

# CECIC Gansu Yumen Changma No.3 Wind Farm Project

Document Prepared By LGAI Technological Center, S.A.

|                      |                                                  |
|----------------------|--------------------------------------------------|
| <b>Project Title</b> | CECIC Gansu Yumen Changma No.3 Wind Farm Project |
| <b>Version</b>       | Version 01                                       |

|                            |                                                                          |
|----------------------------|--------------------------------------------------------------------------|
| <b>Report Title</b>        | Verification report for CECIC Gansu Yumen Changma No.3 Wind Farm Project |
| <b>Client</b>              | CECIC Wind-power (Gansu) Co., Ltd.                                       |
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**Summary:**

The LGAI Technological Center, S.A. has been contracted by CECIC Wind-power (Gansu) Co., Ltd. to perform the verification of the project CECIC Gansu Yumen Changma No.3 Wind Farm Project (UNFCCC Ref, 4734) with using the methodology of ACM0002 Version 12.1 dated 26/11/2010 . A site visit was conducted to verify the data submitted in the monitoring report. LGAI Technological Center, S.A. confirms the following has been reviewed;

- (a) The registered PDD, including the monitoring plan and the corresponding validation report;
- (b) Monitoring report;
- (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

The total installed capacity of the project is 201 MW. The electricity generated from the project is fed into the China Northwest Power Grid (NWPG). The annual electricity supplied to the Grid is estimated to be 425,689 MWh.

LGA Technological Center, S.A. confirms that the project is implemented in accordance with the validated and registered 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 **65,999** tCO<sub>2</sub>e emission reductions during period 28/01/2011 to 27/04/2011.

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## 1 INTRODUCTION

### 1.1 Objective

LGAI Technological Center, S.A. has been contracted by CECIC Wind-power (Gansu) Co., Ltd. to perform an independent verification of its VCS project CECIC Gansu Yumen Changma No.3 Wind Farm Project. VCS projects must undergo audits and verification of emission reductions as the basis for issuance of Verified Emission Reductions (VERs).

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

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 and VCS standard.

LGAI Technological Center, S.A. has, based on the recommendations in the Validation and Verification Manual, employed a risk-based approach in the verification, focusing on the identification of significant reporting risks and the reliability of project monitoring.

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

### 1.3 Level of assurance

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

### 1.4 Summary Description of the Project

Project Parties: CECIC Wind-power (Gansu) Co., Ltd. (People's Republic of China (host))

Title of project activity: CECIC Gansu Yumen Changma No.3 Wind Farm Project

UNFCCC registration No.: UNFCCC registration No. 4734

Monitoring period covered in this report: 28/01/2011 to 27/04/2011

Location of the project activity: Yumen Town, Yumen City, Gansu province, People's Republic of China

The Project is located in Yumen Town, Yumen City, Gansu Province, the People's Republic of China. The purpose of the Project is to generate electricity using wind power resources in the project region and to deliver to the Northwest China Power Grid (NWPG) which is predominated by connected fossil fuel fired power plants, especially coal fired plants. So the Project can reduce GHG emissions by replacing the electricity generated by fossil fuel fired power plants in NWPG. The Project involves the installation of 134 wind turbines with 1.5MW capacity per unit, with a total installed capacity of 201 MW. Total of 463,714 MWh clean electricity generated by

the Project are expected to be delivered to the NWPG annually. Accordingly, the Project estimated can reduce GHG emissions about 425,689 tCO<sub>2</sub> annually.

Electricity supplied to the Grid from 28/01/2011 to 27/04/2011 is taken into account for the calculation of emission reductions achieved by this project in this monitoring period. The first wind turbine was put into operation on 28/01/2011.

## 2 VALIDATION PROCESS, FINDINGS AND CONCLUSION

### 2.1 Validation Process

Method and Criteria, Document Review, Interviews, Site Inspections, Resolution of Any Material Discrepancy.

### 2.2 Validation Findings

#### 2.2.1 Gap Validation

#### **Validation opinion of clauses 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS Project Description Template**

The project was registered as CDM project activity on 28/04/2011, which is also the starting date of the first crediting period of the project. This is the verification prior to CDM crediting period for the project against VCS version 3 covering the period from 28/01/2011 to 27/04/2011. The end date of this monitoring period is the day before the CDM registration date of the project.

