



Monitoring report form
(Version 05.1)

Complete this form in accordance with the Attachment "Instructions for filling out the monitoring report form" at the end of this form.

MONITORING REPORT

| | | |
|--|--|---|
| Title of the project activity | Hebei Guyuan County Dongxinying 199.5MW Wind Power Project | |
| UNFCCC reference number of the project activity | 4853 | |
| Version number of the monitoring report | 01 | |
| Completion date of the monitoring report | 21/03/2016 | |
| Monitoring period number and duration of this monitoring period | 3 rd monitoring period 04/10/2012-31/12/2012 | |
| Project participant(s) | Hebei Construction Investment New Energy Co., Ltd. Vattenfall Energy Trading Netherlands N.V. | |
| Host Party | People's Republic of China | |
| Sectoral scope(s) | Sectoral scope 1: energy industries (renewable sources) | |
| Selected methodology(ies) | Approved consolidated baseline and monitoring methodology ACM0002 (version 12): Consolidated methodology for grid-connected electricity generation from renewable sources. | |
| Selected standardized baseline(s) | Not applicable | |
| Estimated amount of GHG emission reductions or net GHG removals by sinks for this monitoring period in the registered PDD | 104,346 ¹ | |
| Total amount of GHG emission reductions or net GHG removals by sinks achieved in this monitoring period | GHG emission reductions or net GHG removals by sinks reported up to 31 December 2012 | GHG emission reductions or net GHG removals by sinks reported from 1 January 2013 onwards |
| | 109,115tCO ₂ e | 0tCO ₂ e |

¹ The annual emission reductions in the registered PDD version7 is 427,936tCO₂e, therefore, the estimated total emission reductions for this monitoring period in the registered PDD for this monitoring period (89 days) is 104,346 tCO₂e (i.e. 427,936/365*89).

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

The objective of Hebei Guyuan County Dongxingying 199.5MW Wind Power Project (hereinafter referred to as the project) is to generate electricity using wind energy and to sell the generated output to North China Power Grid (NCPG). Total installed capacity of the project is 199.5MW, involving 133 sets of wind turbine-generator (hereinafter referred to as WTG), each set with a rated capacity of 1.5MW. Applying grid-connected electricity generation by wind energy technology and by displacing equal amount electricity generated by NCPG which is dominated by fossil fuel-fired power plants, the project leads to the reduction of GHG emissions into the atmosphere.

The main equipments of the project are 133 sets of WTGs manufactured by Dongfang Steam Turbine Co., Ltd.

Relevant dates for the project are as follows:

