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VOLUNTARY CARBON STANDARD 2007.1



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INNER MONGOLIA XIMENG
ZHELIGENTU WIND FARM
PHASE I PROJECT
IN CHINA

Verification Period:
1 May 2009 to 5 May 2010

REPORT No. 2011-9383
REVISION No. 01

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Client: Beijing Jingneng New Energy Co. Ltd, Zhengxiangbaiqi Wind Power Branch		Client ref.: Ms. Qu Zhan

Summary:
 DNV Climate Change Services AS (DNV) has performed the verification of the emission reductions reported for the Project activity “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” in China, for the period from 1 May 2009 to 5 May 2010. The project activity was validated by Bureau Veritas Certification Holding SAS(BVC/China-val/0089/2008), version 03, dated 26 April 2010 and it was registered as CDM project activity on 6 May 2010 under the UNFCCC Registration Ref. No. 2566 with a renewable crediting period from 6 May 2010 to 5 May 2017. As emission reductions occur prior to the registration of the project as the CDM project activity, these emission reductions can not be claimed as Certified Emission Reductions (CERs). These emission reductions are thus claimed as Voluntary Carbon Units (VCU) under the Voluntary Carbon Standard (VCS) 2007.1. This is in accordance to the eminent VCS Guidance for projects that are registered in two GHG programs. In DNV’s opinion, the GHG emission reductions reported for the project in the VCU monitoring report (version 02) of 30 June 2011 are fairly stated. DNV is able to certify that the emission reductions from the “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” during the period 1 May 2009 to 5 May 2010 amount to 103 878 tonnes of CO₂ equivalent. DNV does not assume any responsibility towards the issuance and utilization of VCUs hereby verified and certified. Request for issuance of VCUs shall be made by the project proponent to an approved VCS Program Registry based on the requirements set out under the most recent version of the VCS Program Guidelines clause on VCS Registration. The verification of reported emission reductions is based on the information made available to DNV and the engagement conditions detailed in this report. Hence, DNV can not be held liable by any party for decisions made or not made based on this report.

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Report title: Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project in China.		
Work carried out by: Li Lianfei; Tang Zhiang		
Work verified by: Li Lei		
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Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction(s)
CL	Clarification request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DCS	Distributed Control System
DNV	Det Norske Veritas
DOE	Designated Operational Entity
EB	Executive Board
ER	Emission Reduction
FAR	Forward Action Request
FSR	Feasible Study Report
GHG	Greenhouse gas(es)
MP	Monitoring Plan
MR	Monitor Report
NCPG	North China Power Grid
NDRC	National Development and Reform Commission
PDD	Project Design Document
PLF	Plant Load Factor
PPSA	Power Purchase and Sales Agreement
SN	Serial Number
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard
VCU	Voluntary Carbon Units
VER	Verified Emission Reductions
VVM	Validation and Verification Manual



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1 INTRODUCTION

Beijing Jingneng New Energy Co. Ltd, Zhengxiangbaiqi Wind Power Branch has commissioned DNV Climate Change Services AS (DNV) to carry out the verification and certification of emission reductions reported for the “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” (the proposed project, UNFCCC Reference Number: 2566) for the verification period from 1 May 2009 to 5 May 2010 under the Voluntary Carbon Standard (VCS) program as per VCS 2007.1 standard /30/, The CDM crediting period was from 6 May 2010 to 5 May 2017. This verification aims to assess and verify the emission reduction occurred before the registration of the “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” as a CDM project activity which was registered on 6 May 2010. Thus, this verification report contains (i) the findings from the verification according to Voluntary Carbon Standard 2007.1 /30/ and (ii) a VCU verification statement for the emission reductions.

The project activity was registered as CDM project (UNFCCC reference number 2566) on 6 May 2010 with the CDM crediting period starting on 6 May 2010. Additional information regarding the referred project is available at the UNFCCC website: <http://cdm.unfccc.int/Projects/DB/BVQI1241775223.11/view>. The emission reductions occurring prior to the registration date are claimed as Voluntary Carbon Units (VCU) under VCS 2007.1 and in accordance to the *Further Guidance for Projects that are Registered in two GHG Programs* /32/. These emission reductions can not be claimed as Certified Emission Reductions (CERs).

This report contains the findings from the verification statement for the VCU emission reductions.

1.1 Objective

Verification of “pre-registration” emission reductions from a project activity is the independent review and *ex-post* determination by a Verification Entity or Designated Operational Entity (DOE) of the monitored reductions in GHG emissions that have occurred as a result of the implementation of an already registered CDM project activity during the period from the date when the project started to operate until the date when the project was actually registered as a CDM project activity by the CDM Executive Board (EB) and thus the start date of the CDM project activity.

The VCS validation of a project against the criteria of VCS 2007.1 may be carried out by an entity accredited under a GHG Program recognized by the VCS Program, such as the CDM. DNV is a DOE approved under the CDM for all sectoral scopes and DNV can thus perform VCS validation and VCS verification for the sectoral scope relevant for this project activity. DNV is a Designated Operational Entities (DOEs) approve under the CDM for all sectoral scopes and DNV can thus perform VCS validation and VCS verification for the sectoral scope relevant for this project activity.

The objective of this VCU verification was to verify and certify VCU emission reductions reported for the “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” for the period 1 May 2009 to 5 May 2010.



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1.2 Scope and Criteria

1.2.1 Scope of the verification

The scope of the verification is:

- Verify whether the reductions generated by the project are in line with the Voluntary Carbon Standard Verification Protocol and the information provided by the project participants contains all the necessary information to evidence the project's compliance with all criteria in the Voluntary Carbon Standard (VCS 2007.1) /30/.
- Verify that the project was implemented as described in the CDM Project Design Document (PDD) (version 4, dated 11 April 2010) equivalent to VCS PD during the verification period and revised CDM MP /3/ during the VER verification period /1/.
- Confirm that the monitoring system was implemented and fully functional to generate voluntary emission reductions (VCU) without any double counting during the whole VER verification period.
- By checking the monitoring records and the emissions reduction calculation, express a conclusion whether reported data are accurate, complete, consistent, and transparent, with a high level of assurance and free of material error or misstatement.
- Validation of VCS requirements not covered by the CDM validation.

According to the VCS 2007.1 /30/, the VER verification also includes an independent third party assessment of the project design. In particular, the project baseline, monitoring plan and the project compliance with relevant applicable protocols and criteria (i.e. UNFCCC, VCS, host Party and others) are to be validated in order to confirm that the project design, as documented, is sound and reasonable and meets the applicable criteria.

The project design, its eligibility as CDM project activity and the correct application of the CDM approved baseline and monitoring methodology ACM0002 (Version 07) were all already validated by Bureau Veritas Certification Holding SAS and the project was registered on 6 May 2010 as CDM project activity with the reference number 2566. The validation opinion by DOE Bureau Veritas Certification Holding SAS is that the "Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project" as described in the CDM PDD of 11 April 2010 (Version 4) /1/. Based on the CDM validation opinion of DOE Bureau Veritas Certification Holding SAS and also based on the registration of the project as a CDM project activity by CDM EB/UNFCCC, DNV assumes that the project design as documented is sound, reasonable and meets the relevant UNFCCC and host Party criteria.

As the VCS recognizes the CDM as a GHG Program that meets its VCU Verification Criteria, this VCU verification report thus only addresses VCS specific and unique criteria in terms of project design, applicability to the adopted methodology and additionality that have not been so far addressed in the validation report as per CDM requirements /1/.



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1.2.2 Validation Criteria for VCS requirements not covered by CDM validation

As the project has been validated under the CDM, a further validation shall be completed of clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS Project Description template /33/ (<http://www.v-c-s.org/sites/v-c-s.org/files/VCS%20PD.doc>) as required by the current VCS 2007.1 “Further Guidance for Projects that are Registered in Two GHG Programs” /32/. This validation was completed as part of the current VCU verification (refer to Appendix B).

1.2.3 Verification Criteria

The verification team has focused on the identification of significant reporting risks and verifying the mitigation measures for these based on the recommendations in the CDM Validation and Verification Manual version 01.2 /23/, ISEA3000 (Revised) Assurance Engagements other than Audits or Reviews of Historical Financial Information /28/, and/or ISO/FDIS 14064-3 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions and employed a risk-based approach /29/.

According to the requirements and guidance of VCS 2007.1 /31/, the criteria of this verification include the relevant applicable rules and steps for CER verification under the CDM excluding:

- The public availability of the VER/VCS Monitoring Report;
- The public availability the Verification Report and VCU Certification Statement.

1.3 VCS Project Description

1.3.1 Project Category

According to the VCS 2007.1 Guidelines /31/ and the list of Sectoral Scopes of the UNFCCC, the project is applicable under the following activity categories:

- Category 1 – Renewable energy (wind, PV, solar, thermal, biomass, liquid biofuels, geothermal, run-of-river hydro).

According to Annex A of the Kyoto Protocol, the project is applicable under the sectoral scope 1

- Energy Industries (renewable/ non-renewable sources).

1.3.2 Geographic Location

The project is located in Zhengxiangbai Qi, south Xilinguole League, Inner Mongolia Autonomous Region, China. The project activity has the geographical coordinate ranges from Longitude 115°29'34" East and Latitude 42°28'15" North as per the registered CDM PDD /1/.

1.3.3 Project Background

The project is a wind farm plant developed by Beijing International New Energy Co., Ltd.. Its total installed capacity is 48.75 MW consisting of 39 sets of 1.25 MW turbines (type: SEC-1250). The details of the turbines with respect to their numbers, type and capacity have been verified to be consistent with the details provided in the registered CDM PDD /1/ through the physical observation at project site and reviewing turbine operation procedure /19/. The project is grid connected to Inner Mongolia Autonomous Region Grid Company as the Power Purchase and Sales Agreement (PPSA) /13/. Inner Mongolia Autonomous Region Grid is part



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of NCPG /27/, so all the generated electricity is supplied to NCPG according to the PPSA /13/. DNV was able to confirm that the project implementation is in accordance with the project description contained in registered CDM PDD of 11 April 2010 /1/ and revised CDM MP dated 6 April 2011 /3/, and all equipments have been installed and were in operation during the site visit.

