
VERIFICATION AND CERTIFICATION REPORT

CECIC Wind-power (Gansu) Co., Ltd.

**CECIC Gansu Yumen Changma
No.3 Wind Farm Project**

(UNFCCC Ref. No. 4734)

Monitoring Period 4: 29/09/2012 - 31/12/2012(Both days inclusive)

SGS Climate Change Programme

SGS United Kingdom Ltd
SGS House
217-221 London Road
Camberley Surrey
GU15 3EY
United Kingdom

Date of Issue:		Project Number:	
27-02-2013		CDM.VER1272 MP4	
Project Title:			
CECIC Gansu Yumen Changma No.3 Wind Farm Project			
Organisation:		Client:	
SGS United Kingdom Limited		CECIC Wind-power (Gansu) Co., Ltd.	
Publication of Monitoring Report:			
Monitoring Period:		From 29/09/2012 to 31/12/2012	
First Monitoring Report Version and Date:		Version 01, dated 01/01/2013	
Final Monitoring Report Version and Date:		Version 02, dated 20/02/2013	
Summary:			
SGS United Kingdom Ltd has performed the fourth periodic verification of the CDM project CECIC Gansu Yumen Changma No.3 Wind Farm Project, with UNFCCC reference number of 4734, registration date of 28/04/2011 and crediting period from 28/04/2011 to 27/04/2018. The verification includes confirming the implementation of the monitoring plan of the revised PDD version 11.0 dated 02/07/2012 which was approved by the EB on 23/10/2012 and the application of the monitoring methodology as per ACM0002, version 12.3.0 and dated 02/03/2012. A site visit was conducted to verify the data submitted in the monitoring report. SGS confirms the following has been reviewed: (a) The approved revised PDD, including the revised monitoring plan and the validation report and the validation opinion on changes in PDD; (b) Monitoring report, emission reductions calculation spreadsheet, previous verification reports; (c) The applied monitoring methodology; (d) Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board; (e) All information and references relevant to the project activity's resulting in emission reductions. This project is a grid connected renewable energy project. It was designed to install 134 sets of wind turbines with a unit capacity of 1,500kW and a total capacity of 201MW to deliver approximately 463,714 MWh of electricity annually to the Northwest China Power Grid (NWPG). The project replaces the electricity generated by fossil-fuel-fired power plants in NWPG and thus reducing GHG emissions. SGS confirms that the project is implemented in accordance with the validated and approved revised Project Design Document. 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 registered 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 95,757 tCO₂e emission reductions during period 29/09/2012 up to 31/12/2012.			
Subject:			
CDM Verification			
Verification Team:			
Rocky Sun – Lead Assessor Crystal Zhu – Local Assessor Tracy Zheng – Expert		☒ No Distribution (without permission from the Client or responsible organisational unit)	
Technical Review:		☐ Limited Distribution	
Date: 28/02/2013 Name: Jett Zhang			
Authorised Signatory:		☐ Unrestricted Distribution	
Name: Siddharth Yadav Date: 14/03/2013			
Revision Number:	Date:	Number of Pages:	
0	22-02-2013	34	
1	27-02-2013	35	

Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CERs	Certified Emission Reductions
CL	Clarification Request
CMP	Conference of Parties serving as the meeting of the parties to the Kyoto Protocol
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EF	Emission Factor
ETNs	Electricity Transaction Notes
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
IPCC	Intergovernmental Panel on Climate Change
MR	Monitoring Report
MRRs	Monthly Reading Records
NWPG	Northwest China Power Grid
PDD	Project Design Document
PP	Project Participant
PPA	Power Purchase Agreement
SGS	SGS United Kingdom Ltd
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

Table of Content

1. Introduction.....	5
1.1 Objective.....	5
1.2 Scope	5
1.3 Project Activity and Period Covered.....	5
2. Methodology	6
2.1 General Approach	6
2.2 Verification Team for this Assessment	6
2.3 Means of Verification.....	6
2.3.1 Review of Documentation	6
2.3.2 Site Visits.....	7
2.4 Reporting of Findings	7
2.5 Internal Quality Control.....	8
3. Verification Findings.....	9
3.1 Project Implementation.....	9
3.2 Post registration changes	10
3.2.1 Temporary deviations from registered monitoring plan or applied methodology.....	10
3.2.2 Corrections	10
3.2.3 Permanent changes from registered monitoring plan or applied methodology	10
3.2.4 Changes to project design of registered project activity	10
3.2.5 Changes to start date of crediting period	10
3.3 Remaining Issues, CAR's, FAR's from Previous Validation or Verification.....	10
3.4 Completeness and accuracy of Monitoring	11
3.4.1 Verification of monitoring of parameters	11
3.4.2 Verification of implementation of sampling plan	12
3.5 Accuracy of Equipment.....	13
3.6 Summary of compliance with the calibration frequency requirements for measuring instruments...14	
3.7 Accuracy of Emission Reduction Calculations.....	14
3.8 Quality of Evidence to Determine Emission Reductions	15
3.9 Management and operational System and Quality Assurance.....	15
3.10 Data from External Sources.....	15
4. Calculation of Emission Reductions.....	16
5. Recommendations for Changes in the Monitoring Plan.....	18
6. Overview of Results	19
7. Verification and Certification Statement.....	21
8. Document References	22
9. Findings Overview	24
10. Statement of Competence.....	25
11. Photographic Evidence	29

1. Introduction

1.1 Objective

SGS United Kingdom Ltd has been contracted by CECIC Wind-power (Gansu) Co., Ltd. (one of the project participants of the project) to perform an independent verification of its CDM project CECIC Gansu Yumen Changma No.3 Wind Farm Project. CDM projects must undergo periodic audits and verification of emission reductions as the basis for issuance of Certified Emission Reductions (CERs).