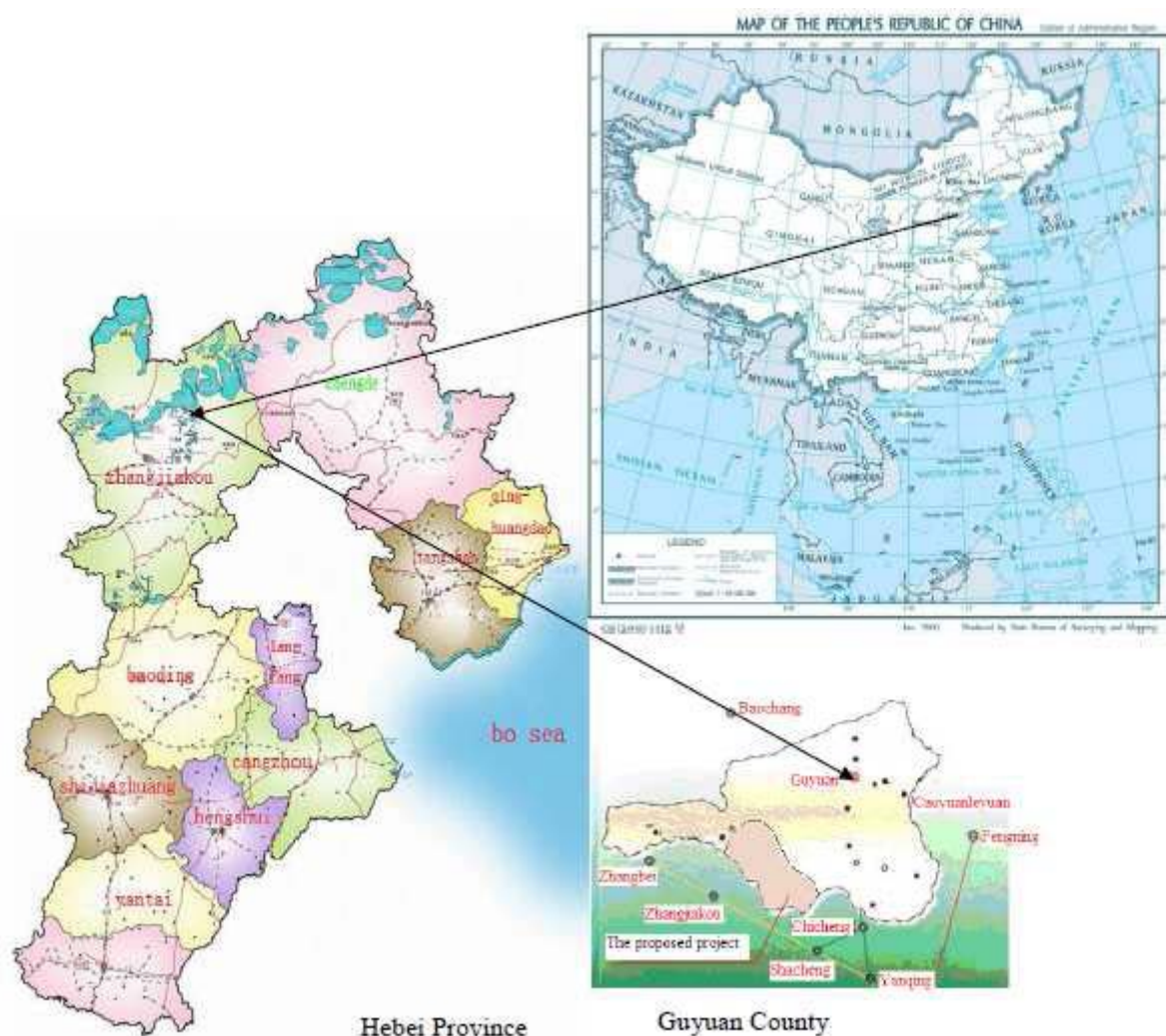
- The date to start construction: 25/08/2008
- The date of first wind turbine started operation : 25/05/2010
- The date of all 133 WTGs started full operation: 06/10/2010
- CDM registration date: 15/09/2011
- CDM crediting period(Renewable) : 15/09/2011 - 14/09/2018

The 3rd monitoring period of the project is from 04/10/2012-31/12/2012. The total GHG emission reductions of the project achieved in this monitoring period are 109,115tCO₂e, the detailed calculation of emission reductions of the project is provided in the section E.

A.2. Location of project activity

The project is located in southern area of Guyuan County, Zhangjiakou City, Hebei Province, P.R.China. The GPS coordinates of the geographical area the project covered are 115.2997° E ~ 115.7508°E, 41.3169°N ~ 41.5661°N. The location of the project is shown in Figure A.1:

Figure A.1: The location of the project



A.3. Parties and project participant(s)

| Party involved (host) indicates a host Party) | Private and/or public entity(ies) project participants (as applicable) | Indicate whether the Party involved wishes to be considered as project participant (yes/no) |
|---|--|--|
| People's Republic of China (Host) | Hebei Construction Investment New Energy Co., Ltd. | No. |
| Sweden | Vattenfall Energy Trading Netherlands N.V. | No. |

A.4. Reference of applied methodology and standardized baseline

The project applies the approved consolidated baseline and monitoring methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" (Version 12.1.0).

The methodology also refers to the latest approved versions of the following tools:

- Tool to calculate the emission factor for an electricity system (Version 02);
- Tool for the demonstration and assessment of additionality (Version 05.2);

For more information regarding the methodology and the tools as well as their consideration by the Executive Board, please refer

to <http://cdm.unfccc.int/methodologies/PAmethodologies/approved.html>

A.5. Crediting period of project activity

A 7yrsx3 renewable crediting period has been chosen by the project. The first crediting period is from 15/09/2011 to 14/09/2018. The start date of the crediting period has been requested to change from 01/12/2011 to 15/09/2011 and the request has been accepted by the Board.

A.6. Contact information of responsible persons/entities

Name of person completing this monitoring report:

CECEP Huajing Carbon Assets Management Co., Ltd.

Li Zhenlan: lizhenlan@cecep.cn

Tel: +86-10-65903379-602; 15011019192

CECEP Huajing Carbon Assets Management Co., Ltd. is not project participant.

