Monitoring report form

(Version 04.0)

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 Gansu Yumen Changma No.3 Wind Farm Project
Reference number of the project activity	4734
Version number of the monitoring report	01
Completion date of the monitoring report	05/01/2015
Registration date of the project activity	28/04/2011
Monitoring period number and duration of this monitoring period	5th monitoring period (01/01/2013-31/12/2014, both days included)
Project participant(s)	CECIC Wind-power (Gansu) Co., Ltd. P.R.China (host);
Host Party(ies)	P.R. of China
Sectoral scope and selected methodology(ies), and where applicable, applied standardized baseline(s)	Sectoral scope1, Energy Industries (renewable sources). Approved Consolidated Methodology ACM0002, "Consolidated baseline methodology for grid-connected electricity generation from renewable sources", Version 12.3.0
Estimated amount of GHG emission reductions or net anthropogenic GHG removals by sinks for this monitoring period in the registered PDD	851,378 tCO_2e
Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period	620,961tCO_2e
Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved during the period up to 31 December 2012(if applicable)	0
Actual GHG emission reductions or net anthropogenic GHG removals by sinks	620,961tCO_2e

achieved during the period from 1 January 2013 onwards (if applicable).	

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

>>

CECIC Gansu Yumen Changma No.3 Wind Farm Project (hereinafter referred as "the Project") is located in Yumen Town, Yumen City, Gansu Province, the People's Republic of China. The purpose of the Project is to generate electricity using wind power resources in the project region and to deliver to the Northwest China Power Grid (NWPG) which is predominated by connected fossil fuel fired power plants, especially coal fired plants. So the Project can reduce GHG emissions by replacing the electricity generated by fossil fuel fired power plants in NWPG.

The Project involves the installation of 134 wind turbines with 1.5MW capacity per unit, with a total installed capacity of 201 MW. Totally 463,714 MWh of clean electricity generated by the Project are expected to be delivered to the NWPG annually.

The Project started construction on 19/09/2009. The first wind turbine of the Project commissioning started on 28/01/2011. The Project started fully commissioning on 23/10/2012.

This monitoring period of the Project is from 01/01/2013 to 31/12/2014. The total emission reduction of the 5th monitoring period is: 620,961 tCO_2e.

A.2. Location of project activity

>>

The Project site is located 18-31 km southwest of Yumen Town, Yumen City, Gansu Province in the People's Republic of China. It is located at Latitude from N 40°05′39″ to N 40°09′52″ and Longitude from E 96°46′22″ to E 96°51′57″. The altitude of the Project site ranges from between 1690 m to 1825 m above the sea level. More details shown as follow figure 1.

