



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	CECIC Urumqi Tuoli Phase I Wind Farm Project	
UNFCCC reference number of the project activity	4421	
Version number of the monitoring report	01	
Completion date of the monitoring report	03/07/2015	
Monitoring period number and duration of this monitoring period	2 nd Monitoring period(01/01/2013-27/05/2015, both days included)	
Project participant(s)	CECIC Wind Power (Xinjiang) Co., Ltd., P.R.China	
Host Party	P.R. China	
Sectoral scope(s)	Sectoral scope 1, Energy industries (renewable-/ non-renewable sources)	
Selected methodology(ies)	ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"(Version 12.3.0)	
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	280,265	
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
	0	226,692

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

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CECIC Urumqi Tuoli Phase I Wind Farm Project (hereinafter referred as “the Project”) is located in Tuoli Town, Urumqi County, Xinjiang Uygur Autonomous Region. The Project is developed by CECIC Wind Power (Xinjiang) Co., Ltd.. The Project install and operate 33 wind turbines with a capacity of 1,500 kW each; the total installed capacity is 49.5 MW. The Project is expected to deliver on average approximately 125,532 MWh (net) of electricity per year to the Northwest Power Grid (NWPG). The purpose of the Project is the generation of electricity from wind and the supply of this electricity to the NWPG.

The project scenario is the installation of 49.5 MW of renewable energy power generation capacity, and the supply to the NWPG of 125,532 MWh (net) of electricity generated from renewable energy. The baseline scenario, which is the same as the scenario existing prior to the implementation of the Project, is the generation of electricity by grid-connected power plants. As the NWPG is dominated by thermal power generation, the establishment of the Project can lead to greenhouse gas (GHG) emission reductions. Following the baseline methodology, the emission reductions are estimated to be approximately 116,644 tonnes of CO₂ equivalent (tCO₂e) per year.

The Project started construction on 01/09/2010. The first wind turbine of the Project commissioning was started on 29/01/2012. The Project started fully commissioning on 05/04/2012.

This is the second monitoring period of the Project which cover period of from 01/01/2013 to 27/05/2015. The total emission reduction of the 2nd monitoring period is: 226,692 tCO₂e.

A.2. Location of project activity

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The Project site is located in Tuoli Town, Urumqi County, Xinjiang Uygur Autonomous Region, the People's Republic of China. It is located at Latitude from N 43.4731° to N 43.5042° and Longitude from E 87.7092° to E 87.7561°. The altitude of the Project site ranges from between 1150 m to 1345 m above the sea level. More details shown as follow figure 1.

