

VCS MONITORING REPORT (VCS-MR)
Inner Mongolia Jingneng Saihan Wind Farm Phase I Project

CONTENTS

- A. General description of the project activity
 - A.1. Brief description of the project activity
 - A.2. Project participants
 - A.3. Location of the project activity
 - A.4. Technical description of the project
 - A.5. Title, reference and version of the baseline and monitoring methodology applied to the project activity
 - A.6. Monitoring period of the project activity and related information
 - A.7. Name of responsible person(s)/entity(ies)

- B. Implementation of the project activity
 - B.1. Implementation status of the project activity
 - B.2. Revision of the monitoring plan
 - B.3. Request for deviation applied to this VCS monitoring period
 - B.4. Notification or request of approval of changes

- C. Description of the monitoring system

- D. Data and parameters monitored
 - D.1. Data and parameters used to calculate baseline emissions
 - D.2. Data and parameters used to calculate project emissions
 - D.3. Data and parameters used to calculate leakage emissions
 - D.4. Other relevant data and parameters

- E. Emission reductions calculation
 - E.1. Baseline emissions calculation
 - E.2. Project emissions calculation
 - E.3. Leakage calculation
 - E.4. Emission reductions calculation
 - E.5. Comparison of actual emission reductions with estimates in the registered CDM-PDD
 - E.6. Remarks on difference from estimated value

- F. Clarification on clauses 1.12, 1.13, 1.14, 8.1 and 8.2 in the VCS PD template
 - F.1. Demonstration to confirm that the project was not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction
 - F.2. Demonstration that the project has not created another form of environmental credit (for example renewable energy certificates)
 - F.3. Project rejected under other GHG programs (if applicable)
 - F.4. Proof of Title
 - F.5. Projects that reduce GHG emissions from activities that participate in an emissions trading program (if applicable)

VCS MONITORING REPORT
Version 02 on 01/07/2011¹

Inner Mongolia Jingneng Saihan Wind Farm Phase I Project
CDM registration reference number: 2567
VCS monitoring period 01 from 01/01/2009 to 28/02/2010 (first and last days included)

SECTION A. General description of the project activity

A.1. Brief description of the project activity: >>

>>

Inner Mongolia Jingneng Saihan Wind Farm Phase I Project (hereafter referred as the Project) is located in Saihantala Town, Suniteyou Qi, Xilinhot City, Xilinguole League, Inner Mongolia Autonomous Region, People's Republic of China. The objective of the Project is to utilize wind resources for electricity generation. The Project involves the installation of 30 wind turbines with each capacity of 750 kW and 18 wind turbines with each capacity of 1500 kW, and totals up an installation capacity of 49.5MW. The electricity supplied by the Project is sold to West Inner Mongolia Power Grid, which is an integral part of the North China Power Grid. The Project helps reduce GHG emissions generated from the high-growth, coal-dominated power generation.

The first wind turbine of the Project has been put into operation on 31/12/2008. And all the 48 wind turbines have been put into operation on 15/05/2009. The expected technical lifetime of the Project is 21 years as stated in the registered CDM PDD.

During this VCS monitoring period from 01/01/2009-28/02/2010, the total emission reduction achieved is 122,925 tCO₂e.

A.2. Project Participants

>>

Name of Party involved	Private and/or public entity(ies) project participants	Kindly indicate if the Party involved wishes to be considered as project participant (Yes/No)
People's Republic of China (host)	Beijing International New Energy Co., Ltd.	No

A.3. Location of the project activity:

>>

The Project is located in Saihantala Town, Suniteyou Qi, Xilinhot City, Xilinguole League, Inner Mongolia Autonomous Region, People's Republic of China. The geographical coordinates of the project are east longitude of 112°49'36.88" and north latitude of 42°34'23.24".

A.4. Technical description of the project

>>

The Project involves the installation of 30 wind turbines with each capacity of 750 kW and 18 wind turbines with each capacity of 1500 kW, and total up an installation capacity of 49.5MW. The selected wind turbines are produced by a domestic manufacturer which is Goldwind Science and Technology Co., Ltd.

¹ The date format in this report is day/month/year.

A.5. Title, reference and version of the baseline and monitoring methodology applied to the project activity:

>>

The approved methodology applied in the Project activity is ACM0002 (version 07) – “Consolidated methodology for grid-connected electricity generation from renewable sources”.

The approved methodology “Tool for the Demonstration and Assessment of Additionality” (version 05.2) is also applied in the Project.

For more information regarding the methodologies please refer to <http://cdm.unfccc.int/methodologies/PAmethodologies/approved.html>

A.6. Monitoring period of the project activity and related information:

>>

The VCS monitoring period of the Project is from 01/01/2009-28/02/2010.