The objectives of this verification exercise are, by review of objective evidence, to establish that:

- The emissions report conforms with the requirements of the monitoring plan in the revised PDD and the approved methodology; and
- The data reported are complete and transparent.

1.2 Scope

The scope of the verification is the independent and objective review and ex post determination of the monitored reductions in GHG emission by the project activity. The verification is based on the validated and registered project design document and the monitoring report. The project is assessed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures and related rules and guidance.

SGS has, based on the recommendations in the Validation and Verification Standard, employed a risk-based approach in the verification, focusing on the identification of significant reporting risks and the reliability of project monitoring.

Due professional care has been exercised and ethical conduct has been followed by the assessment team during the verification process. The verification report is a fair presentation of the verification activity.

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 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:	CECIC Gansu Yumen Changma No.3 Wind Farm Project
UNFCCC Registration Number:	4734
Monitoring Period Covered in this Report:	29/09/2012 to 31/12/2012
Project Participants:	Host Country: CECIC Wind-power (Gansu) Co., Ltd. (China) Annex I Country: Mitsubishi UFJ Morgan Stanley Securities Co., Ltd. (Japan) Annex I Country: EnBW Trading GmbH (United Kingdom of Great Britain and Northern Ireland)
Location of the Project Activity:	Yumen Town, Yumen City, Gansu Province in the People's Republic of China

This project is a grid connected renewable energy project. It was designed to install 134 sets of wind turbines with a unit capacity of 1,500kW and a total capacity of 201MW to deliver approximately 463,714MWh of electricity annually to the Northwest China Power Grid (NWPG). The project replaces the electricity generated by fossil-fuel-fired power plants in NWPG and thus reducing GHG emissions. The project started construction on 19/09/2009. The first wind turbine was commissioned on 28/01/2011.

2. Methodology

2.1 General Approach

SGS performs the verification work using a Periodic Verification Checklist prepared following the VVS. The Periodic Verification Checklist describes the verification approach and the sampling plan.

The checklist gives the assessment team 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.

Using the Periodic 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.

Only verification activities undertaken after the publication of the monitoring report on the UNFCCC CDM website were used as a basis for SGS to conclude our verification and submit a request for issuance of CERs to the Board.

2.2 Verification Team for this Assessment

A team of competency has been selected to perform the verification of the project.

Name	Role
Rocky Sun	Lead Assessor
Crystal Zhu	Local Assessor
Tracy Zheng	Technical Area expert (TA 1.2)

2.3 Means of Verification

2.3.1 Review of Documentation

The validated 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 8 of this report.

2.3.2 Site Visits

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

Location: Yumen Town, Yumen City, Gansu Province in the People's Republic of China	
Date: 05/02/2013	
Coverage:	Source of Information / Persons Interviewed
1. A assessment of the implementation and operation of the project activity as per the approved revised PDD;	Yang Shuai, CECIC Wind-power (Gansu) Co., Ltd.
2. A review of information flows for generating, aggregating and reporting the monitoring parameters;	Zhang Qingxi, Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.
3. Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan contained in the approved revised PDD;	Shen Hongshuai, CECEP Wind Power Corporation
4. A cross check between information provided in the monitoring report and data from other sources such as MRRs and sales receipts;	Yao Xi, CECEP Wind Power Corporation
5. A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the approved revised PDD and the selected methodology and corresponding tool(s), where applicable;	
6. A review of calculations and assumptions made in determining the GHG data and emission reductions;	
7. An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.	

2.4 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. Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;
- II. Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;

- III. Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- IV. Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants

The verification process may be halted until this information has been made available to comply with the requirements of the CDM Executive Board. 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.

A clarification request (CL) will be raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met. All CARs and CLs raised during verification shall be resolved prior to submitting a request for issuance.

Corrective Action Requests and Clarification Requests are raised in the Periodic Verification Checklist. The Project Developer is given the opportunity to “close” outstanding CARs and respond to CLs.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period, which are for the benefit of future projects and future verification activities. These have no impact upon the completion of the verification activity.

All CARs, CLs and FARs for this verification period are included in this report.

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 Review Team. The task of the Technical Review Team 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.

Technical Review Team

Name	Role
Jett Zhang	Technical Reviewer/Technical Area expert (TA 1.2)

3. Verification Findings

3.1 Project Implementation

According to the information on the UNFCCC website, <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view> (1), the project was registered on 28/04/2011. The first crediting period was originally set as 01/07/2011 to 30/06/2018 (renewable), which has been changed to the period covering 28/04/2011 to 27/04/2018 (renewable). This is the fourth periodic verification for the project covering the period from 29/09/2012 to 31/12/2012. The start date of this monitoring period is 29/09/2012, which is the day after the end date of the third monitoring period. The end date of this monitoring period is 31/12/2012, which is within the first crediting period.

The project was registered against the approved consolidated methodology ACM0002 version 12.1.0 (2). The registered monitoring plan has been revised and approved by the EB on 23/10/2012. According to the Validation Opinion on Changes in the PDD (5), the revised monitoring plan applies from 01/01/2012 onwards. Thus, for this monitoring period (29/09/2012 – 31/12/2012), the revised monitoring plan contained in the revised PDD is therefore applied. The Monitoring Plan in the approved revised PDD (4) is in accordance with the applied monitoring methodology. The following has been checked to verify the applicability of the registered methodology to the project activity.

- ✧ The project is the installation of a grid-connected zero-emission renewable power generation activity using wind resources and not related to capacity addition, retrofit or replacement of a power plant/unit.
- ✧ The project is not an activity that involves switching from fossil fuels to renewable energy sources at the site of the project activity;
- ✧ It does not include the biomass fired power plants;
- ✧ The geographical and system boundaries for the project electricity system (NWPG) have been clearly identified and information on the characteristics of the grid is available.