The project was registered against ACM0002 version 12.1 as CDM project activity on 28/04/2011. Further Guidance for Projects that are registered in Two GHG Programs dated 19/03/2008 specifies that Projects registered under other VCS Program approved GHG Programs (such as the CDM) are eligible to create Verified Carbon Units (VCUs) for the emissions reductions or removals not registered under that GHG Program. The VCUs can be registered back to the project start date provisioned in VCS version 3. This is, 27/04/2009 or two years prior to the completion of the project validation whatever is later. The final CDM validation report for the project with Rev No. 6 Report No. 01 997 9105061567 was issued by TUV Rheinland on 20/04/2011. The CDM registration date of the project is 28/04/2011 and the monitoring period covered by this verification is from 28/01/2011 to 27/04/2011. The start date of this monitoring period is both after both 27/04/2009 and 20/04/2009 (or 28/04/2009) which is two years prior to the completion of the project validation (or CDM registration). Thus, requirements prescribed in the Further Guidance for Projects that are registered in Two GHG Programs are fulfilled by the project.

Pursuant to section 4 of VCS guidance document: VCS project registration and VCU issuance process version 3.1: a further validation has been completed of clauses 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS project. Details of validation are presented as below:

#### **1.2 Sectoral Scope and Project Type**

Clarification: The Project comes under sectoral scope 1, Energy Industries renewable sources.

Project Category: Renewable electricity in grid connected applications

The validation on the sectoral scope and project type of the project has been performed in the validation report, <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>. Through

reviewing the FSR approval and site visit, it was validated that the project is a wind farm project, a renewable energy project.

### 1.3 Project Proponent

It has been validated that the PP is CECIC Wind-power (Gansu) Co.,Ltd. through reviewing the LoA in the website, <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>.

### 1.5 Project Start Date.

It was validated that the project started commissioning on 28/01/2011 through reviewing the operation log of the wind farm.

### 1.6 Project Crediting Period.

Through reviewing the website, <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>, it was validated that the project is registered as CDM project on 28/04/2011 and the project first crediting period is from 28/04/2011 to 27/04/2018.

### 1.7 Project Scale and Estimated GHG Emission Reductions or Removals.

Through reviewing the website, <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>, it was validated that the project is a wind farm project with the installed capacity of 201MW. The estimated emission reduction is in the PDD and validated in the validation report on the website, <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view> as below:

| Years               | Estimated GHG emission reductions or removals (tCO <sub>2</sub> e) |
|---------------------|--------------------------------------------------------------------|
| May 2011-April 2012 | 425,689                                                            |
| May 2012-April 2013 | 425,689                                                            |
| May 2013-April 2014 | 425,689                                                            |
| May 2014-April 2015 | 425,689                                                            |
| May 2015-April 2016 | 425,689                                                            |
| May 2016-April 2017 | 425,689                                                            |
| May 2017-April 2018 | 425,689                                                            |

|                                 |           |
|---------------------------------|-----------|
| Total estimated ERs             | 2,979,823 |
| Total number of crediting years | 7         |
| Average annual ERs              | 425,689   |

## 1.9 Project Location

Through reviewing the registered PDD and validation report on the website, <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>, it was validated that the project site is located 18-31 km southwest of Yumen Town, Yumen City, Gansu Province in the People's Republic of China. It is located at Latitude between 40° 05' 39" N to 40° 09' 52" N and longitude from 96° 46' 22" E to 96° 51' 57" E.

## 1.10 Conditions Prior to Project Initiation.

Through reviewing the registered PDD and validation report on the website, <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>, it was validated that prior to the Project initiation, the electricity in the area of NWPG mainly supplied by the fossil fuel fired power plants, especially coal fired plants. The purpose of the Project is to generate electricity using wind power resources in the project region and to deliver to the Northwest China Power Grid (NWPG). So the Project can reduce GHG emissions by replacing the electricity generated by fossil fuel fired power plants in NWPG.

### 1.12.1 Proof of Title

Power Purchase Agreement (PPA) signed between the project owner and the grid company, business licence and related approvals for the project have been provided and verified. In the Letter of Approval (LoA) issued by the Chinese DNA, it is indicated that the project owner is authorized as Chinese participant to voluntarily participate in and carry out the project activity, this has been validated as a right of use of the project arising or granted under statute, regulation or decree by a competent authority. Moreover, the business license issued by local government to the project owner shows that the project owner CECIC Wind-power (Gansu) Co.,Ltd. has the right of use property or contractual right in the plant, equipment or process that generate GHG emission reductions and/or removals. It is validated to be fulfilled in respect of the requirement set out in the VCS Program Normative Document: Project Registration and VCU Issuance Process dated 15/07/2011.