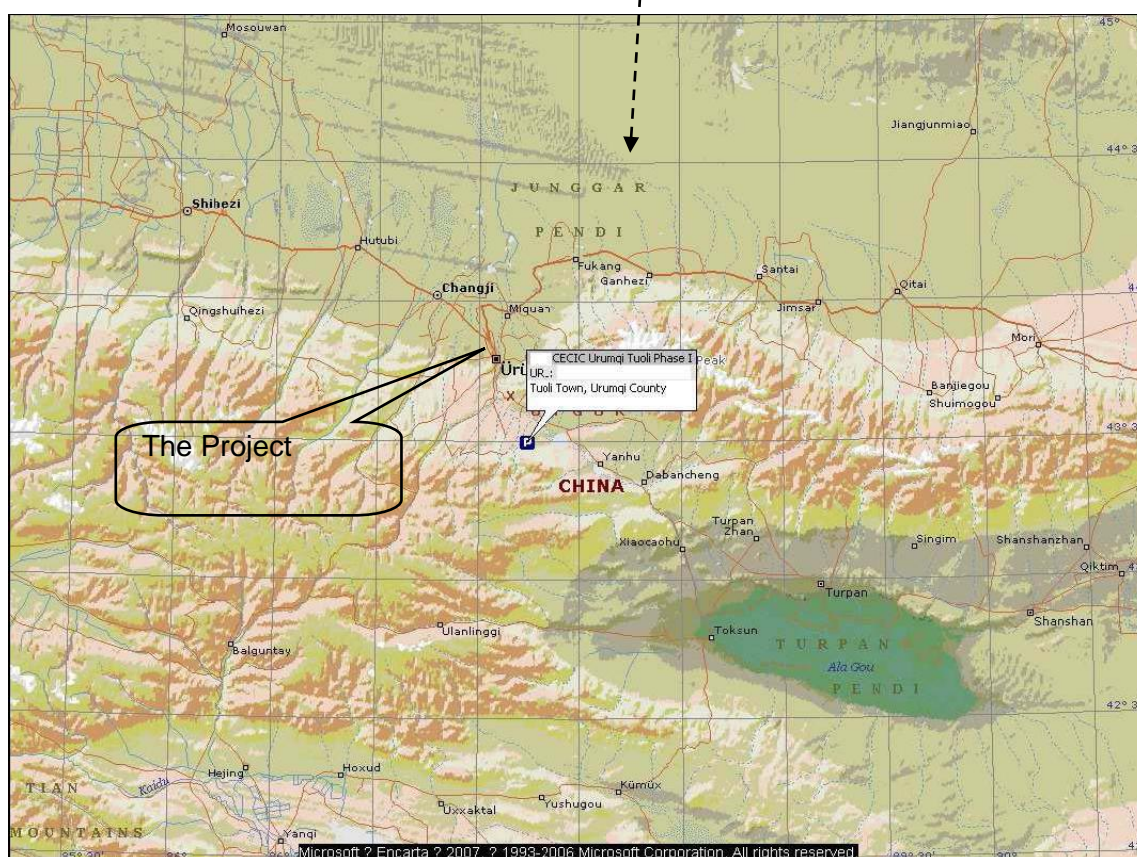


Figure1. Location of the Project

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)
P.R China (host)	CECIC Wind Power (Xinjiang) Co. Ltd.	No

A.4. Reference of applied methodology and standardized baseline

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The approved methodology and tool applied to the Project is:

Approved consolidated baseline and monitoring methodology ACM0002: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" (Version 12.3.0);

"Tool for the demonstration and assessment of additionality" (Version 05.2);

"Tool to calculate the emission factor for an electricity system" (version 02)

Reference: UNFCCC website:

<http://cdm.unfccc.int/methodologies/DB/C505BVV9P8VSNNV3LTK1BP3OR24Y5L>

For the standardized baseline, it's not applicable.

A.5. Crediting period of project activity

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The Project employs the renewable crediting period (3x7yrs), the first crediting period of the project is from 01/05/2011 to 30/04/2018.

A.6. Contact information of responsible persons/entities

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The MR of the Project was completed on 03/07/2015 by Dr. Zheng Zhaoning of Goldchina Consultancy International Co., Ltd.

Address: Room 3103, Unit 3, Building 1, Tangning One, No. 16, Zhongguancun East Road, Haidian District, Beijing, 100083

Telephone:(8610)6268 2508; Fax: (8610)6268 2682

Email: zzn01@mails.tsinghua.edu.cn; zzn@gcci-carbon.com

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

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The Project started construction on 01/09/2010. The first wind turbine of the Project commissioning was started on 29/01/2012. The Project started fully commissioning on 05/04/2012. The electricity generated by the Project is delivered to NWPG.

During this monitoring period, the Project is operated and implemented smoothly. There have been no emergencies (including of overhaul times, downtimes of equipment, exchange of equipment, etc.) happened to the monitoring system in this monitoring period, also no events or situations occurred during the monitoring period, which may impact the applicability of the methodology.

Total 33 sets of wind turbines with a capacity of 1,500 kW each, are installed in the Project, forming 49.5 MW of total capacity. These wind turbines are manufactured in China by Xinjiang Goldwind Science & Technology Co., Ltd. and the model type of these wind turbines is