While the project activity is the installation of a newly grid-connected wind power plant, the project reduces GHG emissions by displacing electricity that would have been generated in the existing fossil fuel power plants in the grid or by the addition of new generation. The project's VCU emission reductions are determined by multiplying the quantity of net electricity supplied by the project ($EG_{facility,y}$) with an estimated *ex-ante* fixed grid emission factor ($EF_{grid,CM,y}$) of 1.0549 tCO₂e/MWh.

The CDM baseline and monitoring methodology used is ACM0002 - "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" (Version 07)/25/.

CDM Project Parties:	China and United Kingdom of Great Britain and Northern Ireland
Title of project activity:	Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project
UNFCCC CDM registration No:	2566
UNFCCC CDM registration date:	6 May 2010
CDM Baseline and monitoring methodology	ACM0002 (version 07)
Project Entity:	Host Party: Beijing International New Energy Co., Ltd. Address: Gaoxin Building, 1# Guang an men wai Nan bing he road; contract person: Wang Yue; Telephone: 86-10-63280088-1022; Email: wangyue@bjnewenergy.com Annex I Party: OneCarbon International B.V. Address: Paseo del Ferrocarril 339, 2o 3a/E-08860 Castelldefels/Spain; Contract person: Mr. Sebastiaan Nikolaas Wilke; Telephone: +34 93 6735621; Email: cfm_helpdesk@onecarbon.com.
Location of the project activity:	Zhengxiangbai Qi, south Xilinguole League, Inner Mongolia Autonomous Region, China. The coordinates of the project ranges from Longitude 115°29'34" East and Latitude 42°28'15" North
Project's CDM registered date:	6 May 2010
Project's CDM crediting period:	6 May 2010 to 5 May 2017 (renewable CDM crediting period)
Project commission start date:	30 April 2009
VCU Verification period:	1 May 2009 to 5 May 2010
VCS Project Crediting period:	1 May 2009 to 5 May 2010



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1.4 Level of assurance

As the VCS 2007.1 only recognizes verified emission reductions, DNV has focused on providing a reasonable level of assurance that the emission reduction calculation methodology used is appropriate and correctly applied, and that emission reductions have been accurately monitored.

DNV may discount verified emission reductions or requests a discount of these by using conservative assumptions for uncertainties in emission reduction calculations that cannot be fully quantified or that cannot give a desired level of assurance. For verifying VCUs, the desired level of assurance was based on the combined quantitative assessment of the accuracy of monitoring project performance and the identification of material risks.

1.5 Methodology for determining emission reductions

According to the applied CDM methodology ACM0002 of version 07 /25/, the emission reductions for the project are determined as the difference between the baseline emissions, project emissions and leakage:

$$ER_y = BE_y - PE_y - L_y$$

Hereinto, PE_y and L_y are considered as to be zero in line with the CDM methodology. Thus, the emission reductions are accounted as follows:

$$ER_y = BE_y.$$

According to the registered CDM PDD /1/ and revised CDM monitoring plan dated 6 April 2011 /3/, the proposed project shares the transformer and gateway meters with another wind farm project named as Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project, key parameter needs to be monitored is EG_y : the net electricity quantity supplied to the North China Power Grid (NCPG) by the project /13/. The main meter was put into operation before the start of the commissioning date 30 April 2009 the proposed project, which can be confirmed by the daily power statistics logs /15/, and daily operation logs for the two projects /16/. According to the monitoring plan in the registered CDM PDD /1/ and revised CDM monitoring plan /3/, the net electricity quantity supplied by the project activity is calculated as follows:

$$BE_y = EG_y \times EF_{\text{grid,CM},y} = \left(\frac{\sum_{i=1,2,3} EG_{A-i,y}}{\sum_{i=1,2,3} EG_{A-i,y} + \sum_{i=1,2,3} EG_{B-i,y}} \times EG_{\text{export},y} - EG_{\text{import},y} \right) \times EF_{\text{grid,CM},y}$$

In the emission reduction calculation, $EG_{\text{export},y}$ is total electricity supplied to the grid by the proposed project and project B in year y, $EG_{\text{import},y}$ is total electricity purchased from the grid by the proposed project and project B in year y, $EG_{A-i,y}$ is electricity supplied to the grid by Group A-I (i=1,2,3) of the proposed project in year y, $EG_{B-i,y}$ is electricity supplied to the grid by Group B-i (i=1,2,3) of the project B in year y, EG_y is net electricity supplied to the grid by the proposed project in year y, $EF_{\text{grid,CM},y}$ is used as emission factor of the NCPG grid (tCO₂/MWh), which was determined *ex-ante* and will not be updated during the first crediting period. And $EF_{\text{grid,CM},y}$ of the project in the registered CDM PDD is equal to 1.0549 tCO₂/MWh.



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2 METHODOLOGY

The verification of the emission reductions has assessed all factors and issues that constitute the basis for emission reductions from the project. These include:

- i) Review of project documentation (cf. 2.1 below);
- ii) The net electricity supplied by the project to the North China Power Grid which is multiplied with a fixed grid baseline combined emission factor of 1.0549 tCO₂e/MWh /1/ /3/
- iii) The actual installed capacity of the wind power plant to ensure the conformance with the descriptions in the registered CDM PDD /1/.

Verification team

Role	Last Name	First Name	Country	Type of involvement					
				Desk review	Site visit	Reporting	Supervision of work	Technical review	TA 1.2 competence
Technical team leader (CDM verifier)	Li	Lianfei	China	✓	✓	✓	✓		✓
Verifier	Tang	Zhiang	China	✓		✓			✓
Technical reviewer	Li	Lei	China					✓	✓

Duration of verification

VCU MR Version 01 provided to DOE: *on 9 June 2011*
 Preparations: *From 27 May 2011 to 13 June 2011*
 On-site verification: *From 14 June 2011 to 15 June 2011*
 Reporting, calculation checks and QA/QC: *From 16 June 2011 to 27 August 2011*

2.1 Review of documentation

The VCU monitoring report version 01, dated 7 June 2011 /5/ has been provided to DOE on 9 June 2011. In addition, based on the two CARs and four CL issued after the site visit (refer to the Appendix A of this report), the VCU monitoring report version 02, dated 30 June 2011 have been raised, which clarified the revised CDM MP and its approved information, added wind turbines' type and meters' calibration and specification information, corrected the value of electricity that exported to grid in March and April 2011, and explained the reason for less emission reduction in the monitoring period from 1 May 2009 to 5 May 2010. The verification has been performed based on the review of the following documentation provided



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by the project participants,

- The registered CDM PDD /1/, in particular the emission reductions estimations contained in the CDM PDD and the project validation report /2/,
- The revised CDM MP /3/ which had been approved by EB at 27 June 2011, and the validation opinion for revision of registered monitoring plan /4/,
- The VER/VCU Monitoring Report of version 01, dated 7 June 2011 and updated version 02, dated 30 June 2011 for the period from 1 May 2009 to 5 May 2010 /5/,
- The approved CDM consolidated baseline and monitoring methodology ACM0002 version 07 /25/ applied by the project,
- The VCU calculations provided in a spreadsheet /6/,
 - Monthly sale receipts of electricity exported to and imported from grid for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project /11/ /12/,
 - The daily power statistics logs for electricity exported to and imported from grid for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project, and also the daily power statistics logs of six auxiliary meters in the two wind farms/15/, and daily operation logs for the two projects /16/,
 - The Power Purchase and Sales Agreement /13/, CDM training record /17/ and management manual /18/, calibration reports /9/ for main meter, backup meter and six auxiliary meters cover the monitoring period 1 May 2009 to 5 May 2010.

During the desk review, DNV has applied standard auditing techniques to assess the quality of information provided. The following activities were performed:

- A review of the data and information presented to verify their completeness /6/; and
- A review of the revised monitoring plan and monitoring methodology ACM0002 version 07 /25/, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures; and
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

2.2 Site visit

From 14 June 2011 to 15 June 2011, Mr. Li Lianfei from DNV has carried out an on-site audit at the “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” in Zhengxiangbai Qi, south Xilinguole League, Inner Mongolia Autonomous Region, China. The key personnel (/35/-/39/) of the project were interviewed or assisted the verification team.

During the on-site assessment, DNV has applied standard auditing techniques to assess the quality of information provided. The following aspects of the CDM project activity have been verified:

- The implementation and operation of the CDM project activity Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project as confirmed that the commissioning start date (1st turbine started generation) is 30 April 2009 /14/ /15/ /16/ and the 39



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- turbines in project took into full operation at 2 July 2009 /15/ /16/. Electricity exported to the power grid and imported from the power grid which is Inner Mongolia Autonomous Region Grid Company /11/. The Inner Mongolia Autonomous Region Grid is part of NCPG according to the grid distribution from NDRC /27/; and
- The information flow for generating, aggregating and reporting of the monitoring parameters /18/; and
 - The operational and data collection procedures are implemented in accordance with the revised monitoring plan /3/ and the registered CDM PDD /1/.

Furthermore, the following activities were performed:

- A cross-check between information provided in the monitoring report /5/ and data from reviewing original power statistics logs /15/, daily operation logs /16/ and electricity sale receipts /11/ /12/; and
- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the revised monitoring plan /3/ and the registered CDM PDD /1/ and the selected methodology ACM0002 version 07 /25/;and
- A review of calculations and assumptions made in determining the GHG data and emission reductions /6/; and
- An identification that quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters /17//18/.