### 1.12.2 Emissions Trading Programs and Other Binding Limits

The project is not included in an emissions trading program excepting registered as CDM project, and does not take place in a jurisdiction or sector in which binding limits are established on GHG emissions.

### 1.12.3 Participation under Other GHG Programs

Through interview with the project owner and review of the UNFCCC website <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>, it is validated that the project has been registered as a CDM project on 28/04/2011. The project does not participate in an emissions trading program.

#### **1.12.4 Other Forms of Environmental Credit**

The project was registered as CDM project on 28/04/2011 and the start date of the first CDM crediting period is 28/04/2011. Credits issued after 28/04/2011 will be used as CERs. The project proponent chooses a clear VCS crediting period from 28/01/2011 to 27/04/2011. Through interview with the project owner and document review of the statement from the project owner confirming that the project does not create another form of environmental credit, it is validated that the project has not created another form of environmental credit..

#### **1.13 Additional Information Relevant to the Project**

##### **Eligibility Criteria**

This project is wind farm project, a renewable energy project.

##### **Leakage Management**

There no leakage in the project.

##### **Commercially Sensitive Information**

N/A

##### **Further Information**

No further information.

#### **2.2.2 Methodology Deviations**

Not applicable.

#### **2.2.3 New Project Activity Instances**

Not applicable.

#### **2.3 Validation Conclusion**

According to the validation report for the project for CDM registration and the above further validation of Clauses 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS PD, it is validated that the Project "CECIC Wind-power (Gansu) Co., Ltd." is in compliance with the VCS Program requirements as set out in the VCS Rules.

#### **2.4 Method and Criteria**

LGAI Technological Center, S.A.' approach to the verification is a two-stage process.

In the first stage, LGAI Technological Center, S.A. 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, LGAI Technological Center, S.A. produced a Verification report 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 Report, LGAI Technological Center, S.A. 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.

## **2.5 Document Review**

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 7 of this report.

## **2.6 Interviews**

The detailed information is in the section 2.7 of this report.

## **2.7 Site Inspections**

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

|                                                                                                                                                                                                                                      |                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Location: Yumen Town, Yumen City, Gansu province, People's Republic of China                                                                                                                                                         |                                                                                                               |
| Date: 11th-14th Oct, 2011                                                                                                                                                                                                            |                                                                                                               |
| Coverage: the VCS verification                                                                                                                                                                                                       | Source of Information / Persons Interviewed                                                                   |
| This can include 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 | Yang Shuai, CECIC Wind-power (Gansu) Co., Ltd.;<br><br>Shen Hongshuai, CECEP Wind Power Incorporated Company. |

## 2.8 Resolution of Any Material Discrepancy

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

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

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

Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;

Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions;

Issues identified in a FAR during validation to be verified during verification 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 and VCS 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 and VCS 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 VCS Verification Checklist. The Project Developer is given the opportunity to “close” outstanding CARs and respond to CLs and Observations.

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. Observations 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.

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

## 3 VERIFICATION FINDINGS

### 3.1 Project Implementation Status

#### Project Implementation

Based on the information available on the UNFCCC website <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1303442859.42/view>, the project was registered on 28/04/2011 and the start date of the crediting period was 28/04/2011. The renewable crediting period for the project is from 28/04/2011 to 27/04/2018. This is VCS verification for the project covering the period from 28/01/2011 to 27/04/2011. The ending date of this monitoring period is before the starting date of CDM crediting period. The project was registered against the approved consolidated methodology ACM0002 version 12.1 dated 26/11/2010 (/1/). The monitoring methodology has been correctly applied and the documents for this monitoring period are complete and transparent. The project boundary is consistent with the registered PDD (/2/). Management and operational system is in place. QA/QC procedures stipulated in the registered PDD have been followed. The project has been implemented in compliance with the registered PDD.

All relevant GHG emissions have been included in the calculation of Emission Reductions in Version 02 of the Monitoring Report dated 20/10/2011.