SECTION B. Implementation of project activity**B.1. Description of implemented registered project activity**

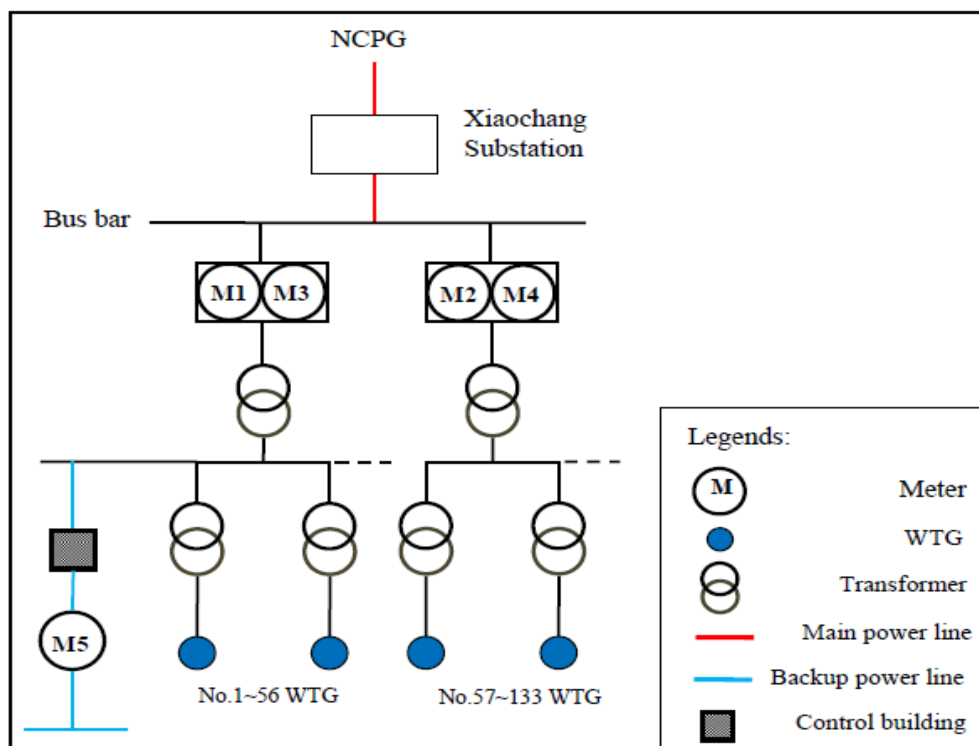
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The installed technology, technical processes and equipments

The project installed 133 sets of wind turbines with a unit capacity of 1,500 kW and total capacity of 199.5MW. Electricity generated by the Project is delivered to NCPG via a 220 kV transmission line.

The wind power generation process of the project is showed in Figure B.1.1.

Figure B.1.1 Process flow chart



The technical parameters of the installed wind turbines are shown in the table below.

Table B.1.1. Technical parameters of wind turbine

| Parameter | Unit | Value |
|-----------------|------|-------|
| Type of turbine | - | FD77B |

| | | |
|--------------------|-----|-------------------------------|
| Type of generator | - | Double-fed asynchronous motor |
| Nominal output | kW | 1500 |
| Rotor diameter | m | 77 |
| Hub height | m | 61.5 |
| Rated voltage | V | 690 |
| Cut-in wind speed | m/s | 3 |
| Nominal wind speed | m/s | 12 |

The implementation and actual operation of the project activity

The start date of the project has been identified on 17 Aug 2008 by signing the equipment purchase contract. The project continuously started construction on 25 Aug 2008. The first wind turbine of the project started operation on 25 May 2010 and started full operation on 6 Oct 2010.

Events or situations that occurred during the monitoring period that may impact the applicability of the methodology

No other events or rule/policy changes have taken place that could have affected the applicability of the methodology during this monitoring period.

In addition, there are no changes to the registered project activity during this monitoring period.

B.2. Post-registration changes

B.2.1. Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline

There are no any temporary deviations from registered monitoring plan, applied methodology have been applied during this monitoring period.

B.2.2. Corrections

There are no any corrections to project information or parameters fixed at validation during this monitoring period.

B.2.3. Changes to start date of crediting period

There were changes to start date of crediting period of the project from 01 Dec 11 to 15 Sep. The request has been accepted by the Board.

B.2.4. Inclusion of a monitoring plan to the registered PDD that was not included at registration

Not applicable. The registered PDD included a monitoring plan at registration.

B.2.5. Permanent changes from registered monitoring plan, applied methodology or applied standardized baseline

There were permanent changes prior to the submission of this monitoring report, the revised PDD was approved on 06 Nov 12 and the reference number is PRC-4853-001.

B.2.6. Changes to project design of registered project activity

There are no any changes to project design of the project during this monitoring period.