Considering the latest editorial revision to version 12.1.0 of ACM0002 was version 12.3.0, the PP voluntarily applied the latest version 12.3.0 of the methodology for this monitoring period.

For further checking if the project still fulfils the applicability of revision 12.3.0 of ACM0002, a gap analysis is engaged. The nature of changes in version 12.3.0 compared with version 12.1.0 of ACM0002 are shown as below:

- ✧ Incorporates applicability conditions on how the methodology shall be applied in cases where the project activity includes hydropower plant(s) with multiple reservoirs.
- ✧ Incorporates a provision for the replacement of renewable energy plants, where the replacement units are in a different location from the existing units.
- ✧ Incorporates changes to the baseline section on capacity additions and other minor editorial improvements.

As stated above, all the changes are not applicable to the project since the project is the new installation of a wind power project without multiple reservoirs, replacement or capacity additions. Thus, it is the assessment team's opinion that ACM0002 version 12.3.0 is still applicable to the project. By checking the operation logbooks (10), the assessment team confirmed that there was no event or situation, which may impact the applicability of the methodology that occurred during this monitoring period. The project meets all applicability requirements of the applied methodology ACM0002 version 12.3.0 (2). The monitoring methodology has been correctly applied and the documents for this monitoring period are complete and transparent.

The project was implemented and equipment installed as described in the approved revised PDD.

The physical and spatial configuration of the project has been checked during the site visit. The project consists of only one site and is not implemented in phases. The construction of the project was started on 19/09/2009 (24), the first wind turbine started commissioning on 28/01/2011 and the project started fully

commissioning on 23/10/2012 (25), no delay occurred for the project operation. Through the onsite visit, it is verified that the information of the wind turbines is in compliance with description in the approved revised PDD. The project was implemented and equipment was installed as described in the approved revised PDD. It has been verified that 134 sets of wind turbines with a unit capacity of 1.5MW have been installed. Each turbine has a 690V-to-35kV transformer, and the wind turbines are connected by ten 35kV lines to the 35kV/330kV main transformer in the 330kV Changma West substation, which is an integral part of Northwest China Power Grid (NWPG). According to the installation schematic of the project (20), the Power Purchase Agreement (PPA) signed between the project owner and the grid company (15) and the verified results through the onsite visit, the assessment team confirmed that the project boundary was consistent with the description in the approved revised PDD. As per the approved revised PDD and the validation report of the project (3), there are no other sources of GHG emissions attributable to the project activity. No fossil fuel was used for power generation by the project during this monitoring period as verified through the onsite visit and interview with the Project Participant.

Following paragraph 198 of *Clean Development Mechanism Project Standard* (EB70 Annex 02, 28) and *Guidelines for Completing the Monitoring Report Form* (EB 66 Annex 20, 27), the Monitoring Report (7) contains a comparison of the actual emission reductions claimed in the monitoring period with the estimated value in the approved revised PDD. The estimated emission reductions were 109,629 tCO₂e for the period from 29/09/2012 to 31/12/2012 as per the estimation made in the approved revised PDD. The actual emission reductions have been verified as 95,757 tCO₂e for the same period, which were 12.65% lower than the estimated emission reductions. Therefore, the assessment team confirms that there is no increase in emission reductions achieved in this monitoring period as compared to the estimation in the approved revised PDD.

3.2 Post registration changes

There are no post registration changes during this monitoring period.

3.2.1 Temporary deviations from registered monitoring plan or applied methodology

There is no temporary deviation from registered monitoring plan or applied methodology during this monitoring period.

3.2.2 Corrections

There is no correction to the project information or parameters fixed at validation during this monitoring period.

3.2.3 Permanent changes from registered monitoring plan or applied methodology

The registered monitoring plan has been revised and approved by the CDM EB on 23/10/2012. The PDD was changed to the latest version 11 dated 02/07/2012.

There is no permanent change from the monitoring plan in the approved revised PDD or applied methodologies during this monitoring period.

3.2.4 Changes to project design of registered project activity

There is no change to the project design of the project activity during this monitoring period.

3.2.5 Changes to start date of crediting period

The crediting period was changed from 01/07/2011 – 30/06/2018 to 28/04/2011 – 27/04/2018 before the first period verification.

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

This is the fourth periodic verification for the project. By means of reviewing the validation report and previous verification reports, the assessment team confirm there is no remaining issue from validation (3, 5) and previous verifications (6) and all the findings raised during previous verifications had been closed out. No FAR was raised during previous verifications.

3.4 Completeness and accuracy of Monitoring

3.4.1 Verification of monitoring of parameters

Monitoring of reductions in GHG emissions resulting from the registered project have been implemented in accordance with the monitoring plan contained in the revised PDD approved by the UNFCCC on 23/10/2012. The monitoring mechanism, including the data collection system, is effective and reliable.

In accordance with the approved revised PDD and the validation opinion on changes in the PDD, no project emission parameter or leakage parameter need to be monitored. The parameter needs to be monitored is $EG_{\text{facility},y}$, quantity of net electricity generation supplied by the project plant/unit to the grid. As per paragraphs 234 of the VVS version 03.0 (26), the assessment team confirms that responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the revised PDD.