As per the registered PDD, the estimated emission reductions of the project are calculated as 141,896 tCO<sub>2</sub>e for the monitoring period (28/01/2011 to 27/04/2011). The actual emission reductions for the same monitoring period are 65,999 tCO<sub>2</sub>e which is lower than the estimation in the registered PDD for the same period.

### **Completeness of monitoring**

According to ACM0002 version 12.1, the registered PDD version PDD version 10.2 dated 20/04/2011 and the validation report (/3/) for the project, parameters EGfacility,y, Quantity of net electricity generation supplied by the project plant/unit to the grid, needs to be monitored. EGfacility,y equals to electricity exported to the grid by the project, EGexport,y, minus electricity imported to the project from the grid by the project, EGimport,y.

### **Electricity exported to the grid by the project (EGexport,y)**

As per the registered PDD version 10.2 dated 20/04/2011, the electricity exported to the grid by the project (EGexport,y) was monitored by bi-directional monitoring meter, which is installed at 330kV Changma West transform substation. As per the Power Purchase Agreement (PPA) signed between the wind farm company and the grid company (/5/), the bidirectional main meter (SN: 57033315) and the backup meter (SN: 57033312) have been installed in the project site and the substation separately to measure EGexport,y.

The computer records the readings of the meter automatically daily and formed the Daily Reading Records (DRRs) on a daily basis. Designated people transcribed the readings into Monthly Reading Records (MRRs) (/8/) on a monthly basis.

At designated time of every month, the Grid Company read and recorded the readings of the meter and based on the readings issued Electricity Transaction Notes (ETNs) to the wind farm company. After confirming the values in the ETNs, the wind farm company issued sales invoices to the Grid Company for the electricity exported to the grid by the project subsequently.

Data from the Monthly Reading Records (MRRs) were used to calculate quantity of net electricity generation supplied by the project plant/unit to the grid. ETNs and sales invoices (/10/) served as sales receipts were used for double check. Data in the Daily Reading Records (DRRs) and the daily operation logbooks (/9/) in the power plant were randomly checked for cross reference.

As per the ACM0002, the net electricity supplied to the grid by the Project should be double checked with sales receipts while there is no relevant information in MR version 01. CL #1 was raised requiring the PP to clarify in this regard.

As the PP clarified that the sales receipts have been used for double checked with the meter readings in ER spreadsheet version 01 and also has been reported the relevant information in MR version 02. It has been verified that the reported values in MR version 02 is in accordance with that in sales receipts for the same period. CL #1 was closed out.

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

#### **Electricity imported from the grid by the project (EGimport,y)**

As per the registered PDD version 10.2 dated 20/04/2011, the electricity exported to the grid by the project (EGexport,y) was monitored by bi-directional monitoring meter, which is installed at 330kV Changma West transform substation. As per the Power Purchase Agreement (PPA) signed between the wind farm company and the grid company (/5/), the bidirectional main meter (SN: 57033315) and the backup meter (SN: 57033312) have been installed in the project site separately to measure EGimport,y.

The computer records the readings of the meter automatically daily and formed the Daily Reading Records (DRRs) on a daily basis. Designated people transcribed the readings into Monthly Reading Records (MRRs) (/8/) on a monthly basis.

At designated time of every month, the Grid Company read and recorded the readings of the meter and based on the readings issued sales receipts to the wind farm company.

Data from the Monthly Reading Records (MRRs) were used to calculate quantity of net electricity generation supplied by the project plant/unit to the grid. Sales invoices (/10/) were used for double check. Data in the Daily Reading Records (DRRs) and the daily operation logbooks (/9/) in the power plant were randomly checked for cross reference.

On page 30 of the registered PDD version 10.2 dated 20/04/2011, the accuracy of the meters installed in the project is not less than 0.5s. The meters will be calibrated by the third party at least once a year according to Technical administrative code of electric energy metering (DL/T448-2000) (/16/).