The data presented in the VCU monitoring report /5/ was assessed by review of the detailed project documentation and production records /11/ /12/ /15/ /16/, as well as by interviews with personnel at Beijing International New Energy Co., Ltd. /35/-/39/, and observation of collection of measurements, observation of established monitoring and reporting practices and assessment of the reliability of monitoring equipment /9/. This has enabled the verification team to assess the accuracy and completeness of reported monitoring results; to verify the correct application of the approved CDM monitoring methodology and the determination of the emission reductions.

In addition, all parameters required by the CDM monitoring methodology ACM0002 version 07, /25/ and the management system were assessed during the site visit, DNV can confirm that the registered CDM project activity meets the additional requirements of VCS 2007.1 /30/.

2.3 Reporting of findings

Findings established during the verification may be that:

- i) the verification is not able to obtain sufficient evidence for the reported emission reductions or part of the reported emission reductions. In this case these emission reductions shall not be verified and certified;
- ii) the verification has identified material misstatements in the reported emission reductions.

While aiming to resolve any outstanding issues which needed be clarified about the project design, findings established during the verification can either be seen as a non-fulfilment of



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the VCU Verification Criteria or where a risk to the fulfilment of project objectives is identified. Emission reductions with material misstatements shall be discounted based on the verifiers' *ex-post* determination of the achieved emission reductions.

A corrective action request (CAR) is issued, where:

- i. Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- ii. Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions;
- iii. Issues identified in a FAR during validation to be verified during verification have not been resolved by the project participants.

A clarification request (CL) shall be raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

A forward action request (FAR) is issued for actions if the monitoring and reporting require attention and/or adjustment for the next monitoring period.

Two corrective action requests (CARs) and four clarification requests (CLs) were raised. These CLs and CARs have been satisfactorily addressed by the project proponent and hence been closed. The CARs and CLs raised and the responses provided by the project proponent have been detailed in Appendix A. No FAR was identified.

DNV was able to verify that the GHG emission reductions reported for the "Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project" in the VCU monitoring report version 02, dated 30 June 2011 are fairly stated /5/.



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3 VERIFICATION FINDINGS

This section summarises the findings from the verification of the voluntary emission reductions reported for the “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” for the period from 1 May 2009 to 5 May 2010. The findings of the verification are documented in more detail in the initial verification checklist given in Appendix A

3.1 Remaining issues, CARs, FARs from previous validation / verification

This is the first verification of the Voluntary Carbon Units (VCU) under the Voluntary Carbon Standard (VCS 2007.1) for “pre-registration” CDM project activity of Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project, the project’s implementation is in accordance with registered CDM PDD /1/ and the revised monitoring plan which had been approved by EB /3/. No previous VCS verification report is found. No FAR were identified with regards to remaining issues from the CDM validation stage/2/.

3.2 Project implementation

As part of the site visit DNV was able to confirm that the project implementation is in accordance with the project description contained in registered CDM PDD /1/ of 11 April 2010 and revised CDM MP /3/. The verification team confirmed through visual inspection and document review that all physical features of the proposed CDM project activity including data collection systems and storage systems have been implemented in accordance with the registered CDM PDD /1/ and revised CDM MP /3/. DNV confirmed during the on-site visit that the CDM project is completely operational. DNV confirmed that revised CDM MP has been requested to CDM Executive Board and approved by EB on 27 June 2011 /3/. DNV verified the project is located in Zhengxiangbai Qi, south Xilinguole League, Inner Mongolia Autonomous Region, China.

The project was commissioned on 30 April 2009 (verified by the daily operation logs /16/ and the daily power statistics logs /15/). The project is operational completely on 2 July 2009 /15/ /16/.

It involves implementation and operation of a 48.75 MW wind power project that comprises 39 wind turbines with 1.25 MW each, the type of turbines is SEC-1250 were verified by the nameplates at the project site and wind turbines operation procedure /19/. The 39 wind turbines were provided by Shanghai Electric Wind Power Equipment Co., Ltd., which is in line with the registered CDM PDD /1/. The project is grid connected to Inner Mongolia Autonomous Region Grid Company as the Power Purchase and Sales Agreement (PPSA) /13/. Inner Mongolia Autonomous Region Grid is part of NCPG /27/, so all the generated electricity is supplied to NCPG according to the PPSA /13/. DNV was able to confirm that the project implementation is in accordance with the project description contained in registered CDM PDD of 11 April 2010 /1/ and revised CDM MP /3/, and all equipments have been installed and were in operation during the site visit.

The main meter M1 (SN: 95232476) is installed at 220 kV on-site substation which is located in the project site. It is a bi-directional meter that can record electricity exports to- ($EG_{\text{export,y}}$) and imports from the grid ($EG_{\text{import,y}}$) continuously /9/ for the two wind power projects (proposed project: Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and project

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B: Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project) A backup meter M2 (SN: 95232477) has also been installed at the on-site sub-station. When the main meter fails to work normally, the readings of the backup meter will be adopted.

The 39 sets of wind turbines were divided into 3 groups, and each group is connected with a 35kV transmission line and installed with a meter at the low voltage side of 35kV/220kV transformer. Three meters A-1 (SN:9030094), A-2 (SN:9030093), A-3 (SN:9030096) were separately installed at lower voltage side of three 35kV/220kV transformer of Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project so as to monitor the electricity supplied by the proposed project; and another three meters B-1 (SN:9030087), B-2 (SN:0010037), B-3 (SN:0010038) were separately installed at lower voltage side of three 35kV/220kV transformer of Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project to monitor the its electricity the project B exported, as following in Figure 1.

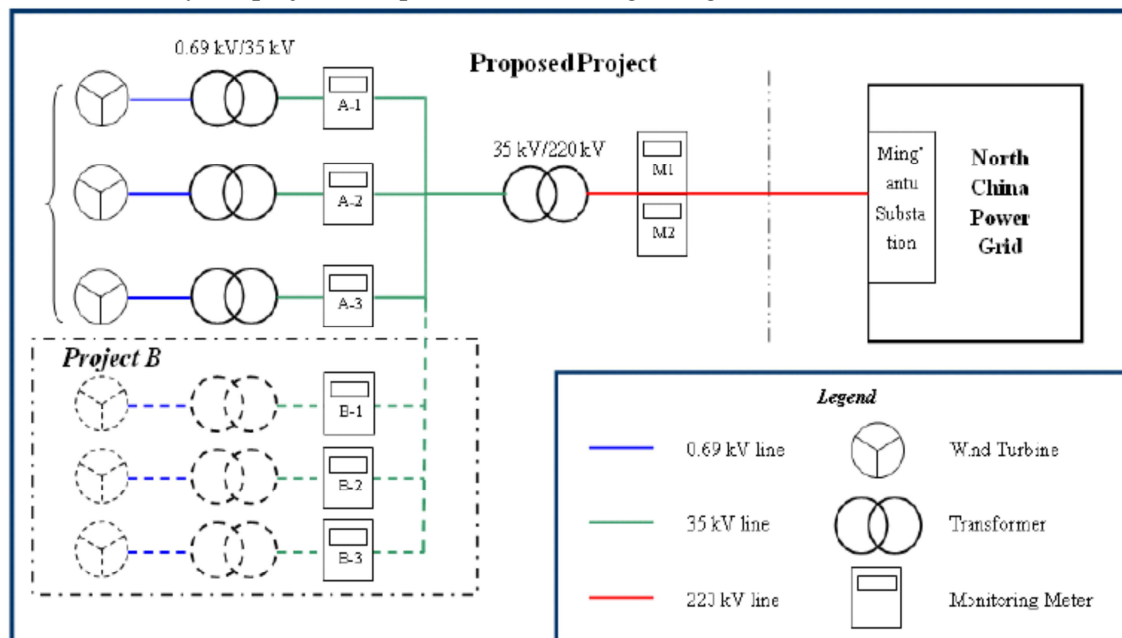


Figure 1: Simplified Power Grid Connection Diagram

Above all, it was confirmed by DNV that the project has been implemented in accordance with the design mentioned in the registered CDM PDD /1/, revised CDM MP /3/.

3.2.1 Eligible GHGs

The project activity contributes to reductions in the emissions of carbon dioxide (CO₂) by generating electricity using a renewable source thus displacing electricity generation based on fossil fuels in the NCPG.

3.2.2 Project Start Date and Emission Reduction Start Date

The starting date of the project activity is 22 December 2007 as per the registered CDM PDD /1/ and its CDM validation report /2/. The project started to commission when the first wind turbines were put into operation on 30 April 2009 /15/ /16/. The emission reduction start date thus is defined to be 1 May 2009.



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3.2.3 Public Funding and Grants

The CDM validation of the CDM project did not reveal any information that indicated that the project received any public funding /1/ /2/.

3.2.4 Project Boundary/GHG Assessment Boundary

The spatial extent of project boundary is defined as the project power plant and all the power plants physically connected to the NCPG, which consists of Beijing, Tianjin, Hebei, Shanxi, Shandong, Inner Mongolia power grid.

3.2.5 Baseline Determination

As the project design was previously assessed by the DOE Bureau Veritas Certification Holding SAS as part of the CDM validation phase (in particular in terms of the project's baseline, the monitoring plan, and the project's compliance with relevant UNFCCC and host Party criteria) and the project was registered as an eligible CDM project activity, it is thus confirmed that:

- i) The project correctly applies the approved CDM baseline and monitoring methodology ACM0002 (Version 07) titled "*Consolidated baseline methodology for grid-connected electricity generation from renewable sources*" /25/.
- ii) The baseline scenario is provision of equivalent electricity that would, in the absence of the project activity, be generated by the operation of the grid-connected power plants within the NCPG. The baseline and monitoring methodologies have been correctly applied and the assumptions made for the selected baseline scenario are sound.

