EF$_y$=1742.496MWh×0.9369tCO$_2$e/MWh=1,632 tCO$_2$e.

[1] The electricity delivered to the grid between 01/01/2009 and 07/01/2009 is calculated by the reading difference of main meter at 0:00 on 01/01/2007 and at 24:00 on 07/01/2009 multiple Magnification of the meter. It can be double checked by sales receipt.
[2] The electricity imported from the grid during the whole month is used to calculation the $E_{im\_main\ line}$ between 01/01/2009 and 07/01/2009 which is conservative.
[3] The electricity imported from the grid during the whole month is used to calculation the $E_{im\_backup\ line}$ between 01/01/2009 and 07/01/2009 which is conservative.
[4] The baseline emission factor used in the registered PDD is 0.9878 tCO2/MWh. The baseline emission factor used in the PDD for the GSC is 0.9369 tCO2/MWh. The baseline emission factor of the project used in the MR is 0.9369 tCO2/MWh for conservativeness.

Annex 1

The Project Description according to VCS 2007 criteria is provided below.
1.1 For item 1.12 of VCS PD template:
The project is a renewable energy generation project, which discharges no emission during operation period. Thus, the project doesn't fall into categories that creating GHG emissions primarily for the purpose of its subsequent removal or destruction.

1.2 For item 1.13 of VCS PD template
The project has not created another form of environmental credit, which will be verified by DOE.

1.3 For item 1.14 of VCS PD template
The project has been registered as a CDM project, which doesn't fall into rejected projects under other GHG programs.

1.4 For item 8.1 of VCS PD template
The project including the plant, equipment and its emissions reductions is owned by Gansu Jieyuan Wind Power Co., Ltd. Relevant evidences for the ownership will be provide to the DOE, which involves business license of the project company, Approval of the project from Gansu Development and Reform Commission (Gansu DRC) and Letter of Approval for the project as a CDM project by Chinese NDRC.

1.5 For item 8.2 of VCS PD template
The project was registered as a CDM project on 08 Jan. 2009, for which a renewable crediting period of 3×7 years will be used under the CDM GHG Program. Therefore, CO_2 emission reductions generated by the project during the CDM crediting period will be verified as unique CERs but not VEUs to avoid double counting. As to the project under VCS2007, only emission reductions achieved from 1 Jun. 2007 to 07 Jan. 2009 will be considered as VERs.

In addition, this monitoring report also refers to the registered CDM PDD.

A.4 Appendix 4: Revised Monitoring Plan

B.7. Application of the monitoring methodology and description of the monitoring plan:

B.7.1. Data and parameters monitored:

Data / Parameter:	EG_{ex}
Data unit:	MWh
Description:	Total electricity delivered to the grid by the project
Source of data to be used:	Electricity meters
Value of data applied for the purpose of calculating expected emission reductions in section B.5	107,872MWh
Description of measurement methods and procedures to be applied:	The total electricity delivered to the grid by the project is measured through national standard electricity metering instruments. The metering instruments will be calibrated annually in accordance with the "Technical administrative code of electric energy metering (DL/T448-2000). The accuracy of the power meters is 0.2s. The readings of electricity meter will be hourly measured and monthly recorded. Data will be archived for 2 years following the end of the crediting period by means of electronic and paper backup.
QA/QC procedures to be applied:	The designated personnel are responsible for recording the data. Sales receipts will also be obtained for double check.
Any comment:	Electricity delivered by the project activity to the grid. Double check by receipt of sales.

Data / Parameter:	$E_{im\ main\ line}$
Data unit:	MWh
Description:	Electricity imported from the grid by the project through main line
Source of data to be used:	Electricity meters.
Value of data applied for the purpose of calculating expected emission reductions in section B.5	Subtracted from total electricity delivered to the grid by the project
Description of measurement methods and procedures to be applied:	The electricity imported from the grid through main line is monitored accurately by the metering equipment installed at the transformer station of the grid and the project site. The readings of electricity meter will be monthly recorded. Data will be archived for 2 years following the end of the crediting period by means of electronic and paper backup.
QA/QC procedures to be applied:	The designated personnel are responsible for recording the data. Sales receipts will also be obtained for double check.
Any comment:	Electricity imported from the main line. Double check by receipt of sales.