$EG_{\text{facility},y}$: Quantity of net electricity generation supplied by the project plant/unit to the grid

Monitoring Report, onsite checks Revised Monitoring Plan & Approved Methodology	Requirement in the applicable methodology and relevant EB Documents	Requirement in the monitoring plan of revised PDD	Implementation of the project	Conclusion on the compliance of the implementation with the monitoring plan & applicable methodology.
Data/Parameter	$EG_{\text{facility},y}$	$EG_{\text{facility},y}$	$EG_{\text{facility},y}$	Yes
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid	Quantity of net electricity generation supplied by the project plant/unit to the grid	Quantity of net electricity generation supplied by the project plant/unit to the grid	Yes
Measured/Calculated /Default	Measured	Measured	Measured	Yes
Source of data	Project activity site	Project activity site	Meter reading records of onsite meters	Yes
Monitoring equipment	Electricity meters	Ten bi-directional electricity energy meters, installed at the 35kV side of the 35kV/330kV substation	Ten bi-directional electricity energy meters, installed at the 35kV side of the 35kV/330kV substation	Yes
Measuring/Reading/ Recording frequency	Continuous measurement and at least monthly recording	Continuously measurement and monthly recording	Measuring continuously / Reading monthly / Recording monthly	Yes
Calculation method (if applicable)	N/A	N/A	N/A	N/A
QA/QC procedures	Cross check measurement results with records for sold electricity	Measured data are counter-checked by receipt of electricity sales	The sales receipts of electricity exported to and imported from the grid issued by the grid company were used for cross checking the electricity exported and imported respectively.	Yes

From the table above, the assessment team can confirm the monitoring of the parameter of $EG_{\text{facility},y}$ is in compliance with the monitoring plan in the approved revised PDD. As per the monitoring plan in the approved revised PDD, the $EG_{\text{facility},y}$ was determined as the electricity exported to the grid by the Project minus the electricity imported from the grid by the Project. The electricity exported to the grid by the Project minus the electricity imported from the grid by the Project would to be continuously measured by using ten bi-directional electricity energy meters installed at the 35 kV side of the 35kV/330kV substation. The calibration would be performed at least once a year. Sales receipts would be used for cross check.

In compliance with the monitoring plan in the approved revised PDD, it was verified by the assessment team that the electricity exported to the grid by the Project minus the electricity imported from the grid by the Project were continuously measured by the ten bi-directional electricity energy meters installed at the 35 kV side of the 35kV/330kV substation. The meters were calibrated annually by Metrological Centre of Jiayuguan Power Supply Corporation.

As per the Supplementary Agreement to the PPA (16) signed between the grid company and the project owner, The project shared gateway meters installed at the 330 kV side of the 35kV/330kV substation with other projects. Meter readings of the gateway meter (Main) were used as basis for electricity trading.

During this monitoring period, at a fixed time every month (00:00 of the penultimate day of each month), a designated person of the grid company read the ten meters and manually recorded the data into Monthly Reading Records (MRRs, 9) monthly. The monthly meter readings were sent to the project owner each month by designated staff of the grid company. The project owner checked the data provided by the grid company with the data read from the ten meters through telecommunication system by themselves. After confirmation by both parties, the grid company issued Electricity Transaction Notes (ETNs) on the electricity exported to the grid by the Project and the electricity imported from the grid by the Project. Then, the wind farm invoiced the grid company for the electricity exported to the grid by the project. However, as for the electricity imported from the grid by the Project, due to the fact that the amount of electricity imported was quite limited during this monitoring period, the grid company has not invoiced the wind farm yet. Both of the ETNs and invoices are regarded as sales receipts (11, 12) for cross check with the values from the MRRs. This was deemed conservative and accepted by the assessment team. The monitoring of $EG_{\text{facility},y}$ has been carried out in accordance with the monitoring plan in the approved revised PDD.

MRRs and sales receipts covering this period are archived by the project owner as supportive evidences. For the period from 30/12/2012 to 31/12/2012, **CL #1** was raised to the PP to clarify how the values of “the electricity exported to the grid by the Project” and “the electricity imported from the grid by the Project” from meter reading were cross checked with sales receipts, For the value of “the electricity exported to the grid by the Project”, the PP supplied the confirmation of electricity exported to the grid by the Project (11) issued by the grid company dated on 18/02/2013. It was used to cross check the meter reading during 30/12/2012 to 31/12/2012, Through checking the Monitoring Report version 02 dated 20/02/2013, it is confirmed by the assessment team that the value for the electricity exported to the grid by the Project during the period from 30/12/2012 to 31/12/2012 have been reported in line with the evidence verified. For the value of “the electricity imported from the grid by the Project”, the ETN covering the period from 30/12/2012 to 29/01/2013 were used to cross check the data from meter reading during the period from 30/12/2012 to 31/12/2012. Through checking the Monitoring Report version 02, it is confirmed by the assessment team that the larger value was selected for emission reduction calculations. This was conservative. Therefore, **CL #1 was closed** out. As the confirmation of electricity exported to the grid by the project has been provided regarding as the sales receipts, the assessment team verified that a complete set of data is available for this period.

For the ERs calculation, a conservative approach is adopted to take the smaller value of electricity exported to the grid and the bigger value of electricity imported from the grid between the two sources of meter readings and sales receipts to calculate the quantity of net electricity generation supplied by the project plant/unit to the grid. In addition, data in the operation logbooks (10) were also checked randomly by the assessment team during the onsite visit for cross reference. The data of $EG_{\text{facility},y}$ reported in Monitoring Report version 02 complies with the evidences checked and the calculation of emission reductions in the ERs calculation spreadsheet version 02 (8) were checked and found to be correct and accurate.

3.4.2 Verification of implementation of sampling plan

Not applicable. No sampling plan is required for this project.

3.5 Accuracy of Equipment

The accuracy of the monitoring meters mentioned in section 3.5 can satisfy the requirements of the monitoring plan contained in the approved revised PDD. As per the monitoring plan in the approved revised PDD, all the monitoring meters are subject to annual calibration in accordance with Chinese national standards (21, 22, 23), to ensure the liability and steadiness of the metering results. As for gateway meter(s), although it is not involved directly in the electricity metering, it is used as a basis for electricity trading. Thus, the accuracy of the gateway meter(s) is the key point to ensure the conservativeness of the values used for emission reductions calculation since only the conservative one from the two sources (values from meter readings of the ten monitoring meters and values from the sales receipts) is adopted. In addition, as per “Figure B.7-2 Illustrative metering diagram” in section B.7.2 of the approved revised PDD, Gateway Meter(s) are involved in the monitoring system. The calibration details verified by the assessment team are indicated in the table below (13, 14).