Both the main meter and the backup meter with accuracy of 0.2s respectively have been installed at the substation separately and calibrated by Metrological Centre of Gansu Province Electric Power Co.,Ltd at least once a year according to Technical administrative code of

electric energy metering (DL/T448-2000). The calibration certificates (/7/) of the meters and the accreditation certificate (/8/) for Metrological Centre of Gansu Province Electric Power Co.,Ltd have been provided for verification. The detailed information could be referred as below:

| meters                    | accuracy | Serial number                                                | Calibration date |
|---------------------------|----------|--------------------------------------------------------------|------------------|
| main meter                | 0.2s     | 57033315                                                     | 29/11/2010       |
| Backup meter              | 0.2s     | 57033312                                                     | 29/11/2010       |
| Calibrator                |          | Metrological Centre of Gansu Province Electric Power Co.,Ltd |                  |
| Accreditation certificate |          | Gansu Province Technology Supervisory Bureau                 |                  |

Supporting references and data required to determine the net electricity supplied to the grid by the project are found to be complete and transparent.

### 3.2 Accuracy of GHG Emission Reduction or Removal Calculations

The discussion, findings and conclusion related to that the evidence is of sufficient quantity and appropriate quality, therefore emission reductions is found to be correct in the MR version 02 (/13/) and ERs spreadsheet(/17/). The original meter readings that were used for ERs calculation and sales receipts that were used for double check purpose covering this monitoring period have been 100% obtained and verified by the verification team. Baseline emission factor is calculated ex-ante in the registered PDD and fixed for the renewable crediting period and the reported value for EFgrid,CM,y in the MR version 02 is verified to be the same as that in the registered PDD.

The ERs calculation spreadsheet has been walked through and found to be correct. The reported ERs calculation in the monitoring report is verified to be correct.

The details of the reported and the verified values for all parameters are listed in section 4, "Verification Statement".

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

Critical parameters used for the determination of the Emission Reductions are discussed in section 3.1 above. All the data recorded is in compliance with the monitoring report.

### 3.4 Management and Operational System

Management system and quality assurance procedures have been stipulated in the CDM monitoring plan and have been implemented during daily operation. This has been verified by on-site visit and document review following paragraph 205(b) of VVM version 01.2(/5/).

Therefore we can affirm that the management system of the CDM project is in place with the responsibilities properly identified and in place.

#### 4 VERIFICATION CONCLUSION

**Table 1 Electricity exported to the grid by the project**

| Monitoring period     | Reported value in MR version 01 | Verified value in MR version 02 |
|-----------------------|---------------------------------|---------------------------------|
|                       | EGexport,y (MWh)                | EGexport,y (MWh)                |
| 28/01/2011-26/02/2011 | 18,406.080                      | 18,406.080                      |
| 27/02/2011-29/03/2011 | 21,832.800                      | 21,832.800                      |
| 30/03/2011-27/04/2011 | 31,775.040                      | 31,775.040                      |
| <b>Subtotal</b>       | <b>72,013.920</b>               | <b>72,013.920</b>               |

**Table 2 Electricity imported from the grid by the project**

| Monitoring period     | Reported value in MR version 01 | Verified value in MR version 02 |
|-----------------------|---------------------------------|---------------------------------|
|                       | EGimport,y (MWh)                | EGimport,y (MWh)                |
| 28/01/2011-26/02/2011 | 60.720                          | 60.720                          |
| 27/02/2011-29/03/2011 | 36.960                          | 36.960                          |
| 30/03/2011-27/04/2011 | 21.120                          | 21.120                          |
| <b>Subtotal</b>       | <b>118.800</b>                  | <b>118.800</b>                  |

Note:

EGexport,y Electricity exported to the grid by the project

EGimport,y Electricity imported from the grid by the project

EGfacility,y The net electricity supplied to the grid by the project

Note: For a conservative calculation, the data in the column of electricity imported from the grid by the Project (EGimport,y) is the total amount of electricity imported from the grid by the Project from 28/01/2011 to 28/04/2011.

**Table 3 Reported and Verified Data of Net Electricity supplied to the grid by the Project in 2011**

| Period                | Reported Value in MR version 01(MWh) | Verified Value(MWh) in MR version 02 |
|-----------------------|--------------------------------------|--------------------------------------|
| 28/01/2011-27/04/2011 | 71,895.120                           | 71,895.120                           |
| <b>Total</b>          | 71,895.120                           | 71,895.120                           |

Based on the verified values, calculation of the emission reductions is done below:

The net electricity supplied to the grid by the project (EGfacility,y) during the monitoring period from 28/01/2011 to 27/04/2011 is 71,895.120 MWh.

The baseline emission factor is 0.9180 t CO<sub>2</sub>e/MWh.