The Project was registered as a CDM project on 01/03/2010. As per *Further Guidance for Projects that are Registered in Two GHG Programs* published on 19/03/2008, “Projects registered under other VCS Program approved GHG Programs (such as the CDM) are eligible to create Voluntary Carbon Units (VCUs) for the emissions reductions or removals not registered under that GHG Program. The VCUs can be registered back to the project start date provisions in VCS 2007 Clause 5.2.1. This is, 28 March 2006 or two years prior to the completion of the project validation whatever is later.”

The final CDM validation report for the Project was issued by Bureau Veritas Certification on 26/02/2010. The starting date of this VCS monitoring period (i.e. 01/01/2009) is after both 28/03/2006 and 26/02/2008 (two years prior to the completion of the project validation). Therefore, the Project definitely fulfils requirements provided in *Further Guidance for Projects that are Registered in Two GHG Programs*.

A.7. Name of responsible person(s)/entity(ies):

>>

Name of person/entity completing the monitoring report:

Ms. Lin, Wei / Mr. Guan, Yisong

Easy Carbon Consultancy Co., Ltd.

13-801, Jianwai SOHO, 39 Dongsanhuan Zhonglu, Chaoyang District, Beijing 100022, P. R. China

Phone/fax: +86 10 58697044/59000064

Email: tonilin@easy-carbon.com / gyisong@easy-carbon.com

Easy Carbon Consultancy Co., Ltd is not Project Participant.

SECTION B. Implementation of the project activity

B.1. Implementation status of the project activity

>>

The first wind turbine of the Project has been put into operation on 31/12/2008. And all the 48 wind turbines have been put into operation on 15/05/2009. There was no significant malfunction or any emergency reported for the Project during this VCS monitoring period from 01/01/2009 to 28/02/2010.

B.2. Revision of the monitoring plan

>>

The revision of the monitoring plan for the current VCS monitoring period has been submitted to EB and approved by EB on 09/06/2011.

B.3. Request for deviation applied to this VCS monitoring period

>>

There is no deviation request for the current VCS monitoring period.

B.4. Notification or request of approval of changes

>>

There is no request of approval of changes from the project activity as described in the registered CDM-PDD.

SECTION C. Description of the monitoring system

>>

The monitoring system is specified as below:

1. Monitoring procedures

Grid-connected electricity generated by the Project was monitored through metering equipment (a meter monitoring both electricity supplied to and purchased from the grid by the Project) at the substation (interconnection facility connecting the plant to the grid). The Project shares the transformer and gateway meters with another wind farm project² (hereafter refer to *Project B*). The main and backup meters' precision in this project was 0.2s. At the same time, the data can be monitored and recorded at the on-site control centre using a computer system.

Additionally, a spare 10 kV line was used for supplying electricity in emergencies. The local power distributor measured the $EG_{im-spare,y}$ by the meter M3 which is owned, operated and installed by local power distributor. Sales receipts were issued accordingly in an approach agreed from both sides and based on the meter reading. The accuracy of M3 was 2.0 that meet the national requirement and the calibration has been done in line with the national calibration standard.

Monitoring equipments included two meters, one of which is for backup, eight auxiliary meters and a meter installed on a spare 10 kV line. The backup meter M2 is equipped at the proposed project station and the project owner was responsible for conducting its monitoring. The main meter M1 was employed at the substation and the grid company was responsible for conducting the monitoring.

The 48 sets of wind turbines of the Project has been divided into 4 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. These meters (A-1, A-2, A-3, A-4) have been installed as the auxiliary meters to calculate the electricity supplied to the grid by Group A-i (i=1,2,3,4) of the Project activity. Similarly, Four meters (B-1, B-2, B-3, B-4) have been installed as auxiliary meters to calculate the electricity supplied to the grid by Group B-i (i=1,2,3,4) of the *Project B*. The precision of these eight meters was 0.5s.

In order to deal with the jointly-reading problem, the project owner and the grid company set up the procedure and calculation method to determine the net electricity supplied to the grid by the Project, which was calculated as follows:

$$EG_y = \frac{\sum_{i=1,2,3,4} EG_{A-i,y}}{\sum_{i=1,2,3,4} EG_{A-i,y} + \sum_{i=1,2,3,4} EG_{B-i,y}} \times EG_{export,y} - EG_{import,y} - EG_{im-spare,y} \quad (1)$$