B.2.7. Types of changes specific to afforestation or reforestation project activity

Not applicable.

SECTION C. Description of monitoring system

The project owner, Hebei Construction Investment New Energy Co., Ltd., is the user of this monitoring plan and is responsible for this monitoring plan. The project owner must maintain credible, transparent, and adequate data estimation, measurement, collection, and tracking systems to maintain the information required for an audit of an emission reduction project.

These records and monitoring systems are needed to allow the DOE to verify project performance as part of the verification and certification process.

Emission reductions will be achieved through displacing part of the electricity from the NCPG due to the power generated by the proposed project. The net grid-connected output is therefore defined as the key data to monitor.

The monitoring plan is established according to the request of approved baseline and monitoring methodology ACM0002 (Version 12.1.0).

1. Monitoring Data management system

The net electricity ($EG_{\text{facility},y}$) supplied to the grid by the project will not be measured directly. It is the difference of the following parameters.

- 1) $EG_{\text{export},y}$ is the electricity exported to the grid by the project through the main power line;
- 2) $EG_{\text{import},y}$ is the electricity imported from the grid by the project through the main power line;
- 3) $EG_{\text{backuptline},y}$ is the electricity delivered to the project through the backup line.

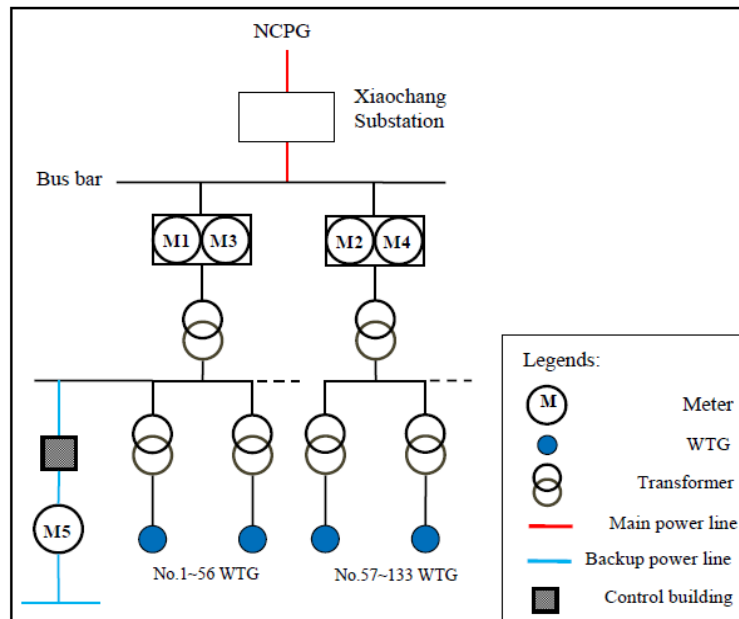
2. Project Integrate Management

This monitoring plan has been implemented by Hebei Construction Investment New Energy Co., Ltd., the project owner. The project manager is responsible for the implementation and monitoring of the monitoring activity. There are two departments organized for data report, quality control. There is a manager responsible for data report and quality control department. The manager will take charge of the employment administration, as well as the operation implementation and monitoring; staffs will carry on the concrete assignment based on the guide of their manager.

3. Metering System

The electricity generated by the project will be transmitted to on-site transformers which increase the voltage to 220 kV, and then delivered to Xiaochang Substation by 220kV transmission line. The simplified electrical grid connection diagram is shown in the following figure C.1:

Figure C.1. Simplified electrical grid connection diagram



The power line supplying electric power to the grid can also deliver power from the grid to the wind farm.

The metering equipment runs in two directions and will record two readings, i.e. electricity exported to the grid ($EG_{\text{export},y}$) and electricity imported from the grid ($EG_{\text{import},y}$). Net electricity supplied to the grid is calculated as exports minus imports.

M1 is installed at high voltage side of No. 1 main transformer; M2 is installed at the high voltage side of No. 2 main transformer. Both M1 and M2 are bi-directional meters. M1 is used for measurement of electricity exported by Group 1 WTGs ($EG_{\text{export},y,1}$) and electricity imported from the grid by Group 1 WTGs ($EG_{\text{import},y,1}$). M2 plays the same role as M1, that is, measuring electricity exported by Group 2 WTGs ($EG_{\text{export},y,2}$) and electricity imported from the grid by Group 2 WTGs ($EG_{\text{import},y,2}$). $EG_{\text{export},y,1}$ plus $EG_{\text{export},y,2}$ makes total electricity exported to the grid by the project ($EG_{\text{export},y}$). Similarly, $EG_{\text{import},y,1}$ plus $EG_{\text{import},y,2}$ make total electricity imported from the grid by the project ($EG_{\text{import},y}$). The meter M3 which is of the same type, accuracy and function and serves as the backup meter of M1, can also record electricity of Group 1 WTGs bidirectionally and works with M1 simultaneously; the meter M4 also acts as backup meter of M2 and measures electricity of Group 2 WTGs together with M2 simultaneously.