Baseline emission reductions (BE<sub>y</sub>) for this monitoring period from 28/01/2011-27/04/2011 is :

$BE_y = EG_{facility,y} \times EF_{grid,CM,y} = 71,895.120 \text{ MWh} \times 0.9180 \text{ t CO}_2\text{e/MWh} = 65,999 \text{ t CO}_2\text{e}.$

The project emission (PE<sub>y</sub>) is 0 t CO<sub>2</sub>e.

The leakage (L<sub>y</sub>) is 0 t CO<sub>2</sub>e.

Emission reductions for the monitoring period from 28/01/2011-27/04/2011 (ER<sub>y</sub>) are

$ER_y = BE_y - PE_y - L_y = 65,999 \text{ t CO}_2\text{e} - 0 \text{ t CO}_2\text{e} - 0 \text{ t CO}_2\text{e} = 65,999 \text{ t CO}_2\text{e}.$

| GHG Emission Reductions or Removals in year 2011 | tCO <sub>2</sub> e |
|--------------------------------------------------|--------------------|
| Baseline Emissions                               | 65,999             |
| Project Emissions                                | 0                  |
| Leakage                                          | 0                  |
| Net GHG emission reductions or removals          | 65,999             |

## 5 VCU CERTIFICATION STATEMENT

### ***The scope of the verification***

We, LGAI Technological Center, S.A. have been engaged by CECIC Wind-power (Gansu) Co., Ltd. to certify that the greenhouse gas (GHG) emission reductions reported for CECIC Gansu Yumen Changma No.3 Wind Farm Project for the period from 28/01/2011 to 27/04/2011 in the verification report and a monitoring report version 02 dated 20/10/2011 are eligible for registration as Verified Carbon Units.

This engagement covers the verification of emission reductions from anthropogenic sources of greenhouse gases included within the project boundary of CECIC Gansu Yumen Changma No.3 Wind Farm Project, as well as an additional confirmation of the compliance of the registered PDD with the requirements of VCS version 3.

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 version 3.

(b) The monitoring report, together with other information examined, was prepared in full substance and form as required by the Verified Carbon Standard version 3, published by the Climate Group as approved by the Verified Carbon Standard Steering Committee on.

(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 Verified Carbon Standard verification criteria contained in the VCS version 3.

(e) Based on our examination of the monitoring report and other relevant information, the claiming emission reductions during the monitoring period from 28/01/2011 to 27/04/2011 are verified as 65,999 tonnes CO<sub>2</sub> equivalent.

### ***Liability statement with regards to the accuracy of the verification statement***

The management of the project, CECIC Gansu Yumen Changma No.3 Wind Farm Project is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions. LGAI Technological Center, S.A. is responsible for verification and confirming emission reductions 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 VCS PD, 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 02 dated 20/10/2011 on emission reductions for CECIC Gansu Yumen Changma No.3 Wind Farm Project during the reporting period from 28/01/2011 to 27/04/2011 is materially correct and is a fair representation of the GHG data and information and the emission reductions are fairly stated. All relevant facts have been found correct by our examination. The GHG emission reductions were calculated correctly on the basis of ACM0002 Version 12.1 dated 26/11/2010.

Therefore, LGAI Technological Center, S.A. is able to certify that the project is in full compliance with the Verified Carbon Standard version3, and the quantity of the reported emission reductions during below reporting period are completely, comparably, accurately and correctly reported.

Reporting period: From 28/01/2011 to 27/04/2011

Verified emission in the above reporting period:

|                     |        |                   |
|---------------------|--------|-------------------|
| Project emissions   | 0      | t CO2 equivalents |
| Baseline emissions  | 65,999 | t CO2 equivalents |
| Emission reductions | 65,999 | t CO2 equivalents |

### **Statement of Confidentiality**

LGA Technological Center, S.A. will hold all information confidential until the client instructs otherwise or until it has been released in accordance with the relevant requirements of VCS version 3.