3.2.6 Project Additionality

As the project was registered by the CDM EB as an eligible CDM project activity, it is thus confirmed that the project is not a likely baseline scenario, and that emission reductions resulting from the project are additional.

Detailed information regarding project additionality is available at:

- i) CDM PDD version 4, dated 11 April 2010 /1/.
- ii) Bureau Veritas Certification Holding SAS, CDM validation report version 03, dated 26 April 2010 /2/.

It is in DNV's opinion that the project is additional to any emission reductions occurring in absence of the project.

3.2.7 GHG Emission

As the project has been registered by the CDM EB as an eligible CDM project activity, it is confirmed that the approach for determining baseline emissions are appropriate and in accordance with the selected baseline and monitoring methodology /25/.

The calculation of the baseline emission factor was performed as required by the methodology. The parameters were calculated *ex-ante*. The Operating Margin (OM) emission factor calculation was based on the "*Tool to calculate the emission factor for an electricity system*" /26/. The simple OM method was selected to calculate the operating margin emission factor since the low cost/ must run resources constitute less than 50% of total grid generation in average of the five most recent years. The Build Margin (BM) emission factor was also calculated *ex-ante* based on the most recent information available at the time of CDM PDD webhosting. Details about the data used for calculation of OM and BM emission factors were



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presented in the CDM PDD and CDM validation report /2/. The grid emission factor calculated ex-ante from OM and BM emission factors above mentioned and applied for CDM baseline emission reductions estimated was 1.0549 tCO₂/MWh.

The reported VCU GHG emission reductions from the project are 103 878 tCO₂e during the period from 1 May 2009 to 5 May 2010.

3.2.8 Secondary Effects

Regarding secondary effects (leakage), although no leakage calculation is needed, as explained in the applicable methodologies; leakage does not need to be considered in applying this methodology /25/.

3.2.9 Impacts on Sustainable Development

As the project was registered by the CDM EB as an eligible CDM project activity, it can be confirmed that the project's social and environmental impacts have been sufficiently addressed. As the project was registered by the CDM EB as an eligible CDM project activity, it is DNV's contention that the project's social and environmental impacts have been sufficiently addressed /2/. In addition, the DNA of China has provided confirmation that the project assists in achieving sustainable development, through the Letter of Approval (LoA) issued in March 2009 /8/.

3.3 Information (data and variables) provided in the monitoring report that is different from that stated in the registered CDM PDD and revised CDM MP

The voluntary emissions reductions reported in this VER monitoring period are 103 878 tCO₂e in the period from 1 May 2009 to 5 May 2010 (370 days). The yearly expected emission reductions in the registered CDM PDD /1/ are 104 941 tCO₂e, which corresponds to the emission reductions of 106 379 tCO₂e in 360 days (106 379 tCO₂e = 104 941 tCO₂e × 370/365), and hence the reported Voluntary emission reductions are 2.35% lower than the expected.

The reason for less emission reduction had been addressed in section 3.6.4.

3.4 Compliance of monitoring plan with monitoring methodology

DNV is able to confirm that the monitoring plan in registered CDM PDD /1/ and revised CDM MP /3/ is in accordance with the approved CDM methodology applied by the project activity, i.e. ACM0002 (version 07) /25/. DNV confirmed that revised CDM MP has been requested to CDM Executive Board and approved by EB on 27 June 2011 /3/.

3.5 Compliance of monitoring with the monitoring plan

As the project design was previously assessed by the Designated Operational Entity (DOE) Bureau Veritas Certification Holding SAS as part of the CDM validation phase (in particular in terms of the project's baseline, the monitoring plan, and the project's compliance with relevant UNFCCC and host Party criteria) /2/ and as the project was registered by the CDM EB as a eligible CDM project activity, it is DNV's contention that the application of the monitoring methodology is transparent.

DNV could confirm the monitoring has been carried out in accordance with the monitoring plan in registered CDM PDD /1/ and the revised CDM MP /3/.



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The revised CDM MP /3/ requires monitoring of net electricity supplied to the North China Power Grid /13/ by the proposed project; the total electricity supplied to the grid by the proposed project and project B; the total electricity purchased from the grid by the proposed project and project B; the quantity of electricity supplied to the grid by Group A-i (i=1,2,3) of the proposed project and the quantity of electricity supplied to the grid by Group B-i (i=1,2,3) of the Project B. According to the registered CDM PDD /1/, the emission factor of the project is determined to be fixed *ex-ante* as 1.0549 tCO₂e / MWh for the first crediting period.

The main meter installed at the substations of the project site monitors the electricity supplied to- and imported from the grid as per the revised CDM MP /3/. three meters A-1, A-2, A-3 monitors the electricity supplied to grid by the proposed project, another three meters B-1, B-2, B-3 monitors electricity supplied to grid by the project B.

The main meter was installed at the substation of the project site and is recorded monthly at 24:00 of the last day of each month /13/, and every month, the monitoring staff will report the electricity generation to NCPG. At the same time, the operator made records on the daily power statistics logs /15/, electricity generated by the proposed project and project B will be record in the daily power statistics logs for six auxiliary electricity meters /15/.

All the data are then cross-checked through the original data recordings for electricity exports and imports. All original records have been verified by DNV during the site visit /15/. DNV was able to verify that the calculations and deemed that the conclusion is transparent and conservative.

All parameters stated in the monitoring plan in registered CDM PDD /1/ and the revised CDM MP /3/ are monitored and reported appropriately. The VCU monitoring report /5/ lists each parameter required by the monitoring plan and the information flow (from data generation, aggregation, recording, calculation and reporting) for these parameters is provided in the monitoring report. The information flow for the each parameter is further verified in the following sections. DNV confirms that no more revision or deviation to the monitoring plan has been requested to CDM Executive Board.

3.5.1 Monitoring parameters

According to the the revised CDM MP /3/, there are five parameters to be monitored:

$EG_{export,y}$ – Total electricity supplied to the grid by the proposed project and project B in year y,

$EG_{import,y}$ – Total electricity purchased from the grid by the proposed project and project B in year y,

$EG_{A-i,y}$ – Electricity supplied to the grid by Group A-I (i=1,2,3) of the proposed project in year y,

$EG_{B-i,y}$ – Electricity supplied to the grid by Group B-i (i=1,2,3) of the project B in year y.

EG_y – Net electricity supplied to the grid by the proposed project in year y,

EG_y is calculated as following,

$$BE_y = EG_y \times EF_{grid,CM,y} = \left(\frac{\sum_{i=1,2,3} EG_{A-i,y}}{\sum_{i=1,2,3} EG_{A-i,y} + \sum_{i=1,2,3} EG_{B-i,y}} \times EG_{export,y} - EG_{import,y} \right) \times EF_{grid,CM,y}$$



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The data reported in the monitoring report for the project has been assessed in detail presented in the following tables. When nothing else is stated, the numbers reported are found to be correctly reported:

Table 1 Total electricity supplied to- and purchased from the grid by the proposed project and project B

	Assessment/ Observation
Data / Parameter: (as in revised monitoring plan):	$EG_{export,y}$ – Total electricity supplied to the grid by the proposed project and project B in year y. $EG_{import,y}$ – Total electricity purchased from the grid by the proposed project and project B in year y.
Measuring frequency:	Continuously measured
Reporting frequency:	Monthly reported
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
Type of monitoring equipment:	Bi-directional meters
Is accuracy of the monitoring equipment as stated in the revised MP? If the revised MP does not specify the accuracy of the monitoring equipment, does the monitoring equipment represent good monitoring practise?	The revised CDM MP /3/ specified the accuracy of the meters is 0.2S. The actual main meter and its backup meter both are with the accuracy of 0.2S /9/.
Calibration frequency /interval:	Annually
Is the calibration interval in line with the monitoring plan of the revised MP? If the revised MP does not specify the frequency of calibration, does the selected frequency represent good monitoring practise?	The revised CDM MP /3/ specified the metering equipments will be calibrated once per year. The actual calibration frequency is annually that is in accordance with it, which is acceptable. The selected frequency meets the requirement of DL/T448 – 2000 /34/, and represents the good monitoring practice.
Company performing the calibration:	Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center calibrated the main meter (SN: 95232476) and its backup meter (SN: 95232477). They were calibrated on 17 April 2009 and 16 June 2009 /9/. Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center is authorized by Quality and Technical Supervision Bureau of Inner Mongolia Autonomous Region and it is qualified from 2 January 2009 to 1 January 2014 /10/. Hence, Inner Mongolia Electricity Science Research



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	Institute Electricity Measurement and Testing Center has qualification to implement the calibration on electric meters /10/.
Did calibration confirm proper functioning of monitoring equipment? (Yes / No):	Yes
Is(are) calibration(s) valid for the whole reporting period?	Yes. The calibration valid periods for the main meter (SN: 95232476) and the backup meter (SN: 95232477) are from 17 April 2009 to 16 April 2010 and from 16 June 2009 to 15 June 2010; /9/. The valid periods of the calibrations can cover the current monitoring period of 1 May 2009 to 5 May 2010.
If applicable, has the reported data been cross-checked with other available data?	Yes. The reported data has been cross-checked with the original daily power statistics logs for electricity supplied to- and purchased from grid for proposed project and project B /15/ and the monthly sale receipts of electricity supplied to the power grid for proposed project and project B /11/ and the monthly sale receipts of electricity purchased from the grid by the Project and Project B /12/.
How were the values in the monitoring report verified?	All original records /15/ and receipts /11/ have been verified by DNV on the project site during the verification. DNV was able to verify that the calculation process and the conclusion are transparent and conservative. To be mentioned that, for the data of electricity supplied to the grid, as the end date of this monitoring period is 5 May 2010, but the sale receipts /11/ in May 2010 is from 1 May 2010 to 31 May 2010, so not only receipts in this month was used for cross-check. Then DNV was able to confirm electricity meters readings on 1 May 2010 and 5 May 2010 from the original daily power statistics logs /15/, and the electricity supplied to the grid in May 2010 is the difference of those two readings, which had been correctly concluded in the spreadsheet /6/ for calculation of the certified emission reductions. Meanwhile, DNV cross-checked the sale receipts in May 2010 /11/ with difference of two readings that between 1 May 2010 and 31 May 2010, can confirm that the data from original daily power statistics in May 2010 is in accordance with that from the sale receipts. As