Data / Parameter:	$E_{im\ backup\ line}$
Data unit:	MWh
Description:	Electricity imported from the grid by the project through backup line
Source of data to be used:	Electricity meters.
Value of data applied for the purpose of calculating expected emission reductions insection B.5	Subtracted from total electricity delivered to the grid by the project
Description of measurement methods and procedures to be applied:	There is a backup meter installed in a 10kv backup line which can monitor the electricity imported through the backup line. The readings of electricity meter will be monthly recorded. Data will be archived for 2 years following the end of the crediting period by means of electronic and paper backup.
QA/QC procedures to be applied:	The designated personnel are responsible for recording the data. Sales receipts will also be obtained for double check.
Any comment:	Electricity imported from the backup line. Double check by receipt of sales.

B.7.2. Description of the monitoring plan:

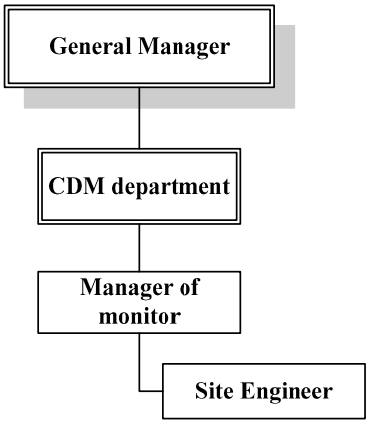
This monitoring plan will assure the completeness, consistency, clear and accurate of monitor and calculation of emission reductions of project activity during the crediting period. The designated personnel are responsible for monitoring and Power Grid Company will implement it together with project owner.

1 Data monitored

For the emission factor of baseline is based on ex-ante calculation, the main data monitored will be total electricity delivered to the grid by this project, electricity imported from the grid by the project through main line and electricity imported from the grid by the project through backup line.

2 Monitor Mechanism

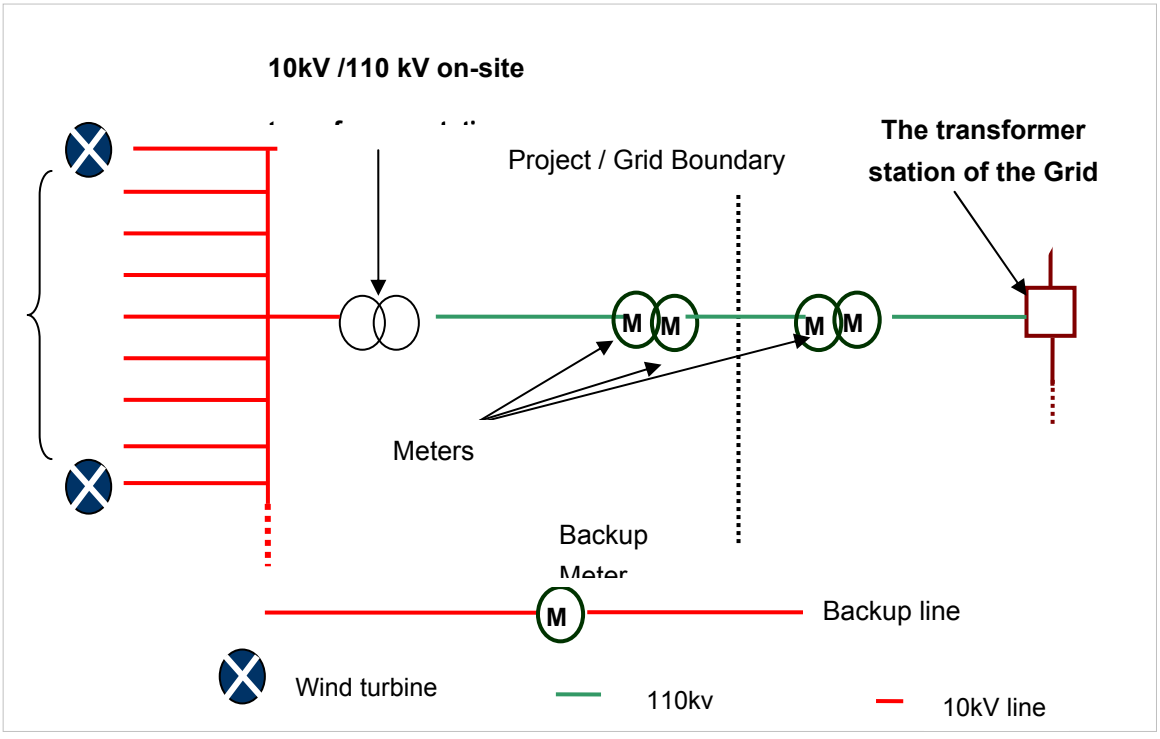
A manager of monitor and check who will be nominated by project owner is responsible for supervising and checking data and whole data record process. Meanwhile, a site engineer will work together with the manager and will collect data (such like electric meter data, keep receipt of sales), calculate emission reduction and prepare the monitor report.