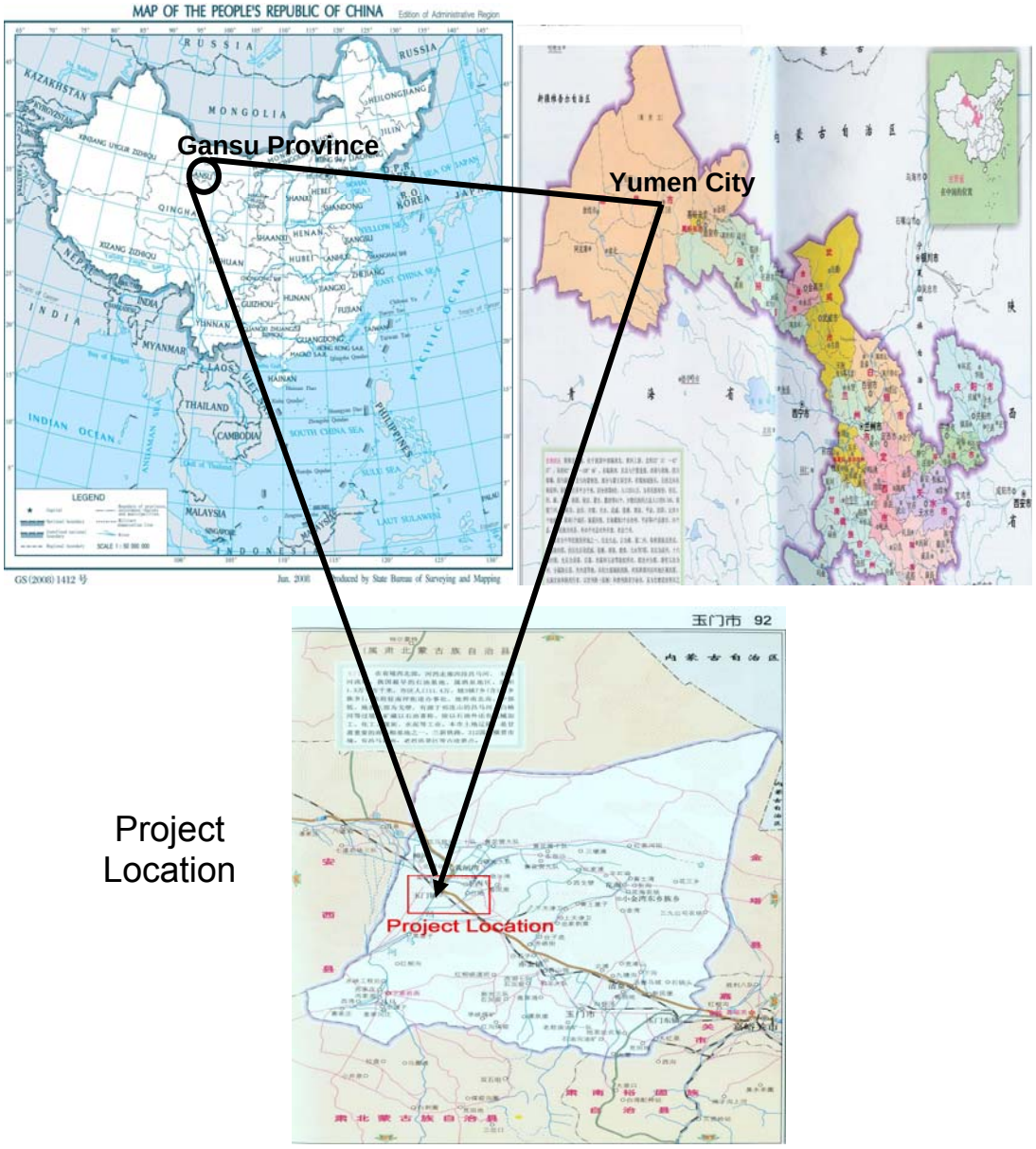


Figure1. Location of the Project

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 if the Party involved wishes to be considered as project participant (Yes/No)
P.R.China (Host)	CECIC Wind-power (Gansu) Co., Ltd.	No

A.4. Reference of applied methodology and standardized baseline

>>

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 02.1.0)

Reference: UNFCCC website:
http://cdm.unfccc.int/methodologies/DB/C505BVV9P8VSNNV3LTK1BP3OR24Y5L

A.5. Crediting period of project activity

>>
The Project employs the renewable crediting period (3×7yrs), the first crediting period of the project is changed from 01/07/2011-30/06/2018 to 28/04/2011-27/04/2018.

A.6. Contact information of responsible persons/ entities

>>
The MR of the Project was completed on 05/01/2015 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

>>
The Project started construction on 19/09/2009. The first wind turbine of the Project commissioning started on 28/01/2011. The Project started fully commissioning on 23/10/2012. 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 134 sets of wind power turbine and generators with 1.5MW unit capacity each, are installed in the Project, forming 201MW of total capacity. These wind turbines are manufactured by China's Dongfang Steam Turbine Co., Ltd and the model type of these wind turbines is FD82A-1500/11. 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.