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	<p>the statement /21/ from the DCS company, the data in the DCS cannot be altered by operator, which also be confirmed through checking during the site visit. Therefore, the electricity exported to the grid from 1 May 2010 to 5 May 2010 is reasonable.</p> <p>On the other hand, for the data of electricity purchased from grid, as the end date of this monitoring period is 5 May 2010, the sale receipts /12/ in May 2010 is also from 1 May 2010 to 5 May 2010 which can be used as cross-check reference directly. Meanwhile, DNV was able to confirm that electricity meters readings on 1 May 2010 and 5 May 2010 from the original daily power statistics logs /15/, the purchased electricity in May 2010 is the difference of the two readings, which is correctly concluded in the spreadsheet /6/ for calculation of the VER. Therefore, the electricity exported to grid from 1 May 2010 to 5 May 2010 is also reasonable.</p>
<p>Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?</p>	<p>Yes. Data of electricity supplied to- and purchased from grid is continuously measured and monthly recorded.</p> <p>DNV has compared the electricity data supplied to- and purchased from grid that reported in the monitoring report for the monitoring period of 1 May 2009 to 5 May 2010 with original power statistics form of electricity kept at the project office that was audited /15/. Reported data matched the statistics form of electricity exported kept at the project office.</p> <p>Critical parameters used for the determination of the emission reductions are: Meter readings and sales receipts of each month in the monitoring period. All the data is in compliance with the figures stated in the VCU monitoring report.</p> <p>Quality of the meter reading is assured through calibration of electricity meters and through cross-checking of readings between the meters and the receipts.</p> <p>Data can be archived for 2 years by means of electronic and paper backup.</p>



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	The site visit confirmed that the management system and QA/QC processes for the CDM project are in place, such as the management structure of the CDM project, the CDM project management and operational procedure manual /18/, and the competence criteria of CDM personnel involved in the project.
In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	Not applicable.

Table 2 Electricity supplied to the grid by Group A-i (i=1,2,3) of the proposed project and by Group B-i (i=1,2,3) of the project B

	Assessment/ Observation
Data / Parameter: (as in revised monitoring plan):	$EG_{A-i,y}$ – Electricity supplied to the grid by Group A-I (i=1,2,3) of the proposed project in year y, $EG_{B-i,y}$ – Electricity supplied to- the grid by Group B-I (i=1,2,3) of the project B in year y.
Measuring frequency:	Continuously measured
Reporting frequency:	Monthly reported
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes
Type of monitoring equipment:	Bidirectional meters
Is accuracy of the monitoring equipment as stated in the revised MP? If the revised MP does not specify the accuracy of the monitoring equipment, does the monitoring equipment represent good monitoring practise?	The revised CDM MP /3/ specified the accuracy of the meters A-1,2,3 and B-1,2,3 are not lower than 0.5s. The actual meters A-1,2,3 and B-1,2,3 are with the accuracy of 0.5s /9/, which are in accordance with the revised CDM MP /3/.
Calibration frequency /interval:	Annually
Is the calibration interval in line with the monitoring plan of the revised MP? If the revised MP does not specify the frequency of calibration, does the selected frequency represent good monitoring practise?	The revised CDM MP /3/ specified the metering equipments will be calibrated once a year. The actual calibration frequency is annually that is in accordance with it, which is acceptable. The selected frequency meets the requirement



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	of DL/T448 – 2000 /34/, and represents the good monitoring practice.
Company performing the calibration:	<p>Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center calibrated the meters A-1 (SN: 9030094), A-2(SN: 9030093), A-3(9030096) and B-1 (SN: 9030087), B-2(SN: 0010037), B-3(0010038) They were calibrated on 17 April 2009 and 16 April 2010 /9/.</p> <p>Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center is authorized by Quality and Technical Supervision Bureau of Inner Mongolia Autonomous Region and it is qualified from 2 January 2009 to 1 January 2014 /10/. Hence, Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center has qualification to implement the calibration on electric meters /10/.</p>
Did calibration confirm proper functioning of monitoring equipment? (Yes / No):	Yes
Is(are) calibration(s) valid for the whole reporting period?	<p>Yes. The calibration valid periods for A-1 (SN: 9030094), A-2(SN: 9030093), A-3(9030096) and B-1 (SN: 9030087), B-2(SN: 0010037), B-3(0010038) are from 17 April 2009 to 16 April 2010 and from 16 April 2010 to 15 April 2011 /9/.</p> <p>The valid periods of the calibrations can cover the current monitoring period of 1 May 2009 to 5 May 2010.</p>
If applicable, has the reported data been cross-checked with other available data?	Yes. The reported data has been cross-checked with the original daily power statistics logs for auxiliary electricity meters for the proposed project and project B /15/ and historical data in the DCS checked during site visit.
How were the values in the monitoring report verified?	<p>All original records /15/ and historical data in the DCS checked during site visit by DNV during the verification. DNV was able to verify that the calculation process and the conclusion is transparent and conservative</p> <p>As the statement /21/ from the DCS company, the data in the DCS cannot be altered by operator, which also be confirmed through checking during the site visit. The data is correctly concluded in the spreadsheet /6/ for calculation of Verified Emission Reductions.</p>



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	Therefore, the electricity supplied to the grid by Group A-I (i=1,2,3) of the proposed project and Group B-I (i=1,2,3) of project B are reasonable.
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	<p>Yes. Data of electricity supplied to the grid by Group A-I (i=1,2,3) of the proposed project and by Group B-I (i=1,2,3) of project B are measured on a continuous basis and monthly recorded;</p> <p>DNV has compared original daily power statistics logs for auxiliary electricity meters for proposed project of 1 May 2009 to 5 May 2010 /15/ and historical data in the DCS that were checked during site visit. Reported data matched the statistics form of electricity purchased kept at the project office.</p> <p>All the data is in compliance with the figures stated in the VCU monitoring report.</p> <p>Quality of the meter reading is assured through calibration of electricity meters and through cross checking of readings between the meters and the historical data in the DCS checked during site visit.</p> <p>Data can be archived for 2 years by means of electronic and paper backup.</p> <p>The site visit confirmed that the management system and QA/QC processes for the CDM project are in place, such as the management structure of the CDM project, the CDM project management and operational procedure manual /18/, and the competence criteria of CDM personnel involved in the project.</p>
In case only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	Not applicable.

Calibration records and accreditation certificates have been provided to the verification team. DNV can confirm that the meters were calibrated covering this monitoring period as per the revised CDM MP /3/.



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3.6 Assessment of data and calculation of emission reductions

DNV confirms that appropriate methods and formulae for calculating baseline emissions, project emissions and leakage have been applied, and the assumptions, emission factors, default values that are applied have been justified.

As stated in the section 1.4, the emission reductions ER_y by the project activity during the crediting period is the difference between baseline emissions (BE_y), project emissions (PE_y) and emissions due to leakage (L_y) per ACM0002 (version 07) /25/, as follows:

$$ER_y = BE_y - PE_y - L_y$$

3.6.1 Baseline emissions

Baseline emissions (BE_y in tCO_2) are the product of the baseline emission factor (EF_y in tCO_2/MWh) times the net electricity supplied by the project activity to the grid (EG_y in MWh).

EF_y is emission factor of the grid, which was calculated *ex-ante* and will not be updated during the first crediting period. EF_y of the proposed project in the registered CDM PDD /1/ is $1.0549 tCO_2/MWh$, which has been verified to be correct based on the availability of NCPG data /27/.

EG_y is the net electricity generation supplied to the NCPG, which is determined by the total electricity supplied to the grid multiply the electricity generated ration of proposed project then minus the imported electricity from the NCPG. The electricity exported to- and imported from the grid was derived from the main meter in the period 1 May 2009 to 5 May 2010, which was verified by DNV and cross-checked by the sale receipts /11/.

The net electricity supplied by the proposed project to the grid in this reporting period is as shown in the following table 3.