Monitoring equipment	Monitoring parameter	S/N	Type	Level	Calibration frequency requirement	Calibration date	Validity	Are there delays in calibration?	Calibration Entity	Accreditation Certificate for the calibration entity issuing authority Relevant
M35A1	EG _{facility,y}	10040283430044	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No	Metrological Centre of Jiayuguan Power Supply Corporation	Accreditation Certificate of Metrological Centre of Jiayuguan Power Supply Corporation issued by Gansu Bureau of Quality and Technical Supervision dated 29/11/2010 valid till 28/11/2014.
M35A2	EG _{facility,y}	10040283430043	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No		
M35A3	EG _{facility,y}	10070369680003	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No		
M35A4	EG _{facility,y}	10060343560044	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No		
M35A5	EG _{facility,y}	10060343560047	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No		
M35B1	EG _{facility,y}	10070369680002	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No		
M35B2	EG _{facility,y}	10060343560043	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No		
M35B3	EG _{facility,y}	10060343560046	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No		
M35B4	EG _{facility,y}	10060343560048	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No		
M35B5	EG _{facility,y}	10040283430045	Electricity Meter	0.5S	Annually	28/03/2012	27/03/2013	No		

Gateway Meter (Main)	EG _{facility,y}	57033315	Electricity Meter	0.2S	Annually	31/03/2012	30/03/2013	No	Electric Energy Measurement Centre of Gansu Electric Power Corporation	Accreditation Certificate of Electric Energy Measurement Centre of Gansu Electric Power Corporation issued by Gansu Bureau of Quality and Technical Supervision dated 26/01/2011 valid till 25/01/2016.
Gateway Meter (Backup)	EG _{facility,y}	57033312	Electricity Meter	0.2S	Annually	31/03/2012	30/03/2013	No		

In conclusion, the assessment team confirmed that the accuracy of metering equipment used for the monitoring of the project is in accordance with the monitoring plan in the approved revised PDD. The meters have been calibrated annually in accordance with the monitoring plan in the approved revised PDD and there were no delay in calibration of the meters.

3.6 Summary of compliance with the calibration frequency requirements for measuring instruments.

As discussed in section 3.5 of this report, all metering equipments have been calibrated annually as per the monitoring plan in the approved revised PDD and no delay in calibration was identified during this monitoring period.

3.7 Accuracy of Emission Reduction Calculations

CL #1 was related to the accuracy of reported values and had an impact on the emission reduction calculations. The response to CL #1 was found satisfactory and CL #1 was closed. No CARs were raised. The calculation of emission reductions is found to be correct. The details of the reported and the verified values for all parameters are listed in section 4, 'Calculation of Emission Reductions'.

The details of the reported and the verified values for all parameters are listed in section 4, 'Calculation of Emission Reductions'. According to the assessment in section 3.4, 3.5 and 3.10, it has been confirmed by the assessment team that in the final version of the MR and ERs calculation spreadsheet:

- All the data requested for the ERs calculation of this monitoring period were monitored and recorded in a complete manner.
- Monitoring data for the parameter EG_{facility,y} reported in the Monitoring Report have been correctly reported and cross checked with sales receipts provided by the PP and conservative values have been used for the ER calculation.
- The methods and formulae for calculation of baseline emissions, project emissions and leakage specified in the revised PDD have been followed.

- (d) The emission factors and default values have been applied correctly in accordance with the revised PDD, validation report and previous verification reports.

The details of the reported and the verified values for all parameters are listed in section 4, 'Calculation of Emission Reductions'.

3.8 Quality of Evidence to Determine Emission Reductions

Critical parameters used for the determination of the Emission Reductions are discussed in section 3.4 above. All the data recorded is in compliance with the monitoring report.

3.9 Management and operational System and Quality Assurance

The management system and quality assurance procedures have been stipulated in the CDM Manual (17) and internal operation procedures, and have been implemented during operation. An emergency plan is in place (18) although no emergency situation happened during this monitoring period. The responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the monitoring plan contained in the revised PDD. Monitoring staff were trained regularly. The training records (19) are documented and have been verified during the on-site visit by the assessment team. All the operation staff are qualified. The qualification certificates (19) were also verified. During the onsite visit, the assessment team checked the onsite monitoring procedure and reviewed the relative staff for their eligibility. Therefore, the assessment team can confirm that the management system of the CDM project is in place; with the responsibilities properly identified and in place. The CDM manual, training records and staff qualification has been verified.

3.10 Data from External Sources

According to the description about the calculation of the baseline emission factor in page 54 of the approved revised PDD and page 24 of the validation report of the project, the baseline emission factor ($EF_{grid,CM,y}$) was ex-ante determined and it is fixed for the first crediting period. The value of the baseline emission factor used in the monitoring report is 0.9180 tCO₂e/MWh, which is the same as the one in the approved revised PDD.