3 Monitor Devices and Installation

The project is connected to the grid through an on-site transformer station that increases the voltage to 110 kV. The project is then connected to the grid. The total electricity delivered to the grid is metered by the grid company at the entrance of the transformer station of the grid (see figure 3). The electric energy metering equipment will be properly configured according to the Technical Administrative Code of Electric Energy Metering (DL/T448-2000).

Figure 3 Simplified electrical grid connection diagram



Four meters with accuracy of 0.2s are installed for the measurement of total electricity delivered to the grid by the project and imported from the grid through the main line. The key meters (1+1 configuration, one for metering, and the other for backup usage) are owned, operated and maintained by the Power

Grid, and the check meters (1+1 configuration, one for metering, and the other for backup usage) are owned, operated and maintained by the owner company. When the key meters are out of order, the readings from the check meters will be used for reference. The meters measure bi-directionally. There is a backup line for emergency which may imports electricity from grid. There is a backup meter (0.5s) installed in the backup line. The electricity imported from the backup line can be monitored by the backup meter which is owned, operated and controlled by the local electric power bureau. The meter readings of the key meters and meter in the backup line are used for sales purposes as well as calculation of emission reduction. The net electricity delivered to the grid is the total electricity delivered to the grid by the project from which electricity imported from grid by the project via the main line and backup line is deducted.

4. Data Management System

This provides information on record keeping of the data collected during monitoring. Record keeping is the most important exercise in relation to the monitoring process.

In order to facilitate auditor's reference, monitoring results will be indexed. All paper-based information will be stored by Gansu Jieyuan Wind Power Co., Ltd. and kept at least one copy.

The following table below outlines the key documents relevant to monitoring and verification of the emission reductions from the project.

Table List of the key documents relevant to monitoring and verification

I.D.No.	Document Title	Main Content	Source
F-1	PDD, including the electronic spreadsheets and supporting documentation(assumptions, estimations, measurement, etc)	Calculation procedure of emission reduction and monitoring items	Consulting Company
F-2	The report on monitoring and checking of electricity delivered to the grid	Record based on monthly meter reading and electricity sale receipts	project owner

5 Meter Calibration

Project owner will be responsible for the operation, monitor and calibration of check meters and Power Grid Company will be responsible the operation, monitor and calibration of key meters. They should both guarantee the meters in good condition and good seal. The verification should get real meter records and calibration reports.

For ensuring the meters' accuracy, yearly meter check and site yearly calibration should be implemented according to the national power industry regulations, standards. Meters should be sealed after calibration. Project owner and Power Gird Company should jointly implement the calibration. It is forbidden to open and modify meters when the other side is not present.

6. Calculation of emission reduction

According to the methodology ACM0002: *ERy=BEy-PEy-Ly*

As the emissions (*PEy)* and leakage (*Ly*) from the project activity are zero, emission reduction is equal to baseline emission.

The baseline emission *BEy* during the monitoring period results from:

$$BEy = EGy \times EFy$$

Where:

EGy is the net electricity delivered to the grid by the project in the year y (MWh);

EFy is the emission factor of the grid in the year y (calculated ex-ante, fixed for the first crediting period).

Emission reduction *ERy* during the monitoring period results from:

$$ERy = BEy = EGy \times EFy$$

According to the meters system mentioned above, the net electricity delivered by the project activity is determined by the total electricity exports to the grid ($\mathbf{EG}_{ex}$) and imports from the grid through main line ($E_{im\_main\ line}$) and imports from the grid through backup line($E_{im\_backup\ line}$). The net electricity delivered to the grid by the project ($\mathbf{EG}_{y}$) is determined using following equations:

$$\mathbf{EGy = EG_{ex} - E_{im\_main\ line} - E_{im\_backup\ line}}$$

Where:

EGy is the net electricity delivered to the grid by the project in the year y (MWh);

$\mathbf{EG}_{ex}$ is the total electricity delivered to the grid by the project (MWh);

$E_{im\_main\ line}$ is the electricity imported from the grid by the project through main line (MWh);

$E_{im\_backup\ line}$ is the electricity imported from the grid by the project through backup line (MWh);

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