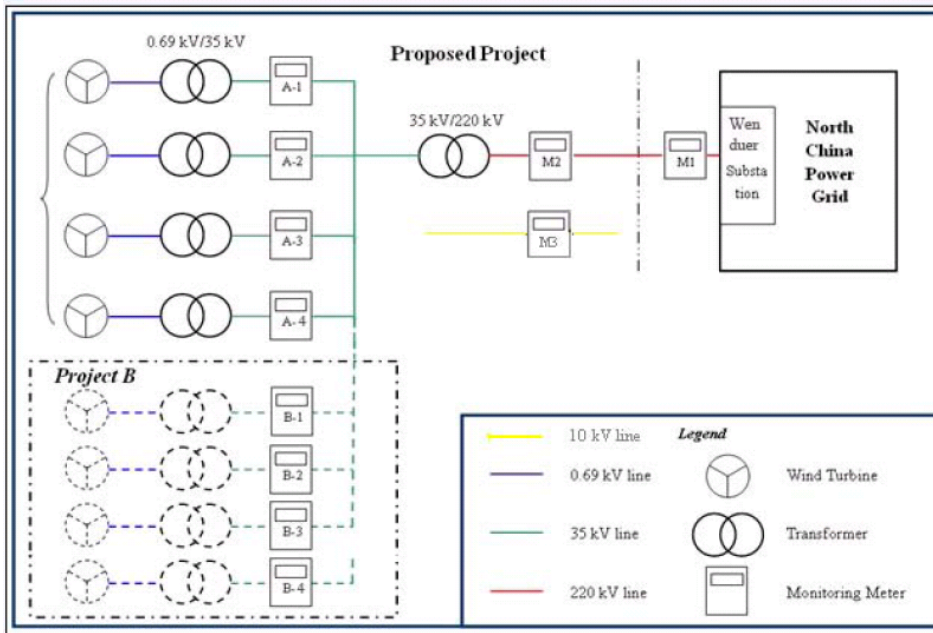
Where:

EG_y = Net electricity supplied to the grid by the Project in the year y.

² Inner Mongolia Jingneng Saihan Wind Farm Phase II Project, <http://cdm.unfccc.int/Projects/Validation/DB/OF27GTF201FE373QFKKZ8ZSUUFKZ4L/view.html>

- $EG_{export,y}$ = Total electricity supplied to the grid via the main power line by the Project and *Project B* in the year y .
- $EG_{import,y}$ = Total electricity purchased from the grid via the main power line by the Project and *Project B* in the year y .
- $EG_{A-i,y}$ = Electricity supplied to the grid by Group A- i ($i=1,2,3,4$) of the Project in the year y .
- $EG_{B-i,y}$ = Electricity supplied to the grid by Group B- i ($i=1,2,3,4$) of the *Project B* in the year y .
- $EG_{im-spare,y}$ = Electricity purchased from the grid by the Project through the spare 10 kV line in the year y .

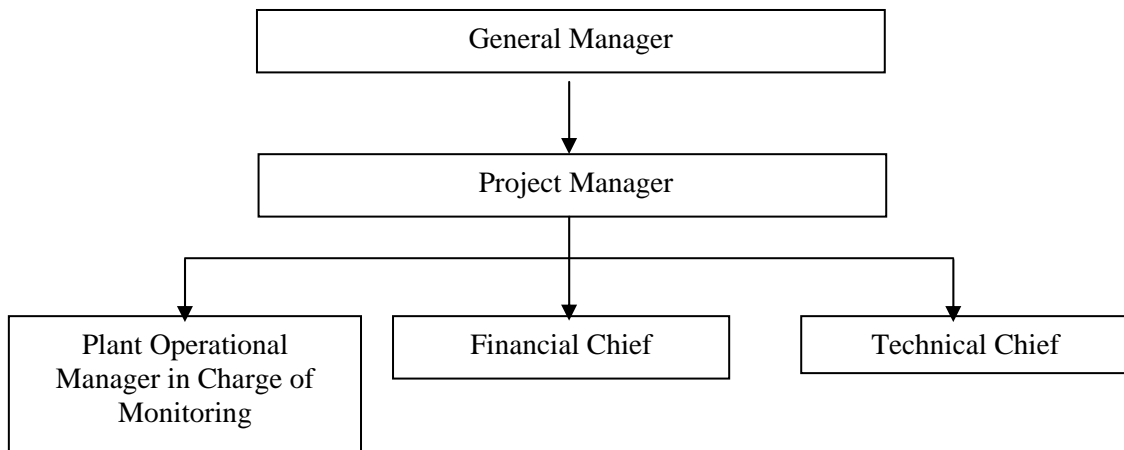
A diagram shows how parameters are monitored is presented as follows:



2. Monitoring structure and responsibility of personnel

Beijing International New Energy Co., Ltd., the project owner, used this document as guideline in monitoring of the project emission reduction performance and adhered to the guidelines set out in this monitoring plan.

Operational manager of wind farm collected the information and data required by the Monitoring Plan. The collected information was documented and sent to the project manager and responsible staffs of the Beijing International New Energy Co., Ltd. monthly. The project manager was in charge of the implementation of the Monitoring Plan and reported to the General Manager of the company. The General Manager of the company would make the confirmations on monitoring, calculation data and reports.