4. Calculation of Emission Reductions

Table 1 Reported and verified value of the electricity exported to the grid by the Project

Period	Reported Value in MR version 01 (MWh)	Verified Value in MR version 02 (MWh)
29/09/2012-29/10/2012	31,053.910	31,053.910
30/10/2012-28/11/2012	34,834.000	34,834.000
29/11/2012-29/12/2012	35,263.000	35,263.000
30/12/2012-31/12/2012	3,404.100	3,358.080
Subtotal	104,555.010	104,508.990

Table 2 Reported and verified value of the electricity imported from the grid by the Project

Period	Reported Value in MR version 01 (MWh)	Verified Value in MR version 02 (MWh)
29/09/2012-29/10/2012	29.040	29.040
30/10/2012-28/11/2012	50.160	50.160
29/11/2012-29/12/2012	71.280	71.280
30/12/2012-31/12/2012	2.100	47.520
Subtotal	152.580	198.000

Table 3 Reported and verified value of $EG_{\text{facility},y}$ (equal to value of the electricity exported to the grid by the Project minus the electricity imported from the grid by the Project)

Period	Reported Value in MR version 01 (MWh)	Verified Value in MR version 02 (MWh)
29/09/2012-29/10/2012	31,024.870	31,024.870
30/10/2012-28/11/2012	34,783.840	34,783.840
29/11/2012-29/12/2012	35,191.720	35,191.720
30/12/2012-31/12/2012	3,402.000	3,310.560
Subtotal	104,402.430	104,310.990

Refer to section 3.4. CL #1 was raised to the PP to clarify how the values of “the electricity exported to the grid by the Project” and “the electricity imported from the grid by the Project” from meter reading were cross checked with sales receipts from meter reading during 30/12/2012 to 31/12/2012. Through checking the Monitoring Report version 02, it is confirmed by the assessment team that the value of “the electricity exported to the grid by the Project” and “the electricity imported from the grid by the Project” had been reported in line with the evidence verified. CL #1 was closed out.

Baseline emissions (BE_y) for the monitoring period from 29/09/2012 to 31/12/2012

The Baseline Emissions (BE_y) is calculated as follows:

$$BE_y = EG_{PJ,y} \times EF_{\text{grid},CM,y}$$

As the project is considered a Greenfield plant,

$$EG_{PJ,y} = EG_{\text{facility},y}$$

$$BE_y = EG_{\text{facility},y} \times EF_{\text{grid},CM,y} = 104,310.990 \text{ MWh} \times 0.9180 \text{ tCO}_2\text{e/MWh} = 95,757 \text{ tCO}_2\text{e};$$

Project emissions (PE_y) is 0 tCO₂e;

Leakage (L_y) is neglected based on the applied methodology and approved revised PDD;

Emission Reductions for the monitoring period from 29/09/2012 to 31/12/2012 is:

$$ER_y = BE_y - PE_y = 95,757 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} = 95,757 \text{ tCO}_2\text{e}.$$

Emission Reduction:

Period	Reported Value (as per the web hosted MR) tCO ₂ e	Verified Value tCO ₂ e	If Different, Summary of Issues That Caused the Difference
29/09/2012 to 31/12/2012	95,841	95,757	Please refer to the CL #1 raised due to which ER changed from reported value
CERs (Up to 31 December 2012 (1st commitment period);)	95,841	95,757	Please refer to the CL #1 raised due to which ER changed from reported value
CERs (From 1 January 2013 onwards.	N/A	N/A	N/A



5. Recommendations for Changes in the Monitoring Plan

The monitoring plan has already been revised and has been approved by the CDM EB on 23/10/2012 during the previous (the second) verification. No recommendation for future changes.

6. Overview of Results

Assessment Against the Provisions of Decision 17/CP.7:

Is the project documentation in accordance with the requirements of the registered PDD and relevant provision of decision 17/CP.7, EB decisions and guidance and the COP/MOP?

Yes. The results of the compliance assessment are recorded in the verification checklist which is used as an internal report only.

Have on-site inspections been performed that may comprise, inter alia, a review of performance records, interviews with project participants and local stakeholders, collection of measurements, observations of established practices and testing of the accuracy of monitoring equipment?

Yes. All members of the assessment team visited the site and undertook interviews, collected data, audited the implementation of procedures, checked calibration certificates and checked data, inter alia.

The results of the site visit are recorded in the verification checklist which is used as an internal report only.

The evidences have been checked and collected. The final Monitoring Report is attached with this verification report.

Has data from additional sources been used? If yes, please detail the source and significance.

Yes. The baseline emission factor, 0.9180 tCO₂e/MWh, was determined using external sources at validation stage. The significance is high. Since baseline emission factor is ex-ante determined and fixed for the first crediting period, its risk is deemed to be low.

Please review the monitoring results and verify that the monitoring methodologies for the estimation of reductions in anthropogenic emissions by sources have been applied correctly and their documentation is complete and transparent.

Yes. The monitoring methodology has been correctly applied and the Monitoring Report and supporting references are complete and transparent.

Have any recommendations for changes to the monitoring methodology for any future crediting period been issued to the project participant?

No.

Determine the reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the CDM project activity, based on the data and information using calculation procedures consistent with those contained in the registered project design document and the monitoring plan.

The data used in anthropogenic emission reduction calculation is consistent with those contained in the approved revised PDD and monitoring plan. The emission reduction was 109,629 tCO₂ for the period 29/09/2012 to 31/12/2012 as per the estimation made in the approved revised PDD. The actual emission reduction has been verified as 95,757 tCO₂ for the same period.

Identify and inform the project participants of any concerns related to the conformity of the actual project activity and its operation with the approved revised project design document. Project participants shall address the concerns and supply relevant additional information.

"No such non conformity of the actual project activity and its operation with the approved revised project design document has been observed."

Post monitoring report on UNFCCC website

Yes, the Monitoring Report is available at ref. 4734 on the UNFCCC website
<http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>

7. Verification and Certification Statement

SGS United Kingdom Ltd has been contracted by CECIC Wind-power (Gansu) Co., Ltd. to perform the verification of the emission reductions reported for the CDM project CECIC Gansu Yumen Changma No.3 Wind Farm Project and UNFCCC Reference Number 4734 in the period from 29/09/2012 to 31/12/2012.