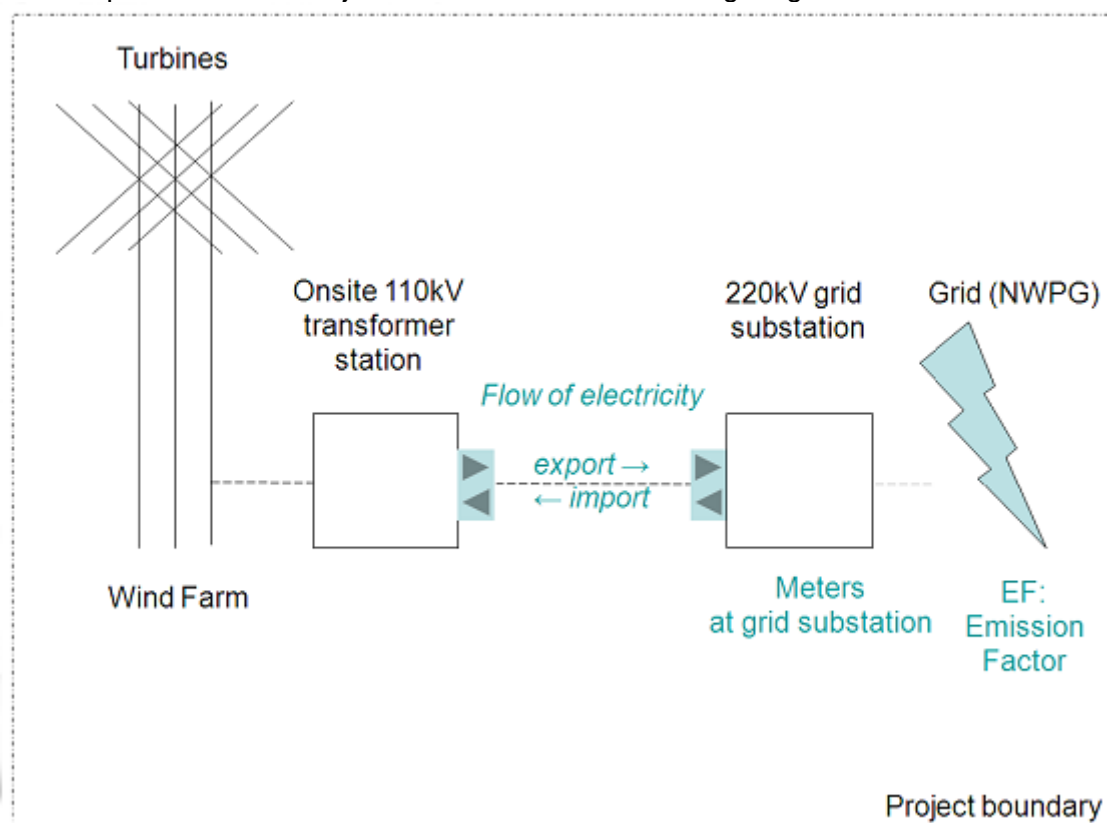
GW77/1500kW. The main technology parameter of this type of wind power turbine can be found at Table1, which is in line with the specification made in the PDD.

Table1 Technology parameter of WTGs for the Project

Item	Specification
Manufacturer	Xinjiang Goldwind Science&Technology Co.,Ltd
Type	GW77/1500kW
Power Rating	1500kW
Rotor Diameter	77m
Hub height(Centre)	65m
Cut-in wind speed	3 m/s
Rating wind speed	12 m/s
Cut-out wind speed	22 m/s
Designed Life	20 years

Each turbine has a transformer from 690 V to 35 kV, and connected with the 110 kV substation on the wind farm. The onsite substation is connected to the grid substation via 110 kV transmission line. All the electricity generated by the wind farm has been transferred to the NWPG via the grid substation.

The technical process in the Project can be shown as following diagram:



B.2. Post-registration changes

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

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There are no any temporary deviations have been applied during this monitoring period.

B.2.2. Corrections

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There are no any corrections to project information or parameters fixed at validation have been approved during this monitoring period or submitted with this monitoring report.

B.2.3. Changes to start date of crediting period

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There are no any permanent changes from the registered monitoring plan or applied methodologies have been approved during this monitoring period or submitted with this monitoring report.

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

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There are no any changes to the project design of the project activity have been approved during this monitoring period or submitted with this monitoring report.

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

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There are no any changes to the start date of the crediting period have been approved during this monitoring period or submitted with this monitoring report.

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

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Not applicable.

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

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Not applicable.