3. Emergency procedures for the monitoring system

The accuracy of the electricity meters (both the main meter and the backup meter) installed at the substation (interconnection facility connecting the facility to the grid) was 0.2s. The meters have been properly calibrated following relevant provision in applicable national standard and its revisions and taking manufacturer specification into consideration. Calibration was carried out by the competent entity with the records being provided to the project owner.

SECTION D. Data and parameters

D.1. Data and parameters determined at registration and not monitored during the VCS monitoring period, including default values and factors

Data / Parameter:	$EF_{grid,CM,y}$
Data unit:	tCO ₂ /MWh
Description:	Baseline emission factor of the grid.
Source of data used:	Registered CDM PDD
Value(s) :	1.0549
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emission calculation.
Additional comment:	The baselines emission factor was determined ex-ante and fixed during the first crediting period.

D.2. Data and parameters monitored

Data / Parameter:	$EG_{export,y}$				
Data unit:	MWh				
Description:	Total electricity supplied to the grid via the main power line by the Project and <i>Project B</i> during year <i>y</i>				
Measured /Calculated /Default:	Measured				
Source of data:	Bidirectional electricity meter reading of M1 installed at the Wenduer substation				
Value(s) of monitored parameter:	132199.91				
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emission calculation				
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	The main meter and the backup meter were calibrated by Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center annually according to Chinese national calibration standards. Information of the meters is listed in the blow table.				
		Main meter M1		Backup meter M2	
	Meter Type	ZMQ202C		ZMQ202C	
	Accuracy class	0.2s		0.2s	
	Serial No.	95303611		95303617	
	Calibration frequency	Yearly		Yearly	
	Certificate report No.	Neng 13, No,2008-L0189	Wenduer Jianzi 2009-02	Neng 13, No.2008-L0185	Jingneng Jianzi 2009-02

	Date of last calibration	22/08/2008	17/06/2009	22/08/2008	17/06/2009
	Validity	21/08/2009	16/06/2010	21/08/2009	16/06/2010
Measuring/ Reading/ Recording frequency:	Continuously measurement and monthly recording				
Calculation method (if applicable):	Not applicable				
QA/QC procedures applied:	The electricity supplied by the project activity to the grid will be monitored and recorded at the central control room. The project operator is responsible for recording such data Double check by receipt of sales.				

Data / Parameter:	$EG_{import,y}$																																												
Data unit:	MWh																																												
Description:	Total electricity purchased from the grid by the proposed project and <i>project B</i> during year <i>y</i>																																												
Measured /Calculated /Default:	Measured																																												
Source of data:	Electricity meter reading of M1 installed at the Wenduer substation																																												
Value(s) of monitored parameter:	637.18																																												
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emission calculation																																												
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	<p>The main meter and the backup meter are calibrated by Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center annually according to Chinese national calibration standards. Information of the meters is listed in the blow table.</p> <table border="1"> <thead> <tr> <th></th> <th colspan="2">Main meter M1</th> <th colspan="2">Backup meter M2</th> </tr> </thead> <tbody> <tr> <td>Meter Type</td> <td colspan="2">ZMQ202C</td> <td colspan="2">ZMQ202C</td> </tr> <tr> <td>Accuracy class</td> <td colspan="2">0.2s</td> <td colspan="2">0.2s</td> </tr> <tr> <td>Serial No.</td> <td colspan="2">95303611</td> <td colspan="2">95303617</td> </tr> <tr> <td>Calibration frequency</td> <td colspan="2">Yearly</td> <td colspan="2">Yearly</td> </tr> <tr> <td>Certificate report No.</td> <td>Neng 13, No,2008-L0189</td> <td>Wenduer Jianzi 2009-02</td> <td>Neng 13, No.2008-L0185</td> <td>Jingneng Jianzi 2009-02</td> </tr> <tr> <td>Date of last calibration</td> <td>22/08/2008</td> <td>17/06/2009</td> <td>22/08/2008</td> <td>17/06/2009</td> </tr> <tr> <td>Validity</td> <td>21/08/2009</td> <td>16/06/2010</td> <td>21/08/2009</td> <td>16/06/2010</td> </tr> </tbody> </table>						Main meter M1		Backup meter M2		Meter Type	ZMQ202C		ZMQ202C		Accuracy class	0.2s		0.2s		Serial No.	95303611		95303617		Calibration frequency	Yearly		Yearly		Certificate report No.	Neng 13, No,2008-L0189	Wenduer Jianzi 2009-02	Neng 13, No.2008-L0185	Jingneng Jianzi 2009-02	Date of last calibration	22/08/2008	17/06/2009	22/08/2008	17/06/2009	Validity	21/08/2009	16/06/2010	21/08/2009	16/06/2010
	Main meter M1		Backup meter M2																																										
Meter Type	ZMQ202C		ZMQ202C																																										
Accuracy class	0.2s		0.2s																																										
Serial No.	95303611		95303617																																										
Calibration frequency	Yearly		Yearly																																										
Certificate report No.	Neng 13, No,2008-L0189	Wenduer Jianzi 2009-02	Neng 13, No.2008-L0185	Jingneng Jianzi 2009-02																																									
Date of last calibration	22/08/2008	17/06/2009	22/08/2008	17/06/2009																																									
Validity	21/08/2009	16/06/2010	21/08/2009	16/06/2010																																									
Measuring/ Reading/ Recording frequency:	Continuously measurement and monthly recording																																												
Calculation method (if applicable):	Not applicable																																												
QA/QC procedures applied:	The electricity purchased from the grid will be monitored and recorded at the central control room. The project operator is responsible for recording such data. Double check by receipt of sales.																																												