In case of emergencies and when the wind farm does not produce enough power for auxiliary power use, the project will use the power through the backup line. Power delivered to the project through a backup power line ($EG_{\text{backuptime},y}$) is metered by instruments at M5 in Figure 4 which is operated by the grid company.

Net electricity supplied to the grid by the proposed project is calculated on a monthly basis as:

$$EG_{\text{facility},y} = EG_{\text{export},y} - EG_{\text{import},y} - EG_{\text{backuptime},y}$$

Where:

$EG_{\text{facility},y}$ is the calculated power generation from the proposed project;

$EG_{\text{export},y}$ is the electricity exported to the grid through the main power line metered by the instruments at M1 and M2 (or backup meter M3 and M4);

$EG_{\text{import},y}$ is the electricity imported from the grid through the main power line metered by the instruments at M1 and M2 (or backup meter M3 and M4);

$EG_{\text{backuptime},y}$ is the electricity delivered to the project through the backup line metered by the instruments at M5.

4. Quality Assurance and Quality Control

The metering equipments will be properly calibrated and checked annually by an independent third

party according to relevant national standard, e.g. the DL/T448 – 2000 or other national standard, to ensure its accuracy. The accuracy of meter M1, M2, M3 and M4 which have been installed are 0.2s. The accuracy of meter M5 is 0.5s.

The relative recording files will be supplied to the project owner. These recording files will be preserved by the project owner and provide to DOE in Verification.

The relevant training will be implemented by the project owner and the equipment manufacturer before operation of the proposed project.

5. Information collection and management

It is the responsibility for the project owner to provide necessary information and data for validation and verification. The measurement of the whole production data is controlled and stored by the project owner.

All physical documents including the readings in electronic and manual form of the Meters, billing receipts will be stored by the project owner and kept one copy in order to facilitate the verification of DOE.

The monthly records of power supplied to the grid and received from the grid, relevant accounting documents and billing receipts and the results of calibration shall be collected in a central place by the project owner. All data collected as part of monitoring will be kept at least for 2 years after the end of the last crediting period by the project owner.

6. Procedure in case of damaged metering equipment

In case metering equipment is damaged and no reliable readings can be recorded the project owner will estimate net supply by the proposed project activity according to the following procedure:

a. In case the main meter is damaged only:

By reading the backup meter

b. In case both the main meter and the backup one are damaged:

The project owner and the grid company will jointly calculate a conservative estimate of power supplied to the grid. A statement will be prepared indicating

- The background to the damage to metering equipment;
- The assumptions used to estimate net supply to the grid for the days for which no record could be recorded the estimation of power supplied to the grid.

7. Monitoring Report

The Project owner will annually prepare a monitoring report which will include among others metering values of power supplied to and received from the grid, copies of electricity receipts, a report on calibration and calculation of emission reductions.

All the data shall be kept until two years after the end of the first crediting period.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante or at renewal of crediting period

| | |
|--|---|
| Data/parameter: | EF _{grid,CM,y} |
| Unit | tCO ₂ e/MWh |
| Description | The baseline emission factor |
| Source of data | Ex-ante calculation in the registered PDD |
| Value(s) applied) | 1.05485 |
| Choice of data or measurement methods and procedures | Notification on Determining Baseline Emission Factor of China Grid ² |
| Purpose of data | Calculation of baseline emissions ex-ante |
| Additional comments | N/A |