The verification is based on the approved revised project design document and the monitoring report for this project. Verification is performed in accordance with section I of Decision 3/CMP.1, and relevant decisions of the CDM EB and CoP/MoP. The scope of this engagement covers the verification and certification of greenhouse gas emission reductions generated by the above project during the above mentioned period, as reported in Monitoring Report version 02 dated 20/02/2013.

The management of CECIC Wind-power (Gansu) Co., Ltd. is responsible for the preparation, calculation and determination of GHG emission reductions from the project. The development and maintenance of records and reporting procedures are in accordance with the monitoring report.

It is our responsibility to express an independent GHG verification opinion on the GHG emissions and on the calculation of GHG emission reductions from the project for the period from 29/09/2012 to 31/12/2012 based on the reported emission reductions in the Monitoring Report version 02 dated 20/02/2013 for the same period.

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

SGS confirms that the project is implemented as described in the validated and registered project design documents. Based on the information we have seen and evaluated, we confirm the following:

Project Title:	CECIC Gansu Yumen Changma No.3 Wind Farm Project
UNFCCC Reference Number:	4734
Approved Revised PDD Used for Verification:	Revised PDD Version 11.0 dated 02/07/2012 Approved by the EB on 23/10/2012
Methodology Used for Verification:	ACM0002, version 12.3.0 dated 02/03/2012
Applicable Period:	29/09/2012 - 31/12/2012 (both days inclusive)
Total GHG Emission Reductions Verified:	95,757 tCO ₂ e

Signed on behalf of the Verification Body by Authorized Signatory

Signature:



Name: Siddharth Yadav

Date: 14/03/2013

8. Document References

1. Project General Information:
<http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>
2. ACM0002 - "Consolidated baseline methodology for grid-connected electricity generation from renewable sources", version 12.1.0, dated 26/11/2010 and version 12.3.0 dated 02/03/2012.
3. Validation report of the project issued by TUV Rheinland, Report No. 019979105061567, Rev No. 05, dated 20/04/2011.
4. Revised Project Design Document (PDD) version 11.0 dated 02/07/2012, which was approved by EB on 23/10/2012.
5. Validation opinion on changes in PDD, issued by SGS Rev. 1 dated 25/07/2012.
6. Verification report of the 1st monitoring period issued by SGS on 26/12/2011, revision number 0.

Verification report of the 2nd monitoring period issued by SGS on 29/10/2012, revision number 0.

Verification report of the 3rd monitoring period issued by SGS on 09/11/2012, revision number 1.
7. Monitoring Report for this monitoring period.

MR Version	Date of Revision	Nature of changes
Version 01	01/01/2013	Original version published on the UNFCCC website.
Version 02	20/02/2013	Revised according to the finding CL #1 raised during assessment stage: 1. The value of the electricity exported to the grid by the Project and the electricity imported from the grid by the Project for the period from 30/12/2012 – 31/12/2012 and accordingly the actual GHG emission reductions achieved in this monitoring period have been corrected in cover page, section A.1, section D.2 and section E.

8. ER calculation spreadsheet for this monitoring period, version 01 dated 01/01/2013.
ER calculation spreadsheet for this monitoring period, version 02 dated 20/02/2013.
9. Monthly Reading Records covering the period from 29/09/2012 to 31/12/2012.
10. Operation logbooks of the wind farm covering the period from 29/09/2012 to 31/12/2012.
11. Sales receipts of the electricity exported to the grid by the project issued by the grid company covering the period from 29/09/2012 to 31/12/2012.

The confirmation of the electricity exported to the grid by the Project issued by the grid company dated on 18/02/2013.
12. Sales receipts of the electricity imported from the grid by the project issued by the grid company covering the period from 29/09/2012 to 31/12/2012.

13. Accreditation Certificate of Metrological Centre of Jiayuguan Power Supply Corporation issued by Gansu Bureau of Quality and Technical Supervision dated 29/11/2010 valid till 28/11/2014.

Accreditation Certificate of Electric Energy Measurement Centre of Gansu Electric Power Corporation issued by Gansu Bureau of Quality and Technical Supervision dated 26/01/2011 valid till 25/01/2016.
14. Calibration certificates of electricity meters: M35A1, M35A2, M35A3, M35A4, M35A5, M35B1, M35B2, M35B3, M35B4, M35B5, Gateway Meter (Main) and Gateway Meter (Backup) covering the whole monitoring period.
15. Power Purchase Agreements dated 15/10/2010 which was signed between the grid company and the project company
16. Supplementary Agreement to the Power Purchase Agreement signed between the grid company and the project company dated 15/12/2011.
17. CDM Manual dated 08/2011 (including QA/QC Procedure)
18. Emergency plan dated 12/2010 for wind farm operation
19. Staff training records and qualification certificates
20. Installation schematic of the project
21. Technical Administrative Code of Electric Energy Metering DL/T 448-2000
22. Alternating Current Static Watt-hour Meters for Active Energy (Classes 0.2s and 0.5s) (GB/T 17883-1999)
23. JJG 596-1999 Verification Regulation of Electronic watt-hour meter
24. Order to commence: Evidence for the project construction start date 19/09/2009
25. Final Acceptance Reports: evidence for the first wind turbine commissioning date 28/01/2011; and also the evidence for the project turbines start fully commissioning date 23/10/2012
26. Clean Development Mechanism Validation and Verification Standard version 03.0 dated 23/11/2012
27. Guidelines for completing the monitoring report form, version 02.0, dated 02/03/2012
28. Clean Development Mechanism Project Standard version 02.1 dated 03/12/2012