Data / Parameter:	$EG_{A-i,y}$																																																							
Data unit:	MWh/yr																																																							
Description:	Quantity of electricity supplied to the grid by Group A-i (i=1,2,3,4) of the proposed project in year y.																																																							
Measured /Calculated /Default:	Measured																																																							
Source of data:	Readings of electricity meters (A-1, A-2, A-3 and A-4 described in B7.2) installed at the 35kV transmission line of the proposed project site.																																																							
Value(s) of monitored parameter:	120279.18																																																							
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emission calculation																																																							
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	<p>The meters are calibrated by Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center annually according to Chinese national calibration standards. Information of the meters is listed in the blow table.</p> <table border="1"> <thead> <tr> <th></th> <th>Meter A-1</th> <th>Meter A-2</th> <th>Meter A-3</th> <th>Meter A-4</th> </tr> </thead> <tbody> <tr> <td>Meter Type</td> <td>DTSD341</td> <td>DTSD341</td> <td>DTSD341</td> <td>DTSD341</td> </tr> <tr> <td>Accuracy class</td> <td>0.5s</td> <td>0.5s</td> <td>0.5s</td> <td>0.5s</td> </tr> <tr> <td>Serial No.</td> <td>9020390</td> <td>9020463</td> <td>9020465</td> <td>9020392</td> </tr> <tr> <td>Calibration frequency</td> <td>Yearly</td> <td>Yearly</td> <td>Yearly</td> <td>Yearly</td> </tr> <tr> <td>Certificate report No.</td> <td>2008N00060</td> <td>2008N00063</td> <td>2008N00067</td> <td>2008N00062</td> </tr> <tr> <td>Date of last calibration</td> <td>22/10/2008</td> <td>22/10/2008</td> <td>22/10/2008</td> <td>22/10/2008</td> </tr> <tr> <td>Validity</td> <td>21/10/2009</td> <td>21/10/2009</td> <td>21/10/2009</td> <td>21/10/2009</td> </tr> <tr> <td>Certificate report No.</td> <td colspan="4">Saihan Jianzi 2009-03-1</td> </tr> <tr> <td>Date of last calibration</td> <td colspan="4">07/09/2009</td> </tr> <tr> <td>Validity</td> <td colspan="4">06/09/2010</td> </tr> </tbody> </table>		Meter A-1	Meter A-2	Meter A-3	Meter A-4	Meter Type	DTSD341	DTSD341	DTSD341	DTSD341	Accuracy class	0.5s	0.5s	0.5s	0.5s	Serial No.	9020390	9020463	9020465	9020392	Calibration frequency	Yearly	Yearly	Yearly	Yearly	Certificate report No.	2008N00060	2008N00063	2008N00067	2008N00062	Date of last calibration	22/10/2008	22/10/2008	22/10/2008	22/10/2008	Validity	21/10/2009	21/10/2009	21/10/2009	21/10/2009	Certificate report No.	Saihan Jianzi 2009-03-1				Date of last calibration	07/09/2009				Validity	06/09/2010			
	Meter A-1	Meter A-2	Meter A-3	Meter A-4																																																				
Meter Type	DTSD341	DTSD341	DTSD341	DTSD341																																																				
Accuracy class	0.5s	0.5s	0.5s	0.5s																																																				
Serial No.	9020390	9020463	9020465	9020392																																																				
Calibration frequency	Yearly	Yearly	Yearly	Yearly																																																				
Certificate report No.	2008N00060	2008N00063	2008N00067	2008N00062																																																				
Date of last calibration	22/10/2008	22/10/2008	22/10/2008	22/10/2008																																																				
Validity	21/10/2009	21/10/2009	21/10/2009	21/10/2009																																																				
Certificate report No.	Saihan Jianzi 2009-03-1																																																							
Date of last calibration	07/09/2009																																																							
Validity	06/09/2010																																																							
Measuring/ Reading/ Recording frequency:	Monthly recording																																																							
Calculation method (if applicable):	The sum of readings of electricity meters (A-1, A-2, A-3 and A-4 described in B7.2) installed at the 35kV transmission line of the Project site.																																																							
QA/QC procedures applied:	The metering equipments at the substation will be calibrated once a year according to the management standard.																																																							