Table 3 Electricity supplied to and imported from the grid

Period	Total electricity supplied to the grid by the proposed project and project B $EG_{export}(MWh)$			Power supplied by proposed project EG_y (MWh)	PLF	Total imported electricity from the grid $EG_{import}(MWh)$		
	Values from meter reading	Values from sales receipts	Verified			Values from meter reading	Values from sales receipts	Verified
	A	B	$C=Min(A, B)$	calculated	%	D	E	$F=Max(D, E)$
1 May 2009-31 May 2009	5 487.53	5 448.61	5 448.61	5 448.61	15.0	30.63	30.63	30.63
1 June 2009-30 June 2009	6 513.61	6 481.38	6 481.38	6 481.38	18.5	44.2	44.2	44.2
1 July 2009-31 July 2009	4 263.84	4 237.82	4 237.82	4 237.82	11.7	61.55	61.55	61.55
1 August 2009-31 August 2009	4 987.08	4 967.20	4 967.20	4 967.20	13.7	70.95	70.95	70.95
1 September 2009-30 September 2009	8 494.32	8 462.40	8 462.40	8 462.40	24.1	66.43	66.43	66.43
1 October 2009-31 October 2009	10 622.71	10 548.57	10 548.57	10 548.57	29.1	42.82	42.82	42.82
1 November 2009-30 November 2009	9 705.78	9 664.31	9 664.31	9 664.31	27.5	43.99	43.99	43.99
1 December 2009-31 December 2009	10 478.48	10 401.40	10 401.40	8 959.34	24.7	60.11	60.11	60.11
1 January 2010-31 January 2010	16 609.41	16 517.11	16 517.11	10 042.21	27.7	169.45	169.45	169.45



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1 February 2010- 28 February 2010	8 421.27	8 377.44	8 377.44	4 341.22	13.3	151.03	151.03	151.03
1 March 2010- 31 March 2010	21 448.01	21 324.28	21 324.28	10 223.15	28.2	88.63	88.63	88.63
1 April 2010- 30 April 2010	27 407.01	27 282.28	27 282.28	13 663.57	38.9	39.68	39.68	39.68
1 May 2010- 5 May 2010	4 848.65	25 329.8	4 848.65	2 310.62	39.5	8.76	8.76	8.76
1 May 2009 to 5 May 2010	-	-	138 561.45	99 350.4	22.9	-	-	878.23

- *note: 1. The end date of this monitoring period is 5 May 2010, the sale receipts /11/ in May 2010 is from 1 May 2010 to 31 May 2010, so not only receipts in this month was used for cross-check. DNV was able to confirm electricity meters readings on 1 May 2010 and 5 May 2010 from the original daily power statistics logs /15/, and the generated electricity in May 2010 is the difference of those two readings, which had been correctly concluded in the spreadsheet /6/ for calculation of certified emission reductions. Meanwhile, DNV cross-checked sale receipts in May 2010 /11/ with difference of two readings that between 1 May 2010 and 31 May 2010, can confirm the data from original daily power statistics in May 2010 is in accordance with that from sale receipts. As the statement /21/ from the DCS company, the data in the DCS can't be revised by operator, which also be confirmed through checking during the site visit. Therefore, the electricity exported to grid from 1 May 2010 to 5 May 2010 is reasonable.
2. The end date of this monitoring period is 5 May 2010, and the purchased electricity sale receipts /12/ in May 2010 is also from 1 May 2010 to 5 May 2010 which can use as cross-check reference directly. Meanwhile, DNV was able to confirm electricity meters readings on 1 May 2010 and 5 May 2010 from the original daily power statistics logs /15/, the purchased electricity in May 2010 is the difference of that two readings, which is correctly concluded in the spreadsheet /6/ for calculation of certified emission reductions. Therefore, the electricity purchased from grid from 1 May 2010 to 5 May 2010 is reasonable.

Hence,

$$EG_y = EG_{export} - EG_{import} = 99\,350.4 - 878.23 = 98\,472.17 \text{ MWh, and}$$

$$BE_y = EF_y * EG_y = 103\,878 \text{ tCO}_2\text{e}$$

3.6.2 Project emissions

The project emissions are regarded as zero according to the methodology ACM0002 (version 07) /25/.

3.6.3 Leakage

There are no leakages that need to be considered in applying the methodology ACM0002 (version 07) /25/.

3.6.4 Emission reductions

Therefore, the emission reductions in the monitoring period are:

$$ER_y = BE_y - PE_y - L_y = 103\,878 \text{ tCO}_2\text{e} - 0 - 0 = 103\,878 \text{ tCO}_2\text{e}$$

The yearly expected emission reductions in the registered CDM PDD /1/ are 104 941 tonnes of CO₂ equivalents, which correspond to the emission reductions of 106 379 tonnes of CO₂ equivalents in 370 days (from 1 May 2009 to 5 May 2010), and hence the reported emission reductions are 2.35% lower than estimated quantity of emission reductions.

DNV has checked the power statistics logs /15/ and daily operation logs /16/, and can confirm that all wind turbines were put into operation only on 2 July 2009. In another words, the project is not fully operational for the entire verified VER monitoring period. The total amount of electricity supplied to grid from 1 May 2009 to 5 May 2010 is 98 472.17MWh,



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which is 2.35% lower than the expected value of 100 843 MWh (99 480 MWh*370/365), equivalent to 99 480 MWh in a year in the registered CDM PDD /1/.

As outlined above, the input data for calculating the emission reductions, the calculating process and the result are complete and transparent. Therefore, DNV is able to confirm the accuracy of the emission reductions.

3.7 Quality of evidence to determine emission reductions

DNV confirms that a complete set of data for this monitoring period is available to be monitored and are in accordance with the registered CDM PDD /5/ and revised CDM MP /3/.

DNV compared the total electricity exported and imported data, generated electricity of proposed project and project B reported in the monitoring report for selected months with statistics form kept at the project office that were visited as following,

- The daily power statistics logs for electricity exported to and imported from grid for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project. /15/;
- The daily power statistics logs for six auxiliary electricity meters in Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project. /15/;
- Monthly Sale receipts of electricity supplied to the power grid for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project /11/;
- Monthly Sale receipts of electricity purchased from the power grid for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project. /12/.

Critical parameters used for the determination of the emission reductions are:

$EG_{export,y}$, $EG_{import,y}$, $EG_{A-i,y}$, EG_{B-i} , and EG_y .

All the data was in compliance with the figures stated in the monitoring report. The original data were transferred to the spreadsheet and are appended as an attachment to this report.

All paper-based information will be stored by the technology department of Beijing International New Energy Co., Ltd. and all the material will have a copy for backup. And all data including calibration records is kept until 2 years after the end of the total crediting period of the project.

3.8 Management system and quality assurance

Beijing International New Energy Co., Ltd. is responsible for the operation and maintenance of the project, the monitoring equipments and data collection. The management system for the project has been verified to be in place by DNV on site. The organization structure with the responsibilities, personnel competencies, monitoring procedure and monitoring management have been properly identified and put into operation.

DNV confirms that the responsibilities and authorities in the management and operational system for monitoring and reporting are in accordance with the responsibilities and authorities stated in the revised CDM MP /5/, and the CDM management manual /18/.

Data was collected according to the well defined data collection procedures:



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- Data of electricity generated is automatically recorded on a continuous basis;
- At the end of every month, the monitoring data will be filed in a spreadsheet and stored on a hard disk and CD-ROM, and the paper-based printout should be also archived, and
- Quality of the meter reading is assured through calibrated meters.

The monitoring and reporting of electricity data is also in accordance with the well established operational procedures.

All monitoring meters have been calibrated and maintained periodically to ensure the accuracy of measurement. All data has been archived in paper form (hard copy) and was checked during the site visit.

The site visit confirmed that the management system for the CDM project is in place /18/ for Beijing International New Energy Co., Ltd., such as the management structure of the CDM project, the CDM project management and CDM training. The CDM training for the staff was organized by the project owner and carried out by Beijing International New Energy Co., Ltd. at Zhengxiangbai Qi, south Xilinguole League, Inner Mongolia Autonomous Region, China. /17/ /18/. The new staff will be trained by the experienced staff and then gain competency CDM through working on the project. By interviewing with some staff, site visit and records checking, it can be confirmed that the monitoring management system is implemented following the monitoring manual.



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4 VERIFICATION STATEMENT

DNV Climate Change Services AS (DNV) has performed the verification of the emission reductions that have been reported for the “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” (UNFCCC Registration Reference No. 2566) for the period of 1 May 2009 to 5 May 2010. As these emission reductions occur prior to the registration of the project as CDM project activity, these emission reductions cannot be claimed as Certified Emission Reductions (CERs). The emission reductions are thus claimed as Voluntary Carbon Units (VCUs) under the Voluntary Carbon Standard (VCS) 2007.1.

The verification was thus carried out in accordance with the requirement in the Voluntary Carbon Standard (VCS) 2007.1 applying to projects which are registered sequentially under the VCS Program and the CDM which is a VCS approved GHG program.

The project participants are responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project.

It is DNV’s responsibility to express an independent verification statement on the reported GHG emission reductions from the project. DNV does not express any opinion on the selected baseline scenario or on the validated and registered CDM PDD and approved revised CDM MP. Since the project design was previously assessed by Bureau Veritas Certification Holding SAS as part of the CDM validation and registration of the project. DNV recognizes the validation opinion of Bureau Veritas Certification Holding SAS that the project design as documented is sound, reasonable and meets the relevant UNFCCC and host Party criteria. DNV also recognizes that the project was registered as a CDM project activity on 6 May 2010 under the UNFCCC reference number 2566.

DNV conducted the verification on the basis of the monitoring methodology ACM0002 (version 07), the revised CDM monitoring plan dated 6 April 2011 and approved by EB on 27 June 2011 and the VCU monitoring report (version 02) dated 30 June 2011. The verification included i) checking whether the provisions of the monitoring methodology and the monitoring plan were consistently and appropriately applied and ii) the collection of evidence supporting the reported data.

DNV’s verification approach draws on an understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. DNV planned and performed the verification by obtaining evidence and other information and explanations that DNV considers necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emissions reductions of the “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” for the period 1 May 2009 to 5 May 2010 are fairly stated in the VCU Monitoring Report (version 02) dated 30 June 2011, the project design meets all VCU Verification Criteria.

The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology ACM0002 (version 07) and the monitoring plan contained in the revised CDM monitoring plan dated 6 April 2011 and approved by EB on 27 June 2011 .

DNV Climate Change Services AS (DNV) is able to certify that the emission reductions from the “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project” during the period 1 May 2009 to 5 May 2010 amount to 103 878 tonnes of CO₂ equivalent.



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DNV does not assume any responsibility towards the issuance and utilization of the VCUs hereby verified. Request for issuance of VCUs shall be made by the project proponent to an approved VCS Program Registry based on the requirements set out under the most recent version of the VCS Program Guidelines clause on VCS Registration.