## **6 FINDINGS OVERVIEW**

### **Findings Overview Summary**

|                     | CARs | CLs | FARs |
|---------------------|------|-----|------|
| Total Number raised | 0    | 1   | 0    |

|                                                                                                                                                                                                                                                                                                                                           |            |                |                   |                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|-------------------|-------------------------|
| <b>Date:</b>                                                                                                                                                                                                                                                                                                                              | 18/10/2011 |                | <b>Raised by:</b> | Grace Han Huijuan       |
| <b>Type:</b>                                                                                                                                                                                                                                                                                                                              | CL         | <b>Number:</b> | #1                |                         |
| <b>Lead Assessor Comment:</b>                                                                                                                                                                                                                                                                                                             |            |                |                   | <b>Date:</b> 18/10/2011 |
| As per the ACM0002, the net electricity supplied to the grid by the Project should be double checked with sales receipts while there is no relevant information in MR version 01. CL #1 was raised requiring the PP to clarify in this regard.                                                                                            |            |                |                   |                         |
| <b>Project Participant Response:</b>                                                                                                                                                                                                                                                                                                      |            |                |                   | <b>Date:</b> 20/10/2011 |
| the sales receipts have been used for double checked with the meter readings in ER spreadsheet version 01 and also has been reported the relevant information in MR version 02.                                                                                                                                                           |            |                |                   |                         |
| Documentation Provided as Evidence by Project Participant:                                                                                                                                                                                                                                                                                |            |                |                   |                         |
| sales receipts<br><br>MR version 02<br><br>ER spreadsheet version 01 and 02                                                                                                                                                                                                                                                               |            |                |                   |                         |
| <b>Information Verified by Lead Auditor:</b>                                                                                                                                                                                                                                                                                              |            |                |                   |                         |
| As the PP clarified that the sales receipts have been used for double checked with the meter readings in ER spreadsheet version 01 and also has been reported the relevant information in MR version 02. It has been verified that the reported values in MR version 02 is in accordance with that in sales receipts for the same period. |            |                |                   |                         |
| <b>Reasoning for not Acceptance or Acceptance and Close Out by Lead Auditor</b>                                                                                                                                                                                                                                                           |            |                |                   | <b>Date:</b> 20/10/2011 |
| CL #1 was closed out.                                                                                                                                                                                                                                                                                                                     |            |                |                   |                         |

## 7 REFERENCES

List documents provided by the Client or the project entity, such as the monitoring report, the PDD, the monitoring plan, the validation/determination report, the initial verification report (if applicable), written management manuals and operation licenses.

/1/ ACM0002 version 12.1 dated 17/10/2010

/2/ PDD version 10.2 dated 20/04/2011

- /3/ Validation report issued by TUV Rheinland version 05 dated 20/04/2011 (Report No.: 01 997 9105061567)
- /4/ Monitoring report version 01 dated 29/09/2011 and version 02 dated 20/10/2011
- /5/ Validation and Verification Manual version 01.2 dated 30/07/2010
- /6/ Power Purchase Agreement (PPA) signed between the wind power company and the grid company in October 2009.
- /7/ The calibration certificates issued by Metrological Centre of Gansu Province Electric Power Co.,Ltd for the master meter (SN: 57033315) dated on 29/11/2010, and the calibration certificates for backup meter (SN: 57033312) dated on 29/11/2010.
- /8/ The accreditation certificate for Metrological Centre of Gansu Province Electric Power Co.,Ltd issued by Gansu Province Technology Supervisory Bureau (Certificate No.: (Gan) Fa Ji (2006) No.62055,dated on 05/01/2006 and Certificate No.: (Gan) Fa Ji (2011) No.62055 dated on 26/01/2011 ).
- /9/ The Monthly Reading Records (MRRs) covering the period 28/01/2011 to 27/04/2011.
- /10/ Daily Reading Records (DRRs) and the operation logbooks of the project covering the period 28/01/2011 to 27/04/2011
- /11/ ETNs for the project for electricity exported to the grid by the project covering the period 28/01/2011 to 27/04/2011
- /12/ ETNs and sales invoices for the project for electricity imported from the grid by the project covering the period 28/01/2011 to 27/04/2011
- /13/ CDM manual issued by the PP
- /14/ training records
- /15/ Main electrical connection diagram and nameplate of turbines and generators
- /16/ Technical administrative code of electric energy metering (DL/T448-2000)
- /17/ ER spreadsheet version 02 dated 20/10/2011
- /18/ LoA from China and FSR approval
- /19/ Business license of the PP

Signed:

Verification Team:

Grace Han - Team leader



DOE Representative: Miquel Sitjes Cabanas (CDM Technical Manager)



B.U. Systems Certification Area Manager : Juan Sendín Caballero