9. Findings Overview

Findings Overview Summary

	CARs	CLs	FARs
Total Number raised	0	1	0

Date:	17/02/2013	Raised by:	Rocky Sun, Crystal Zhu, Tracy Zheng		
Type:	CL	Number:	CL #1	Reference:	Verification Checklist
Lead Assessor Comment:			Date: 01/02/2013		
Please clarify how the values of “the electricity exported to the grid by the Project” and “the electricity imported from the grid by the Project” from meter reading during 30/12/2012 to 31/12/2012 were double-checked with sales receipts.					
Project Participant Response:			Date: 20/02/2013		
The value of “the electricity exported to the grid by the Project” from meter reading during 30/12/2012 to 31/12/2012 is 3,404.100 MWh. It is can be double-checked against with the Confirmation of Electricity exported to the grid by the Project issued from grid company dated on 18/02/2013. The value of “the electricity exported to the grid by the Project” from the Confirmation of Electricity exported to the grid by the Project during 30/12/2012 to 31/12/2012 is 3,358.080 MWh. For a conservative, the data of 3,358.080 MWh is used for Emission Reductions calculation.					
The value of “the electricity imported from the grid by the Project” from meter reading during 30/12/2012 to 31/12/2012 is 2.100 MWh. For a conservation, the value of 47.520 MWh which is the total electricity imported from the grid by the Project and other projects (for this monitoring period only including one Solar PV project) during 30/12/2012 to 29/01/2013 sharing the same gateway meters with the project is used for the ERs calculation.					
More detail, please refer to the updated MR version 02.					
Documentation Provided as Evidence by Project Participant:					
MR version 02 dated on 20/02/2013; ER calculation spreadsheet version 02 dated on 20/02/2013; The confirmation of Electricity exported to the grid by the Project issued by the grid company dated on 18/02/2013. The ETN for the electricity exported to the grid by the Project covering the period from 30/12/2012 to 29/01/2013 issued by the grid company; The ETN for the electricity imported from the grid by the Project covering the period from 30/12/2012 to 29/01/2013 issued by the grid company.					
Information Verified by Lead Assessor:					
MR version 02 dated on 20/02/2013; ER calculation spreadsheet version 02 dated on 20/02/2013; The confirmation of Electricity exported to the grid by the Project issued by the grid company dated on 18/02/2013. The ETN for the electricity exported to the grid by the Project covering the period from 30/12/2012 to 29/01/2013 issued by the grid company; The ETN for the electricity imported from the grid by the Project covering the period from 30/12/2012 to 29/01/2013 issued by the grid company.					
Reasoning for not Acceptance or Acceptance and Close Out:					
The grid company issued the confirmation with data from both meter reading and the ETN specific for the period from 30/12/2012 to 31/12/2012. Through checking the Monitoring Report version 02, it is confirmed by the assessment team that the value for the electricity exported to the grid by the Project during the period from 30/12/2012 to 31/12/2012 have been reported in line with the evidence verified.					
The value of the electricity imported from the grid by the Project from meter reading during the period from 30/12/2012 to 31/12/2012 is cross-checked with the ETN for the electricity imported from the grid by the Project covering the period from 30/12/2012 to 29/01/2013 and the larger value is selected for emission reduction calculation. This is conservative.					
Therefore, CL #1 is closed out.					
Acceptance and Close out by Lead Assessor:			Date: 21/02/2013 by Rocky Sun		

10. Statement of Competence

Statement of Competence

Name: Rocky
Sun

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):	
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: 03/05/2012

Statement of Competence

Name: Tracy
Zheng

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):	
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: Crystal
Zhu

Status

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

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	
Technical Area(s):	
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: 18/01/2013

Statement of Competence

Name: Jett Zhang

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	x
Technical Area(s): TA 13.1: Waste handling and disposal	
14.Afforestation and Reforestation	
Technical Area(s):	
15.Agriculture	
Technical Area(s):	

Approved Member of Staff by: Siddharth Yadav Date: 21/09/2012

11. Photographic Evidence

Unique reference number: 10040283430044

Parameter: EG_{facility,y}

Name of equipment: M35A1

Date: 05/02/2013



Unique reference number: 10040283430043

Parameter: EG_{facility,y}

Name of equipment: M35A2

Date: 05/02/2013



Unique reference number: 10070369680003

Parameter: EG_{facility,y}

Name of equipment: M35A3

Date: 05/02/2013



Unique reference number: 10060343560044

Parameter: EG_{facility,y}

Name of equipment: M35A4

Date: 05/02/2013



Unique reference number: 10060343560047

Parameter: $EG_{\text{facility},y}$

Name of equipment: M35A5

Date: 05/02/2013



Unique reference number: 10070369680002

Parameter: $EG_{\text{facility},y}$

Name of equipment: M35B1

Date: 05/02/2013



Unique reference number: 10060343560043

Parameter: $EG_{\text{facility},y}$

Name of equipment: M35B2

Date: 05/02/2013



Unique reference number: 10060343560046

Parameter: $EG_{\text{facility},y}$

Name of equipment: M35B3

Date: 05/02/2013



Unique reference number: 10060343560048

Parameter: EG_{facility,y}

Name of equipment: M35B4

Date: 05/02/2013



Unique reference number: 10040283430045

Parameter: EG_{facility,y}

Name of equipment: M35B5

Date: 05/02/2013



Unique reference number: 57033315

Parameter: N/A (It is not involved directly in the electricity metering, it is used as basis for electricity trading)

Name of equipment: Gateway Meter (Main)

Date: 05/02/2013



Unique reference number: 57033312

Parameter: N/A

Name of equipment: Gateway Meter (Backup)

Date: 05/02/2013



- oOo -

History

Version	EB Requirement	Nature of revision	Validity
Issue 7	VVS version 03.0	Update to checklist to include VVS procedures	11 th January 2013
Issue 6	VVs Version 02.0	Update to checklist to include VVS procedures	25 th May 2012
Issue 5.4	VVM Version 01.2	Update to checklist	24 th February 2011