SECTION C. Description of monitoring system

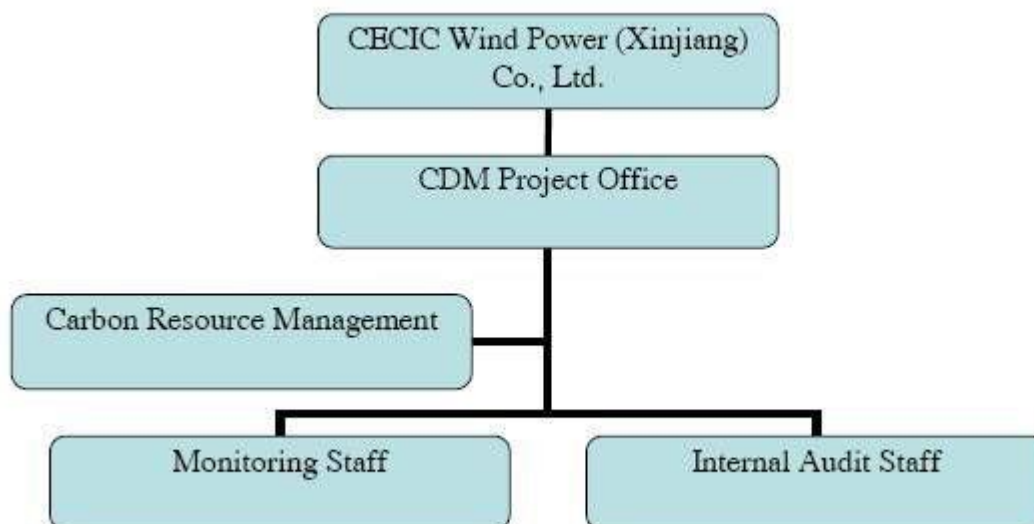
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The implementation of monitoring system and Management organization for the Project are fully consistent with the description in the registered PDD.

1. Monitoring organization and Responsibility

The responsibility for monitoring lies with CECIC Wind Power (Xinjiang) Co., Ltd. who operates the Project. The company established a CDM Project Management Office (PMO) and assigned dedicated people responsible for the monitoring and reporting of the generation and emission reductions of the Project.

The operating and management structure is illustrated as followed:



2. Description of the monitoring system

The electricity generated by the Project is upgraded by a 35kV/110kV transformer within the project site, then feeds to the Dafeng 110kV/220kV substation through one 110kV transmission lines, finally feeds to NWPG. The Quantity of net electricity supplied by the project to the grid ($EG_{facility,y}$) is continuous monitored through two bi-directional meters (one is main meter, the other is backup meter) installed at the

Dafeng 110kV/220kV substation. The readings of the backup meter will be adopted only when the main meter fails to work normally.

Both the electricity supply to the grid by the Project ($EG_{facility,export,y}$) and the electricity imports from the grid by the Project ($EG_{facility,import,y}$) are continuous monitored through the main meter in the Dafeng 110kV substation. The net electricity supplied by the Project to the grid ($EG_{facility,y}$) is the difference of the electricity exports to the grid and imports from the grid ($EG_{facility,export,y} - EG_{facility,import,y}$).

Designed personnel in Dafeng substation read and record the reading of the meters mentioned above daily. Accumulated data was reported to the Project Owner on a monthly basis. For the electricity exports to the grid by the Project, the cut off time is 24:00 of 27th each month, consider of the equipment consumption and based on the calculation method description in the PPA, the grid company issued the Electricity Transaction Notes (ETNs) to the project company. After confirming the numbers on the ETNs, the project company issue sales receipts for the electricity exports to the grid by the Project to the grid company subsequently on a monthly basis.

For the electricity imports from the grid by the Project, the cut off time is 24:00 of 20th each month, consider of the equipment consumption and based on the calculation method description in the PPA, the grid company issued the Electricity Transaction Notes (ETNs) to the project company. After confirming the numbers on the ETNs, the grid company issue the sales receipts for the electricity imports from the grid by the Project to the project company on a monthly basis.

All data collected as part of monitoring is archived electronically and is kept until 2 years after the end of the total crediting period of the Project.

3. Installation of electricity meters

Both the main meter and backup meter are installed in accordance with industry standards (Chinese electric industry regulation DL/T448-2000). Any error resulting from the meter shall not exceed 0.5%, which is in line with the industry standards.