The verification of reported emission reductions is based on the information made available to DNV and the engagement conditions detailed in this report. DNV cannot be held liable by any party for decisions made or not made based on this report.

Beijing and Oslo, 27 August 2011

Li Lianfei
CDM Verifier
DNV Beijing, China

Edwin Aalders
Approver
DNV Climate Change Services AS



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5 REFERENCES

Documents provided by the Project Participants that relate directly to the GHG components of the project. These have been used as direct sources of evidence for the periodic verification conclusions, and are usually further checked through interviews with key personnel.

- /1/ Easy Carbon Consultancy Co., Ltd.: CDM Project Design Document for “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project”, version 4, dated 11 April 2010.
- /2/ Bureau Veritas Certification Holding SAS: CDM Validation Report for “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project”, Report No.: BVC/China-val/0089/2008, version 03, dated 26 April 2010.
- /3/ Easy Carbon Consultancy Co., Ltd.: Revised CDM Monitoring Plan for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project, dated 6 April 2011 and approved by EB on 27 June 2011.
Approved information from website:
<http://cdm.unfccc.int/Projects/DB/BVQI1241775223.11/view>
- /4/ China Environmental United Certification Center Co., Ltd.: CDM Validation Opinion For Revision of Registered Monitoring Plan of Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project, dated 8 April 2011.
Information from website: <http://cdm.unfccc.int/Projects/DB/BVQI1241775223.11/view>
- /5/ Easy Carbon Consultancy Co., Ltd.: VCU Monitoring Report for “Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project”, Monitoring Period: 1 May 2009 to 5 May 2010, version 01, dated 7 June 2011, and updated version 02, dated 30 June 2011.
- /6/ Easy Carbon Consultancy Co., Ltd.: VCU Emission reduction calculation spreadsheet for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project from 1 May 2009 to 5 May 2010, version 1, dated 24 May 2011, and updated version 2, dated 30 June 2011.
- /7/ North China Power Engineering (Beijing) Co., Ltd.: Feasible Study Report for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project, prepared in September 2007.
- /8/ National Development and Reform Commission (DNA of China): Letter of Approval for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project, dated March 2009.
- /9/ Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center: Calibration and certificate of meters according to national industrial regulations JJG 1055-1997 and JJG 596-1999.
The main meter M1 (No. 95232476, accuracy 0.2S, Type ZMQ202C):
The meter is calibrated on 17 April 2009 and valid till 16 April 2010,
The meter is calibrated on 16 June 2009 and valid till 15 June 2010,
The backup meter M2 (No. 95232477, accuracy 0.2S, Type ZMQ202C):
The meter is calibrated on 17 April 2009 and valid till 16 April 2010,
The meter is calibrated on 16 June 2009 and valid till 15 June 2010,
Meter A-1(No.9030094, accuracy 0.5S, Type DSSD331):
The meter is calibrated on 17 April 2009 and valid till 16 April 2010,



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The meter is calibrated on 16 April 2010 and valid till 15 April 2011,

Meter A-2 (No.9030093, accuracy 0.5S, Type DSSD331):

The meter is calibrated on 17 April 2009 and valid till 16 April 2010,

The meter is calibrated on 16 April 2010 and valid till 15 April 2011,

Meter A-3 (No.9030096, accuracy 0.5S, Type DSSD331):

The meter is calibrated on 17 April 2009 and valid till 16 April 2010,

The meter is calibrated on 16 April 2010 and valid till 15 April 2011,

Meter B-1 (No.9030087, accuracy 0.5S, Type DSSD331):

The meter is calibrated on 17 April 2009 and valid till 16 April 2010,

The meter is calibrated on 16 April 2010 and valid till 15 April 2011,

Meter B-2 (No.0010037, accuracy 0.5S, Type DSSD331):

The meter is calibrated on 17 April 2009 and valid till 16 April 2010,

The meter is calibrated on 16 April 2010 and valid till 15 April 2011,

Meter B-3 (No. 0010038, accuracy 0.5S, Type DSSD331):

The meter is calibrated on 17 April 2009 and valid till 16 April 2010,

The meter is calibrated on 16 April 2010 and valid till 15 April 2011,

DNV confirms that the main meter M1, backup meter M2, meters A-1,2,3 and Meters B-1,2,3 in the certifications are the ones installed at the project site during the site visit.

- /10/ Quality and Technical Supervision Bureau of Inner Mongolia Autonomous Region: The People's Republic of China Certificate of metrological authorization for the Legal Metrological Verification institution for Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center (No. of accreditation certificate: Meng (2009) 15021). The valid period is from 2 January 2009 to 1 January 2014.
- /11/ Beijing International New Energy Co., Ltd.: Monthly Sale receipts of electricity supplied to the power grid for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project
The receipts period is from May 2009 to May 2010.
- /12/ Inner Mongolia Autonomous Region Grid Company: Monthly Sale receipts of electricity purchased from the power grid for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project.
The receipts period is from May 2009 to May 2010.
- /13/ Beijing International New Energy Co., Ltd. and Inner Mongolia Autonomous Region Grid Company: Power Purchase and Sales Agreement (PPSA), dated October 2009.
- /14/ Beijing International New Energy Co., Ltd.: Acceptance certificate for the first wind turbine for trial generation, dated in April 2009.
- /15/ Beijing International New Energy Co., Ltd.: The daily power statistics logs for electricity exported to and imported from grid for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project.
The daily power statistics logs for six auxiliary electricity meters in Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu



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Wind Farm Phase II Project.

The logs are from April 2009 to May 2010.

- /16/ Beijing International New Energy Co., Ltd.: The daily operation logs for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project.
The logs are from April 2009 to May 2010.
- /17/ Beijing International New Energy Co., Ltd.: CDM training record, dated 6 April 2009.
- /18/ Beijing International New Energy Co., Ltd.: CDM management manual for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project, prepared in January 2010.
- /19/ Shanghai Electric Wind Power Equipment Co., Ltd: The wind turbine operation procedure for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project, dated 23 October 2008.
- /20/ Beijing International New Energy Co., Ltd.: *Clarification for the project commissioning date and declaration of transaction under VCS during the period from 1 May 2009 to 5 May 2010*, dated 30 June 2011.
- /21/ Beijing Zhongke Furui Electric Technic Co., Ltd: Statement of data management for the meters at the low voltage side of 35kV/220kV transformer, dated June 2011.
- /22/ Beijing International New Energy Co., Ltd.: Line connection drawing on DCS for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project.

Background documents related to the design and/or methodologies employed in the design or other reference documents.

- /23/ CDM Executive Board: Validation and Verification Manual, version 01.2.
http://cdm.unfccc.int/Reference/Manuals/accr_man01.pdf
- /24/ CDM Executive Board: Guidelines for Completing the Monitoring Report Form, version 01, EB 54 Annex 34.
http://cdm.unfccc.int/Reference/Guidclarif/iss/iss_guid06_v01.pdf
- /25/ CDM Executive Board: Approved consolidated baseline and monitoring methodology ACM0002, version 07, EB36.
- /26/ CDM Executive Board: *Tool to calculate the emission factor for an electricity system*, version 2, EB 50 Annex 14.
- /27/ NDRC: *Notification on Determining Baseline Emission Factor of China's Grid*, 18 July 2008,
<http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File1874.pdf>
- /28/ ISEA3000 (Revised): *Assurance Engagements other than Audits or Reviews of Historical Financial Information*.
<http://www.ifac.org/IAASB/ProjectHistory.php?ProjID=0008>
- /29/ ISO/FDIS 14064-3 "Greenhouse gases – Part 3: *Specification with guidance for the validation and verification of greenhouse gas assertions and employed a risk-based approach*.



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<http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=38700&tscopelist=PROGRAMME>

- /30/ Voluntary Carbon Standard – VCS 2007.1: *Voluntary Carbon Standard - Specification for the project-level quantification, monitoring and reporting as well as validation and verification of greenhouse gas emission reductions or removals*
- /31/ Voluntary Carbon Standard – VCS 2007.1: *Voluntary Carbon Standard Program Guidelines*, dated 19 November 2007.
- /32/ Voluntary Carbon Standard – VCS 2007.1: *Further Guidance for Projects that are Registered in Two GHG Programs*, dated 19 March 2008.
- /33/ Voluntary Carbon Standard: *Project Description Template*, dated 19 November 2007. Available at: <http://www.v-c-s.org/sites/v-c-s.org/files/VCS%20PD.doc>.
- /34/ China Power Press: Management regulation for electricity measurement equipment<DL/T448 – 2000>, issued on 1 January 2001.

Persons interviewed during the initial verification, or persons who contributed with other information that are not included in the documents listed above.

- /35/ Mr. Gong Libin, Wind Farm Manager, Beijing Jingneng New Energy Co. Ltd, Zhengxiangbaiqi Wind Power Branch.
- /36/ Mr. Qiao Hairui, Wind Farm Manager assistant, Beijing Jingneng New Energy Co. Ltd, Zhengxiangbaiqi Wind Power Branch.
- /37/ Mr. Liu Xuejun, Wind Farm Manager assistant, Beijing Jingneng New Energy Co. Ltd, Zhengxiangbaiqi Wind Power Branch.
- /38/ Ms. Qu Zhan, CDM Manager assistant, Beijing International new Energy Co., Ltd..
- /39/ Ms. Wang Yuan, Project Manager, Easy Carbon Consultancy Co., Ltd..