D.2. Data and parameters monitored

| | |
|--|--|
| Data/parameter: | EG _{facility,y} |
| Unit | MWh |
| Description | Quantity of net electricity generation supplied by the project plant to the grid in year y |
| Measured/calculated/default | Calculated |
| Source of data | Calculation |
| Value(s) of monitored parameter | 103,442 |
| Monitoring equipment | N/A |
| Measuring/reading/recording frequency: | - |
| Calculation method (if applicable): | Calculated by $EG_{export,y} - EG_{import,y} - EG_{backupline,y}$ and cross-check with sale receipts. |
| QA/QC procedures: | Net electricity supplied to the grid by the project activity will be crosschecked with electricity sales receipts. |
| Purpose of data: | Calculation of baseline emissions |
| Additional comments: | N/A |

| | |
|--|--|
| Data/parameter: | EG _{export,y} |
| Unit | MWh |
| Description | The electricity delivered by the Project to the grid in year y |
| Measured/calculated/default | Measured |
| Source of data | Measured by M1 (M3) and M2 (4) located at the output of the on-site 220kV transformer substation |
| Value(s) of monitored parameter | 103,501 |
| Monitoring equipment | M1(M3) and M2(M4) |
| Measuring/reading/recording frequency: | Continuously measurement and monthly recording |

² <http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/2008/20081231101111351.pdf>

| | |
|-------------------------------------|---|
| Calculation method (if applicable): | $EG_{\text{export},y} = EG_{\text{export},y,1} + EG_{\text{export},y,2}$ Here, $EG_{\text{export},y}$ refers to annual electricity exported to the grid and equals to sum of $EG_{\text{export},y,1}$ and $EG_{\text{export},y,2}$. $EG_{\text{export},y,1}$ and $EG_{\text{export},y,2}$ refer to annual electricity exported to the grid by the two groups of wind turbine generators respectively. All data collected as part of monitoring should be archived electronically and be kept at least for 2 years after the end of the last crediting period. |
| QA/QC procedures: | The metering equipments at the substation will be calibrated at least once a year according to national standard. |
| Purpose of data: | Calculation of baseline emissions |
| Additional comments: | N/A |

| | |
|--|--|
| Data/parameter: | $EG_{\text{import},y}$ |
| Unit | MWh |
| Description | Annual electricity imported from the grid to the proposed project. |
| Measured/calculated/default | Measured |
| Source of data | Measured by M1(M3) and M2 (M4) located at the output of the on-site 220kV transformer substation |
| Value(s) of monitored parameter | 59 |
| Monitoring equipment | M1(M3) and M2(M4) |
| Measuring/reading/recording frequency: | Continuously measurement and monthly recording |
| Calculation method (if applicable): | $EG_{\text{import},y} = EG_{\text{import},y,1} + EG_{\text{import},y,2}$ Here, $EG_{\text{import},y}$ refers to annual electricity imported from the grid and equals to sum of $EG_{\text{import},y,1}$ and $EG_{\text{import},y,2}$. $EG_{\text{import},y,1}$ and $EG_{\text{import},y,2}$ refer to annual electricity imported from the grid by the two groups of wind turbine generators respectively. All data collected as part of monitoring should be archived electronically and be kept at least for 2 years after the end of the last crediting period. |
| QA/QC procedures: | The metering equipments at the substation will be calibrated at least once a year according to national standard. |
| Purpose of data: | Calculation of baseline emissions |
| Additional comments: | N/A |

| | |
|--|---|
| Data/parameter: | $EG_{\text{backuptline},y}$ |
| Unit | MWh |
| Description | The electricity imported by the Project from the grid via the 10kV line in year y |
| Measured/calculated/default | Measured |
| Source of data | Measured by M5 located at the 10kV line |
| Value(s) of monitored parameter | 0 |
| Monitoring equipment | M5 |
| Measuring/reading/recording frequency: | Continuously measurement and monthly recording |
| Calculation method (if applicable): | N/A |
| QA/QC procedures: | Calibration has been conducted to guarantee the accuracy and normal functions of M5, according to relevant national or industrial standards by qualified institution; |
| Purpose of data: | Calculation of baseline emissions |
| Additional comments: | N/A |

D.3. Implementation of sampling plan

Not applicable.

SECTION E. Calculation of emission reductions or GHG removals by sinks**E.1. Calculation of baseline emissions or baseline net GHG removals by sinks**

The baseline emissions are calculated according to the ACM0002 (version 12) and the registered PDD as below:

$$BE_y = EG_{facility,y} \times EF_{grid,CM,y} \quad (1)$$

Where,

BE_y : Baseline emissions in year y (tCO₂e);

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

$EF_{grid,CM,y}$: the combined margin CO₂ emission factor for grid connected power generation in year y calculated using *Tool to calculate the emission factor for an electricity system* (tCO₂e/MWh).