Data / Parameter:	$EG_{B-i,y}$
Data unit:	MWh/yr
Description:	Quantity of electricity supplied to the grid by Group B-i (i=1,2,3,4) of the <i>Project B</i> in year y.
Measured /Calculated /Default:	Measured
Source of data:	Readings of electricity meters (B-1, B-2, B-3 and B-4 described in B7.2) installed at the 35kV transmission line of the <i>Project B</i> site.
Value(s) of monitored parameter:	15767.01
Indicate what the data are used for (Baseline/ Project/ Leakage emission)	Baseline emission calculation

calculations)																																									
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	<p>The meters are calibrated by Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center annually according to Chinese national calibration standards. Information of the meters is listed in the blow table.</p> <table border="1"> <thead> <tr> <th></th> <th>Meter B-1</th> <th>Meter B-2</th> <th>Meter B-3</th> <th>Meter B-4</th> </tr> </thead> <tbody> <tr> <td>Meter Type</td> <td>DTSD341</td> <td>DTSD341</td> <td>DTSD341</td> <td>DTSD341</td> </tr> <tr> <td>Accuracy class</td> <td>0.5s</td> <td>0.5s</td> <td>0.5s</td> <td>0.5s</td> </tr> <tr> <td>Serial No.</td> <td>4690001</td> <td>4690002</td> <td>4690003</td> <td>4690004</td> </tr> <tr> <td>Calibration frequency</td> <td>Yearly</td> <td>Yearly</td> <td>Yearly</td> <td>Yearly</td> </tr> <tr> <td>Certificate report No.</td> <td>Neng 13, No.2009-L0368</td> <td>Neng 13, No.2009-L0369</td> <td>Neng 13, No.2009-L0370</td> <td>Neng 13, No.2009-L0371</td> </tr> <tr> <td>Date of last calibration</td> <td colspan="4">13/10/2009</td> </tr> <tr> <td>Validity</td> <td colspan="4">12/10/2010</td> </tr> </tbody> </table>		Meter B-1	Meter B-2	Meter B-3	Meter B-4	Meter Type	DTSD341	DTSD341	DTSD341	DTSD341	Accuracy class	0.5s	0.5s	0.5s	0.5s	Serial No.	4690001	4690002	4690003	4690004	Calibration frequency	Yearly	Yearly	Yearly	Yearly	Certificate report No.	Neng 13, No.2009-L0368	Neng 13, No.2009-L0369	Neng 13, No.2009-L0370	Neng 13, No.2009-L0371	Date of last calibration	13/10/2009				Validity	12/10/2010			
	Meter B-1	Meter B-2	Meter B-3	Meter B-4																																					
Meter Type	DTSD341	DTSD341	DTSD341	DTSD341																																					
Accuracy class	0.5s	0.5s	0.5s	0.5s																																					
Serial No.	4690001	4690002	4690003	4690004																																					
Calibration frequency	Yearly	Yearly	Yearly	Yearly																																					
Certificate report No.	Neng 13, No.2009-L0368	Neng 13, No.2009-L0369	Neng 13, No.2009-L0370	Neng 13, No.2009-L0371																																					
Date of last calibration	13/10/2009																																								
Validity	12/10/2010																																								
Measuring/ Reading/ Recording frequency:	Monthly recording																																								
Calculation method (if applicable):	The sum of readings of electricity meters (B-1, B-2, B-3 and B-4 described in B7.2) installed at the 35kV transmission line of the <i>project B</i> site.																																								
QA/QC procedures applied:	The metering equipments at the substation will be calibrated once a year according to the management standard.																																								