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APPENDIX A

CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUEST

Corrective action requests

CAR ID	Corrective action request	Response by Project Participants	DNV's assessment of response by Project Participants
CAR 1	The implementation of the actual monitoring programme, the monitoring data and parameters, monitoring program and equipment are not in accordance with the monitoring plan in the registered CDM PDD version 4 dated 11 April 2010.	The Project shares the transformer and gateway meters with another wind farm project named as Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project (hereafter refer to Project B). The revision of monitoring plan has been submitted to EB and approved by EB on 27 June 2011. The actual monitoring implementation is in line with the revised monitoring plan.	<p>OK.</p> <p>DNV checked the line connection drawing on the DCS /22/ during the site visit, can confirm that the proposed project, Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project and project B Inner Mongolia Jingneng Zheligentu Wind Farm Phase II Project share the same transformer and main meter (SN: 95232476).</p> <p>revised CDM monitoring plan for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project, dated 6 April 2011 had been approved by EB on 27 June 2011 /3/.</p> <p>Approved information from website: http://cdm.unfccc.int/Projects/DB/BVQI1241775223.11/view</p> <p>The monitoring implementation was verified during site visit and the monitoring parameters in the VCU Monitoring Report version 02, dated 30 June 2011 were in accordance with revised CDM MP /3/.</p> <p>CAR 1 is closed.</p>

CAR ID	Corrective action request	Response by Project Participants	DNV's assessment of response by Project Participants
CAR 2	In the VCU MR version 01 dated 24 May 2011, Section B.B.2, it is stated that <i>The revision of the monitoring plan for the current monitoring period has been submitted to EB</i> . It is requested to clarify the status of the revision of CDM monitoring plan and EB decision on the revision of the CDM monitoring plan.	The revision of the monitoring plan has been approved by EB on 27 June 2011. And it has been stated in the MR version 02 dated 30 June 2011.	OK. Revised CDM monitoring plan for Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project, dated 6 April 2011 had been approved by EB on 27 June 2011 /3/. Approved information from website: http://cdm.unfccc.int/Projects/DB/BVQI1241775223.11/view CAR 2 is closed.

Clarification requests

CL ID	Clarification request	Response by Project Participants	DNV's assessment of response by Project Participants
CL 1	It is requested to clarify the actual wind turbine types that put into operation in the monitor report.	The actual wind turbine type is SEC-1250, which has been demonstrated in the MR version 02 dated 30 June 2011.	OK. DNV checked the actual turbine nameplates and the wind turbine operation procedure /19/ during site visit, can confirm that the wind turbine tupe is SEC-1250, which is in accordance with registered CDM PDD /1/. CL 1 is closed.

CL ID	Clarification request	Response by Project Participants	DNV's assessment of response by Project Participants
CL 2	<p>It is requested to clarify the dates of calibration for main meters and backup meters, and six auxiliary meters, and application of calibration standard that used for calibration for all these meters. In addition, clarification of the actual accuracy class and type for six auxiliary meters are sought.</p>	<p>All the calibration dates and the accuracy class for all the monitoring meters have been clearly stated in the MR version 02 dated 30 June 2011. Besides, the calibration frequency was in line with the requirements of the calibration standard in the revised monitoring plan approved by EB on 27 June 2011.</p>	<p>OK. The calibration information had been stated in reference no. /9/, DNV confirms that the main meter M1, backup meter M2, meters A-1,2,3 and Meters B-1,2,3 in the certifications are the ones installed at the project site during the site visit. Calibration frequency is once per year which is in accordance with national calibration standard technical administrative administrative of electric energy metering (DL/T448-2000) /34/ in the revised CDM MP /3/. The valid periods of the calibrations can cover the proposed period from 1 May 2009 to 5 May 2010. Accuracy for six auxiliary electricity meters is 0.5s, model DSSD331, which had been corrected in the VCU MR version 02, dated 30 June 2011, and they were in accordance with revised CDM MP /3/. CL 2 is closed.</p>

CL ID	Clarification request	Response by Project Participants	DNV's assessment of response by Project Participants
CL 3	It is requested to clarify reasons for that the actual emission reductions value during the monitoring period in the VCU MR version 01 dated 7 June 2011 is less than values applied in the ex-ante calculation of the registered CDM PDD, whether it has caused likely to increase the estimates of emission reductions in the future monitoring periods.	The first wind turbine of the Project has been put into operation on 30 April 2009. And since all the 39 wind turbines have been put into operation till 2 July 2009, the electricity generation is less than the designed value in the FSR. It is reasonable the actual emission reductions value during the monitoring period is 2.35% less than the estimated value in the registered CDM PDD and it will not increase the estimates of emission reductions in the future monitoring period.	OK. DNV has checked the power statistics logs /15/ and daily operation logs /16/, and can confirm that all wind turbines were put into operation 2 July 2009, in the whole verified monitoring period, the project was not full operationed, so the electricity generated from 1 May 2009 to 5 May 2010 is 98 472.17MWh, which is 2.35% lower than the expected value of 100 843 MWh (99 480 MWh*370/365), equivalent to 99 480 MWh in a year in the registered CDM PDD /1/. The actual average PLF is 22.9%, which is a little lower than the expected PLF, the actual PLF trend is in line with historical wind speed trends in the FSR /7/. Therefore DNV can confirm that the variation of electricity generated and PLF in each month and in the whole year are reasonable. CL 3 is closed.
CL 4	The declaration of the accreditation and transaction of VCS between the project owner and the VCU buyer should be provided.	The declaration of the accreditation and transaction of VCS from the project owner has been provided to DOE.	The project participants have declared that the emission reductions during the monitoring period from 1 May 2009 to 5 May 2010 will only be transacted under the VCS program, and the VCU will be credited only one time /20/. CL 4 is closed.

Forward action requests from previous verification

FAR ID	Forward action request	Summary of how FAR has been addressed in this reporting period	Assessment of how FAR has been addressed
FAR	<i>No FAR was issued.</i>	N/A	N/A

Forward action requests from this verification

FAR ID	Forward action request	Response by Project Participants	DNV's assessment of response by Project Participants
FAR	<i>No FAR was issued.</i>	N/A	N/A

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APPENDIX B

CLARIFICATION OF CLAUSES 1.12, 1.13, 1.14, 8.1 AND 8.2 OF THE VCS PD

Clarification of clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD

The project has been undergoing the validation and verification for the monitoring period (1 May 2009 to 5 May 2010) under the VCS 2007.1 by an accredited validator and verifier (DNV). This clarification is annexed to cover all the requirements set out in the VCS2007.1 for project validation together with the validated CDM PDD (version4, dated 11 April 2010), according to the Policy Announcement from the VCS Association /32/.

Clarification of clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD are as follows:

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

Clarification: As a wind energy project, the project activity will produce clean electricity using wind power resources and will generate GHG emission reductions by avoiding CO₂ emissions from electricity generation of fossil fuel fired power plants. Operation of this project does not lead to GHG emissions. It is confirmed that the project was not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction.

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

The project is located in China and is developed and operated by Beijing International New Energy Co., Ltd., , which has been validated by DNV via the LoA of China /8/ and PPSA /13/. It has been verified by DNV that there is no mandatory program defined for renewable energy in China, and there are no carbon trading scheme in China. Thus, it can be confirmed that there is no other environmental credit which has or will be produced by or obtained for the project /20/.

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

This is not applicable for this project, as the proposed project had been registered as CDM project (UNFCCC Reference Number: 2566).

8.1 Proof of Title:

Evidences of proof of title have been verified via documentation proving ownership of the plant and equipment at the on-site visit. The project's design and implementation have been verified in compliance with all relevant and national legislations in China. The declaration letter from the project owner Beijing International New Energy Co., Ltd. /20/ has been obtained. It has been confirmed that the project owner will not apply for other VERs (VER+, GS etc.). It also has been confirmed that the Beijing International New Energy Co., Ltd. will only sell the VCUs once /20/.

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

The proposed project is not included in an emissions trading program, and does not take place in a jurisdiction or sector in which binding limits are established on GHG emissions. The proposed project does not reduce GHG emissions from activities that participate in an emissions trading program, so this clause is not applicable.

APPENDIX C

CURRICULA VITAE OF THE VERIFICATION TEAM MEMBERS

Li Lian Fei

Mr. Li Lian Fei: holds a Bachelor Degree in the Chemical Engineering. He has an overall experience of more than three years in the field of chemical industries. Prior to joining DNV having these three years experience in chemical process industry covering sulfur burning sulfuric acid plant, heavy oil boiler, de-salted water system, and water purification system, involved in basic design, operation practice, EPC, commissioning, and troubleshooting of these plants.

His qualification, industrial experience demonstrate his sufficient sectoral competence in "Chemical Processes Industries".

Tang Zhiang

Mr. Tang Zhiang holds a Bachelor Degree in Thermodynamic Engineering and a Master Degree in Business Administration. Having an overall experience of around twelve years. Prior to joining DNV, having around 5 years in the field of power industry covering of consulting and engineering for thermal power, wind power, hydropower and solar energy projects. His experience also covers the field of space industry for thermal design, the energy analysis and thermal control for about 4 years.

He has gained the relevant financial and investment knowledge through his courses in MBA. He has applied his financial and investment knowledge in his consulting work for the power industry, such as investment risk analysis, financial accounting, investment parameters assessment, etc.

He has experience of more than 3 years in validation and verification of numerous CDM, VCS and GS projects in DNV both in China and abroad.

His qualification, industrial experience and experience in CDM demonstrate his sufficient sectoral competence in "Energy Generation from Renewable Energy Sources".

Li Lei

Mr. Li Lei holds a Master Degree in Environment Science & Technology. He has an overall experience of 4 years. Prior to joining DNV, he had around 1.2 years of experience as a government servant covering environment management, carbon footprint research and supporting the government decision making process. Prior to that, he has completed one year practical training on the CDM project consulting majoring in the sector of energy generation from renewable energy sources.

He had an experience of around 2.5 years in validation and verification of numerous CDM projects in DNV, majoring in China. His qualification, industrial experience and experience in CDM demonstrate his sufficient sectoral competence in "Energy Generation from Renewable Energy Sources".