- Main meter, is installed at the grid substation.
- Backup meter, is installed at the grid substation.

4. Meters Calibrations

The metering equipments are calibrated and checked at least annually in accordance with related regulations and rules. Calibration is carried out by authorized and qualified calibration entity. The calibration record of the electricity measure-related meters can be found at Table 2.

Table2. Calibration record of the meters

Serial No.	Accuracy	Type	Calibration date	Calibration due on	Calibration frequency	Calibrated by
000002141037 Main meter	0.2s	bi-directional electricity meter	17/09/2012	16/09/2013	Annually	Metrological Centre Electricity Bureau
			07/08/2013	06/08/2014		
			14/05/2014	13/05/2015		
			13/04/2015	12/04/2016		
000002141035 Backup meter	0.2s	bi-directional electricity meter	17/09/2012	16/09/2013	Annually	Metrological Centre Electricity Bureau
			08/06/2013	07/06/2014		
			14/05/2014	13/05/2015		
			13/04/2015	12/04/2016		

5. Emergency Procedures

Should any previous months reading of the main meter be inaccurate by more than the allowable error, or otherwise functioned improperly, the net generation output shall be determined by (a) first, by reading backup meter, unless a test by either party reveals it is inaccurate; (b) if the backup system is not with acceptable limits of accuracy or operation is performed improperly the project company and grid company shall jointly prepare a reasonable and conservative estimate of the correct reading, and provide sufficient evidence that this estimation is reasonable and conservative for verification by the DOE; and (c) if the grid company and the project company fail to agree then the matter will be referred for arbitration according to agreed procedures.

The Project is operated and implemented smoothly during this monitoring period. Neither emergencies were happened to the monitoring system, nor events or situations were occurred during the monitoring period.

SECTION D. Data and parameters

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

(Copy this table for each piece of data and parameter)

Data/parameter:	$EF_{grid,CM,y}$
Unit	tCO ₂ e/MWh
Description	Baseline emission factor: the combined emission factor of the project grid system.
Source of data	Source from the Section B.6 of the registered PDD for the Project.
Value(s) applied)	0.9292
Choice of data or measurement methods and procedures	Chinese DNA and official national statistics (<i>China Energy Statistical Yearbook</i> and <i>China Electric Power Yearbook</i>)
Purpose of data	Calculation of baseline emissions.
Additional comments	The emission factor of the Project was ex-ante determined and is fixed during the first crediting period. All data and parameters had been determined at registration.

D.2. Data and parameters monitored

(Copy this table for each piece of data and parameter)

Data/parameter:	$EG_{facility,y}$
Unit	MWh/yr
Description	Quantity of net electricity supplied by the project to the grid in year y.
Measured/calculated/default	Calculated based on the measurement result
Source of data	The meter reading records of the main bi-directional electricity meter, which monitoring the electricity supply to the grid ($EG_{facility,export,y}$) and imports from the grid ($EG_{facility,import,y}$).
Value(s) of monitored parameter	The quantity of net electricity supplied by the Project to the grid during this monitoring period is 243,965.728 MWh. The electricity exports to the grid by the Project is 245,404.528 MWh, and the electricity imports from the grid by the Project is 1,438.8 MWh.
Monitoring equipment	More detail, please refer to Section C table 2.
Measuring/reading/recording frequency:	Measuring continuously/Recording monthly
Calculation method (if applicable):	The net electricity supplied by the Project to the grid ($EG_{facility,y}$) is the difference of the electricity exports to the grid and imports from the grid ($EG_{facility,export,y} - EG_{facility,import,y}$).
QA/QC procedures:	The metering equipments were calibrated annually by qualified third party for accuracy. The measurement results are cross-checked with records for sold electricity. The accuracy of the meters meets the national standard, and the metering equipments have sufficient accuracy. Monthly supplied generation data were approved and signed off by CDM manager before it is accepted and stored. This audit was checked compliance with operational procedures in this monitoring plan. This internal audit also can identify potential improvements to procedures to improve monitoring and reporting in future years. No such improvement was proposed during this monitoring period.
Purpose of data:	Calculation of baseline emissions.
Additional comments:	-

There are no additional capacities, which could be either an additional wind farm or expansion of the existing wind farm, added to the grid at the same point as the Project, and shared transmission facilities with the Project during this monitoring period. So, no other more parameters are monitored during this monitoring period.