Data / Parameter:	EG _{im-spare,y}																								
Data unit:	MWh/yr																								
Description:	Electricity purchased from the grid by the proposed project through a spare 10 kV line in the year y																								
Measured /Calculated /Default:	Measured																								
Source of data:	Electricity meter reading (M3 installed on the spare 10 kV line)																								
Value(s) of monitored parameter:	96																								
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emission calculation																								
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	<p>The meter is calibrated by Inner Mongolia Electricity Science Research Institute Electricity Measurement and Testing Center annually according to Chinese national calibration standards. Information of the meters is listed in the blow table.</p> <table border="1"> <thead> <tr> <th></th> <th colspan="2">M3 installed on the spare 10 kV line</th> </tr> </thead> <tbody> <tr> <td>Meter Type</td> <td colspan="2">DS862-4</td> </tr> <tr> <td>Accuracy class</td> <td colspan="2">2.0</td> </tr> <tr> <td>Serial No.</td> <td colspan="2">10669106</td> </tr> <tr> <td>Calibration frequency</td> <td colspan="2">yearly</td> </tr> <tr> <td>Certificate report No.</td> <td>Jingneng Saihan Jianzi 2008-03</td> <td>Saihan Jianzi 2009-03</td> </tr> <tr> <td>Date of last calibration</td> <td>01/09/2008</td> <td>31/08/2009</td> </tr> <tr> <td>Validity</td> <td>31/08/2009</td> <td>30/08/2010</td> </tr> </tbody> </table>		M3 installed on the spare 10 kV line		Meter Type	DS862-4		Accuracy class	2.0		Serial No.	10669106		Calibration frequency	yearly		Certificate report No.	Jingneng Saihan Jianzi 2008-03	Saihan Jianzi 2009-03	Date of last calibration	01/09/2008	31/08/2009	Validity	31/08/2009	30/08/2010
	M3 installed on the spare 10 kV line																								
Meter Type	DS862-4																								
Accuracy class	2.0																								
Serial No.	10669106																								
Calibration frequency	yearly																								
Certificate report No.	Jingneng Saihan Jianzi 2008-03	Saihan Jianzi 2009-03																							
Date of last calibration	01/09/2008	31/08/2009																							
Validity	31/08/2009	30/08/2010																							

Measuring/ Reading/ Recording frequency:	Monthly recording
Calculation method (if applicable):	The local power distributor will measure the $EG_{im-spare,y}$ by metering instrument owned, operated and installed by local power distributor. Only the owner is accessible to the meter. Electricity sales receipts will be issued accordingly in an approach which is agreed by both local power distributor and the project owner.
QA/QC procedures applied:	Reading recording, operation and maintenance of this meter was implemented by local power distributor (the owner of the metering instrument).

Data / Parameter:	EG_y
Data unit:	MWh
Description:	Net electricity supplied to the Grid by the Project activity during year y
Measured /Calculated /Default:	Calculated
Source of data:	Calculation by $EG_{export,y}$, $EG_{import,y}$, $EG_{A,y}$, $EG_{B,y}$ and $EG_{im-spare,y}$ according to the equation (1) in section B.7.2 of the revised monitoring plan.
Value(s) of monitored parameter:	116528.10
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline emission calculation
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	Not applicable
Measuring/ Reading/ Recording frequency:	Monthly recording
Calculation method (if applicable):	The net electricity supplied to the Grid by the proposed project will be calculated through $EG_{export,y}$, $EG_{import,y}$, $EG_{A,y}$, $EG_{B,y}$ and $EG_{im-spare,y}$ according to the equation (1) in section B.7.2 of the revised monitoring plan.
QA/QC procedures applied:	Power supplied to the grid will be checked by internal verification procedure and electricity sales receipts.

SECTION E. Emission reductions calculation

E.1. Baseline emissions calculation

>>

The baseline emission BE_y (tCO₂e) during the VCS monitoring period results from:

$$BE_y = EG_y * EF_y$$

Where

EG_y -Net electricity supplied to the grid during the VCS monitoring period (MWh);

EF_y -Emission factor of the grid (tCO₂/MWh) (1.0549 tCO₂/MWh as calculated ex-ante in the registered CDM PDD page 24 and fixed during the first crediting period according to the methodology of ACM0002 version 07).

Net electricity supplied to the grid

Period	EG _{A-i,y} (MWh)	EG _{B-i,y} (MWh)	EG _{export,y} (MWh)	EG _{import,y} (MWh)	EG _{im-spare,y} (MWh)
01/01/2009-31/01/2009	4668.3	0	4483.46	55.19	96
01/02/2009-28/02/2009	5178.6	0	5034.70	45.09	
01/03/2009-31/03/2009	5620.86	0	5485.16	42.74	
01/04/2009-30/04/2009	4771.62	0	4685.26	26.69	
01/05/2009-31/05/2009	12145.77	0	12030.71	8.31	
01/06/2009-30/06/2009	10949.19	0	10838.23	18.24	
01/07/2009-31/07/2009	6362.79	0	6262.40	21.93	
01/08/2009-31/08/2009	7166.88	0	7062.97	30.11	
01/09/2009-30/09/2009	9427.95	0	9317.69	20.91	
01/10/2009-31/10/2009	13733.79	2.1	13570.39	22.06	
01/11/2009-30/11/2009	13381.62	1663.41	14683.26	26.73	
01/12/2009-31/12/2009	9769.83	5013.33	14123.88	46.92	
01/01/2010-31/01/2010	11857.02	5375.16	16400.61	84.02	
01/02/2010-28/02/2010	5244.96	3713.01	8221.19	188.24	
Total	120279.18	15767.01	132199.91	637.18	
EG _y (MWh)	116528.10				

$$BE_y = EG_y * EF_y = 116528.10 \text{ MWh} * 1.0549 \text{ tCO}_2/\text{MWh} = 122,925 \text{ tCO}_2\text{e.}$$

E.2. Project emissions calculation

>>

According to ACM0002 (Version 07), no project emissions were to be counted by the Project.