Calculation of $EG_{facility,y}$

The Project is the installation of a new grid-connected renewable power plant at a site where no renewable power plant was operated prior to the implementation of the Project, so:

$$EG_{facility,y} = EG_{export,y} - EG_{import,y} - EG_{backupline,y} \quad (2)$$

Where:

$EG_{facility,y}$ is the quantity of net electricity generation supplied by the Project to the grid in year y (MWh);

$EG_{export,y}$ is the electricity delivered by the Project to the grid via the main transmission line in year y (MWh);

$EG_{import,y}$ is the electricity imported by the Project from the grid in year y (MWh);

$EG_{backupline,y}$ is the electricity imported by the Project from the grid via 10kV line in year y (MWh).

The quantity of electricity delivered by the Project to NCPG via the main transmission line during this monitoring period is shown in Table E.1.1. During this monitoring period, the total quantity of electricity delivered by the project to NCPG via the main transmission line is 103,501MWh.

Table E.1.1. Amount of electricity delivered by the Project to NCPG via the main transmission line (Unit: MWh)

| Period | Electricity from meter readings | Electricity from receipts | Conservative value between A & B for ER calculation |
|-----------------------|---------------------------------|---------------------------|---|
| | A | B | C=min(A,B) |
| 04/10/2012-31/10/2012 | 28,724.400 | 29,766.869 | 28,724.400 |
| 01/11/2012-31/11/2012 | 38,989.200 | 38,200.855 | 38,200.855 |
| 01/12/2012-31/12/2012 | 36,978.500 | 36,575.836 | 36,575.836 |
| | Total | | 103,501 |

The quantity of electricity imported by the Project from NCPG during this monitoring period is shown in Table E.1.2. During this monitoring period, the total quantity of electricity imported by the Project from NCPG is 59MWh. The ex ante baseline emission factor is 1.05485tCO₂e/MWh.

Table E.1.2. Amount of electricity imported by the Project from NCPG via main transmission line (Unit: MWh)

| Period | Electricity from meter readings | Electricity from receipts | Conservative value between A & B for ER calculation |
|-----------------------|---------------------------------|---------------------------|---|
| | D | E | F=max(D,E) |
| 04/10/2012-31/10/2012 | 25.900 | 42.350 | 42.350 |
| 01/11/2012-31/11/2012 | 0.500 | 0.825 | 0.825 |
| 01/12/2012-31/12/2012 | 4.600 | 15.050 | 15.050 |

The quantity of electricity imported by the Project via the 10kV line during this monitoring period is shown in Table E.1.3. During this monitoring period, no electricity was imported from the grid by the project via the 10kV line, therefore, the total quantity of electricity imported from the grid by the Project via the 10kV line is 0MWh.

Table E.1.3. Amount of electricity imported by the Project from the grid via the 10kV line (Unit: MWh)

| Period | Electricity from main meter readings | Electricity from receipts | Conservative value between A & B for ER calculation |
|-----------------------|--------------------------------------|---------------------------|---|
| | G | H | I=max(G,H) |
| 04/10/2012-31/10/2012 | 0.000 | 0.000 | 0.000 |
| 01/11/2012-31/11/2012 | 0.000 | 0.000 | 0.000 |
| 01/12/2012-31/12/2012 | 0.000 | 0.000 | 0.000 |
| Total | | | 0 |

Based on Table E1.1, Table E1.2, Table E1.3, the total amount of the net electricity delivered by the Project to NCPG in this monitoring period is 910,923(=912,857-1,934-0) MWh. The ex ante baseline emission factor is 1.05485tCO₂e/MWh.

Table E.1.4. Amount of net electricity delivered by the project to NCPG (Unit: MWh)

| Period | Electricity delivered by the project to the grid | Electricity imported by the project from the grid | Electricity imported by the project from 10kV backup line | Amount of net electricity delivered by the project to the grid |
|-----------------------|--|---|---|--|
| 04/10/2012-31/10/2012 | 28,724.400 | 42.350 | 0.000 | 28,682.050 |
| 01/11/2012-31/11/2012 | 38,200.855 | 0.825 | 0.000 | 38,200.030 |
| 01/12/2012-31/12/2012 | 36,575.836 | 15.050 | 0.000 | 36,560.786 |
| Total | | | | 103,442 |

The baseline emissions are calculated according to formula (1):

$$BE_y = EG_{facility,y} \times EF_{grid,CM,y} = 103,442 \text{ MWh} \times 1.05485 \text{ tCO}_2\text{e /MWh} = 109,115 \text{ tCO}_2\text{e}$$

E.2. Calculation of project emissions or actual net GHG removals by sinks

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According to ACM0002 (Version 12), the Project is a wind power project and project emissions are not considered.

E.3. Calculation of leakage

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According to ACM0002 (Version 12), no leakage effects need to be accounted.