D.3. Implementation of sampling plan

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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**

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According to ACM0002 and the registered PDD of the Project, The baseline emission BE_y during the monitoring period results from:

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

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,:

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

Accordingly,

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

Where:

BE_y is the baseline emissions in year y (tCO₂/yr);

$EG_{PJ,y}$ is the quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/yr);

$EF_{grid,CM,y}$ is the combined margin baseline emission factor of the NWPG;

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

The monthly electricity data is listed in following table 3 and table 4:

Table 3. Calculation of the electricity exported to the grid by the Project

Period	Electricity exported to the grid by the Project ($EG_{facility,export,y}$)		
	Data from meter reading	Data from the sales receipts	Data used to calculate the ER
	A	B	C=MIN(A,B)
01/01/2013-27/05/2015	245,942.400	245,404.528	245,404.528

Table 4. Calculation of the electricity imported from the grid by the Project

Period	Electricity imported from the grid by the Project ($EG_{facility,import,y}$)		
	Data from meter reading	Data from the sales receipts	Data used to calculate the ER
	D	E	F=MAX(D,E)
01/01/2013-27/05/2015	1,438.8	1,438.8	1,438.8

* For the period from 01/01/2013-27/05/2015, the “data from the sales receipts” is actually covering from the period from 21/12/2012 to 20/06/2015.

Therefore,

$$EG_{facility,y} = EG_{facility,export,y} - EG_{facility,import,y} = 245,404.528 \text{ MWh} - 1,438.8 \text{ MWh} = 243,965.728 \text{ MWh}.$$

The baseline emission during this monitoring period calculated as following:

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

Table5. Baseline emissions

Period	$EG_{facility,y}$ (MWh)	$EF_{grid,CM,y}$ (tCO _{2e} /MWh)	BE_y (tCO _{2e})
01/01/2013-27/05/2015	243,965.728	0.9292	226,692

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

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Project emission (PE_y) is 0 tCO_{2e} as per the methodology applied, the registered PDD and the validation report.

E.3. Calculation of leakage

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Leakage (L_y) is not considered as per the methodology applied, the registered PDD and the validation report.

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	226,692	0	0	0	226,692	226,692

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

The estimated annual emission reduction in the registered PDD is 116,644 tCO₂e. So, the estimated emission reduction is 280,265 tCO₂e¹ in this monitoring period calculated based on the registered PDD. The actual emission reductions of the Project during this period are 226,692 tCO₂e.

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)	280,265	226,692

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

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The actual emission reductions during this monitoring period are 226,692 tCO₂e, which is less than the estimated value in the registered PDD. There is no any significant increase compared with the estimated emission reduction in the registered PDD.

¹ 280,265 tCO₂e = 116,644 tCO₂e * (877days/365days)

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"/> Person/entity responsible for completing the CDM-MR-FORM
Organization name	CECIC Wind Power (Xinjiang) Co. Ltd.
Street/P.O. Box	Tuoli Town, Urumqi County
Building	/
City	Urumqi City
State/region	/
Postcode	/
Country	People's Republic of China
Telephone	+8610 62248705
Fax	+8610 62248705
E-mail	chendongjuan@cecep.cn
Website	/
Contact person	Chen Dongjuan
Title	/
Salutation	Ms.
Last name	Chen
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Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
05.1	4 May 2015	Editorial revision to correct version numbering.
05.0	1 April 2015	Revisions to: <ul style="list-style-type: none"> • Include provisions related to delayed submission of a monitoring plan; • Provisions related to the Host Party; • Remove reference to programme of activities; • Overall editorial improvement.
04.0	25 June 2014	Revisions to: <ul style="list-style-type: none"> • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from <i>F-CDM-MR</i> to <i>CDM-MR-FORM</i>; • Editorial improvement.
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01	28 May 2010	EB 54, Annex 34. Initial adoption.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: monitoring report		