Hence, $PE_y = 0$

E.3. Leakage calculation

>>

According to ACM0002 (Version 07), the main indirect emissions potentially giving rise to leakage in the context of electric sector projects result from power plant construction, fuel handling (mining, processing, and transportation) and land inundation (for hydroelectric projects). The project developer

did not need to consider such indirect emissions when applying the methodology. Project activities using this baseline methodology would not claim any credit for the project on account of reducing these emissions below the level of the baseline scenario. The leakage from the project is zero.

$$L_y=0$$

E.4. Emission reductions calculation / table

>>

Total baseline emissions: $BE_y = 122,925$ tCO₂e.

Total project emissions: $PE_y = 0$

Total leakage: $L_y = 0$

Total emission reductions: $ER_y = BE_y - PE_y - L_y = BE_y - 0 - 0 = 122,925$ tCO₂e.

Emission reductions in the VCS monitoring period (01/01/2009–28/02/2010): 122,925 tCO₂e.

E.5. Comparison of actual emission reductions with estimates in the CDM-PDD

>>

The estimated annual emission reductions are 131,331 tCO₂e. For this VCS monitoring period (01/01/2009–28/02/2010), it covered 424 days. The estimated value should be: $131,331/365 * 424 = 152,560$ tCO₂e.

Item	Values applied in ex-ante calculation of the registered CDM-PDD	Actual values reached during the VCS monitoring period
Emission reductions (tCO₂e)	152,560	122,925

E.6. Remarks on difference from estimated value in the CDM PDD

>>

The emission reductions in the VCS monitoring period from 01/01/2009–28/02/2010 were lower than the estimated quantity in the registered CDM PDD. Since the first wind turbine of the Project has been put into operation on 31/12/2008 and all the 48 wind turbines have been put into operation till 15/05/2009, the electricity generation is less than the designed value in the FSR. It is reasonable the actual emission reductions value during the VCUs monitoring period is less than the estimated value in the registered CDM PDD and it will not increase the estimates of emission reductions in the future VCUs monitoring period.

SECTION F. Clarification on clauses 1.12, 1.13, 1.14, 8.1 and 8.2 in the VCS PD template

>>

The Project was registered as a CDM project on 01/03/2010 (reference number: 2567). As per *Further Guidance for Projects that are Registered in Two GHG Programs* published on 19/03/2008: “Projects registered under other VCS Program approved GHG Programs (such as the CDM) are eligible to create Voluntary Carbon Units (VCUs) for the emissions reductions or removals not registered under that GHG Program. ... For example, when a 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 template³. This validation can be completed when the Project Proponent undergoes a VCS Program verification of achieved emissions reductions or removals.” Therefore only clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS Project Description template are filled as below.

³ For further details, refer to: <http://v-c-s.org/docs/VCS%20PD.doc>

F.1. Demonstration to confirm that the project was not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction

>>

The Project is newly constructed grid-connected project to utilize wind resources for electricity generation for substitution the on-grid coal-fired power in the North China Power Grid, as the existing coal-fired power plants dominate the North China Power Grid. The Project achieved GHG emission reduction by avoiding CO₂ emissions. As renewable energy, wind power generates no emission prior to subsequent destruction.

F.2. Demonstration that the project has not created another form of environmental credit (for example renewable energy certificates)

>>

The Project has registered as CDM project activity at EB on 01/03/2010. As the first wind turbine of the wind farm has been in operation since 31/12/2008, the project entity only requests VCUs generated by the project from 01/01/2009-28/02/2010. The Project is a wind farm project and project participants promise that no any other environmental credit has been or will be requested except CDM and VCS credits.

F.3. Project rejected under other GHG programs (if applicable)

>>

The Project has been registered as CDM project on 01/03/2010. The Project achieved GHG emission reductions by avoiding CO₂ emissions. Therefore, it is not applicable that project is rejected under other GHG programs.

F.4. Proof of Title

Letter of Approval for Inner Mongolia Jingneng Saihan Wind Farm Phase I Project is the proof that the Project developed as a Clean Development Mechanism Project by National Development and Reform Commission of the People's Republic of China.

The project owner, Beijing International New Energy Co., Ltd., possesses the ownership of the project, including the plants, equipments and the process, therefore possesses the VCUs generated from the project. The ownership of the VCUs will be transferred to the Buyer.

F.5. Projects that reduce GHG emissions from activities that participate in an emissions trading program (if applicable)

Not applicable. The VCUs generated from the project that is not included in an emission trading program; or does not take place in a jurisdiction or sector in which binding limits are established on GHG emissions.