E.4. Summary of calculation of emission reductions or net GHG removals by sinks

| Item | Baseline emissions or baseline net GHG removals by sinks (t CO ₂ e) | Project emissions or actual net GHG removals by sinks (t CO ₂ e) | Leakage (t CO ₂ e) | GHG emission reductions or net GHG removals by sinks (t CO ₂ e) achieved in the monitoring period | | |
|-------|--|---|-------------------------------|--|-----------------|--------------|
| | | | | Up to 31/12/2012 | From 01/01/2013 | Total amount |
| Total | 109,115 | 0 | 0 | 109,115 | 0 | 109,115 |

E.5. Comparison of actual emission reductions or net GHG removals by sinks with estimates in registered PDD

| Item | Values estimated in ex ante calculation of registered PDD | Actual values achieved during this monitoring period |
|--|---|--|
| Emission reductions or GHG removals by sinks (t CO ₂ e) | 104,346 ³ | 109,115 |

E.6. Remarks on difference from estimated value in registered PDD

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The amount of emission reductions achieved in this monitoring period is 4.57% higher than the estimated value for the same period in the approved registered PDD, which is due to the higher wind speed during winter season.

³ The annual emission reductions in the registered PDD version7 is 427,936tCO₂e, therefore, the estimated total emission reductions for this monitoring period in the registered PDD for this monitoring period (89 days) is 104,346 tCO₂e (i.e. 427,936/365*89).

Appendix 1. Contact information of project participants and responsible persons/entities

| | |
|--|---|
| Project participant and/or responsible person/ entity | <input checked="" type="checkbox"/> Project participant <input type="checkbox"/> Responsible person/ entity for completing the CDM-MR-FORM |
| Organization name | Hebei Construction Investment New Energy Co., Ltd. |
| Street/P.O. Box | No.9 Yuhua Western Road |
| Building | Room 501, Building B, Yuyuan Plaza |
| City | Shijiazhuang |
| State/region | Hebei province |
| Postcode | 050000 |
| Country | People's Republic of China |
| Telephone | 86- 311-85278915 |
| Fax | 86-311-85278008 |
| E-mail | cdmhecic@gmail.com |
| Website | |
| Contact person | Bo Zhang |
| Title | - |
| Salutation | Ms. |
| Last name | Zhang |
| Middle name | |
| First name | Bo |
| Department | - |
| Mobile | 86-15803211020 |
| Direct fax | 86-311-85278008 |
| Direct tel. | 86- 311-85278915 |
| Personal e-mail | Zhangbo9339@126.com |

| | |
|--|---|
| Project participant and/or responsible person/ entity | <input checked="" type="checkbox"/> Project participant <input type="checkbox"/> Responsible person/ entity for completing the CDM-MR-FORM |
| Organization name | Vattenfall Energy Trading Netherlands N.V. |
| Street/P.O. Box | Hoekenrode 8 |
| Building | |
| City | Amsterdam |
| State/Region | Amsterdam |
| Postcode | 1102 BR |
| Country | The Netherlands |
| Telephone | +31 6 55872128 |
| Fax | +31 6 55872128 |
| E-mail | cdmteam@vattenfall.com |
| Website | |
| Contact person | Francisco Grajales |
| Title | |
| Salutation | Mr. |
| Last name | Francisco |

| | |
|------------------------|--|
| Middle name | |
| First name | Grajales |
| Department | |
| Mobile | +31 6 55872128 |
| Direct fax | |
| Direct tel. | +31 6 55872128 |
| Personal e-mail | cdmteam@vattenfall.com |

| | |
|--|---|
| Project participant and/or responsible person/ entity | <input type="checkbox"/> Project participant <input checked="" type="checkbox"/> Responsible person/ entity for completing the CDM-MR-FORM |
| Organization name | CECEP Huajing Carbon Assets Management Co., Ltd |
| Street/P.O. Box | No. 42 Xizhimen Beidajie, Haidian District |
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Appendix 2. The calibration information for all the meters

| Metering equipment | Serial No. | Accuracy class | Calibration frequency |
|---------------------------|--------------------|-----------------------|------------------------------|
| Electricity meter M1 | 37006390 | 0.2S | 1 year |
| Electricity meter M2 | 37002994 | 0.2S | 1 year |
| Electricity meter M3 | 09080144840023 | 0.2S | 1 year |
| Electricity meter M4 | 09080144840005 | 0.2S | 1 year |
| Electricity meter M5 | B24T0P812403001807 | 0.5S | 1 year |