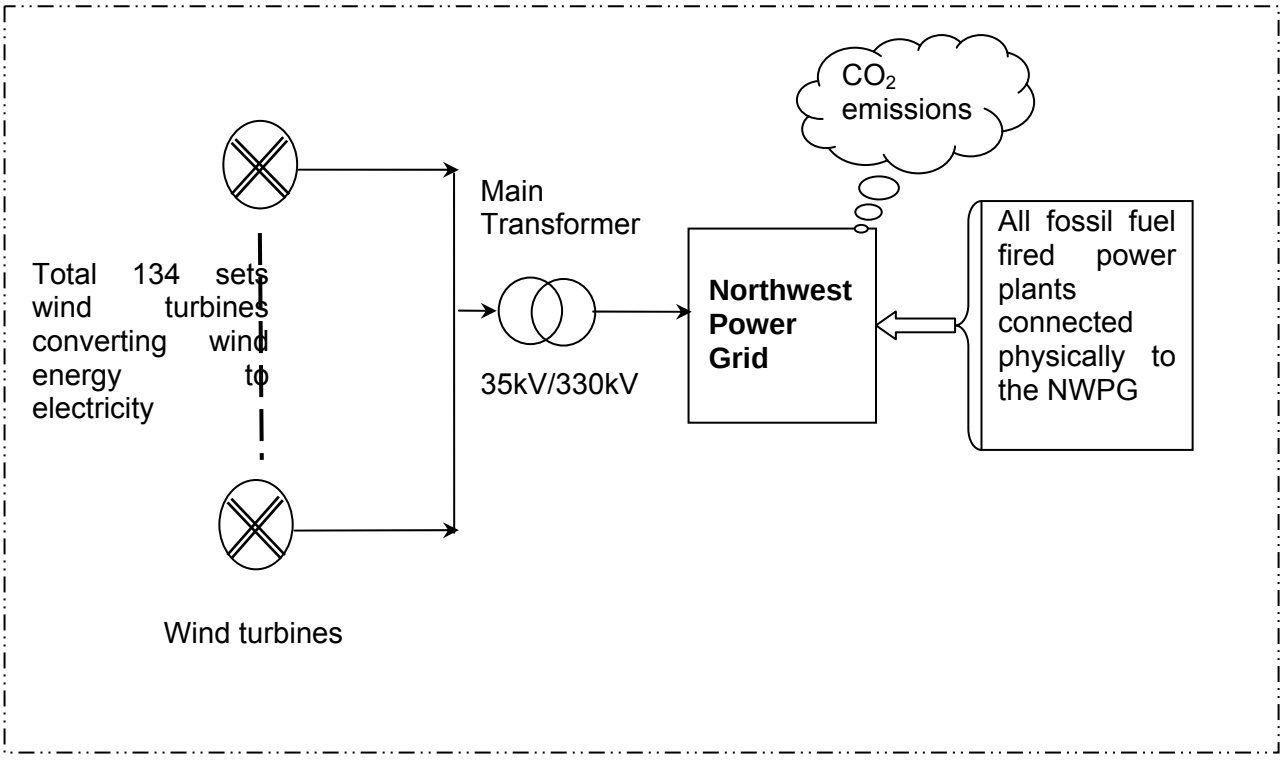
Table1 Technology parameter of WTGs for the Project

Key Technology Parameter	FD82A-1500/11

Rated capacity (kW)	1500
Number of unit	134
Turbine diameter (m)	82
Hub height (m)	70
Cut in wind speed (m/s)	3.0
Rated wind speed (m/s)	11
Cut out wind speed (m/s)	20.0
Wind speed limit (m/s)	52.5
Operating temperature (℃)	-20～+40
Number of blades	3
Output Voltage (V)	690
Technical lifetime (y)	20

The electricity generated by the Project is exported to the local Yumen town grid via a newly built 35kV/330kV transformer station, which is then exported to the NWPG.

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

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

B.2.2. Corrections

>>

There is no correction during this monitoring period.

B.2.3. Permanent changes from registered monitoring plan, applied methodology or applied standardized baseline

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There is no permanent change from the monitoring plan or applied methodologies during this monitoring period.

B.2.4. Changes to project design of registered project activity

>>

There is no any change to the project design of the project activity.

B.2.5. Changes to start date of crediting period

>>

The first crediting period of the project was changed from 01/07/2011-30/06/2018 to 28/04/2011-27/04/2018.

B.2.6. Types of changes specific to afforestation or reforestation project activity

>>

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 revised Monitoring Plan which was approved by EB on 23/10/2012.

1. Data collection and management

The electricity generated by the Project feeds to the Changma west 35kV/330kV substation through ten 35kV transmission lines, then to NWPG after 35kV/330kV transformer. The Quantity of net electricity generation supplied by the project plant/unit to the grid ($EG_{facility,y}$) is continuous monitored through ten bi-directional meters installed at the 35kV side of 35kV/330kV transformer. All of the meters can record the electricity exported to the grid by the Project and the electricity imported from the grid by the Project. The electricity exported to the grid by the Project is the sum of values measured by the ten meters for exported electricity. Meanwhile, electricity imported from the grid by the Project is the sum of values measured by the ten meters for imported electricity. The electricity output and input of other current and any future projects which share the same Gateway Meter with the Project, can be measured directly by their own meters. The Gateway Meter can obtain the total electricity output and input by these projects. The cut off time is the 00:00 of the penultimate day of each month. Designated personnel of the grid company read and record the readings monthly, then inform the reading to the project company for confirmation. Meanwhile, the staff of the Project company reads and records the meters readings through telecommunication system, too.

Based on the readings of the meters at the 35kV side of the 35kV/330kV transformer, the gateway meter at the 330kV side of the 35kV/330kV transformer, consider of the transmission

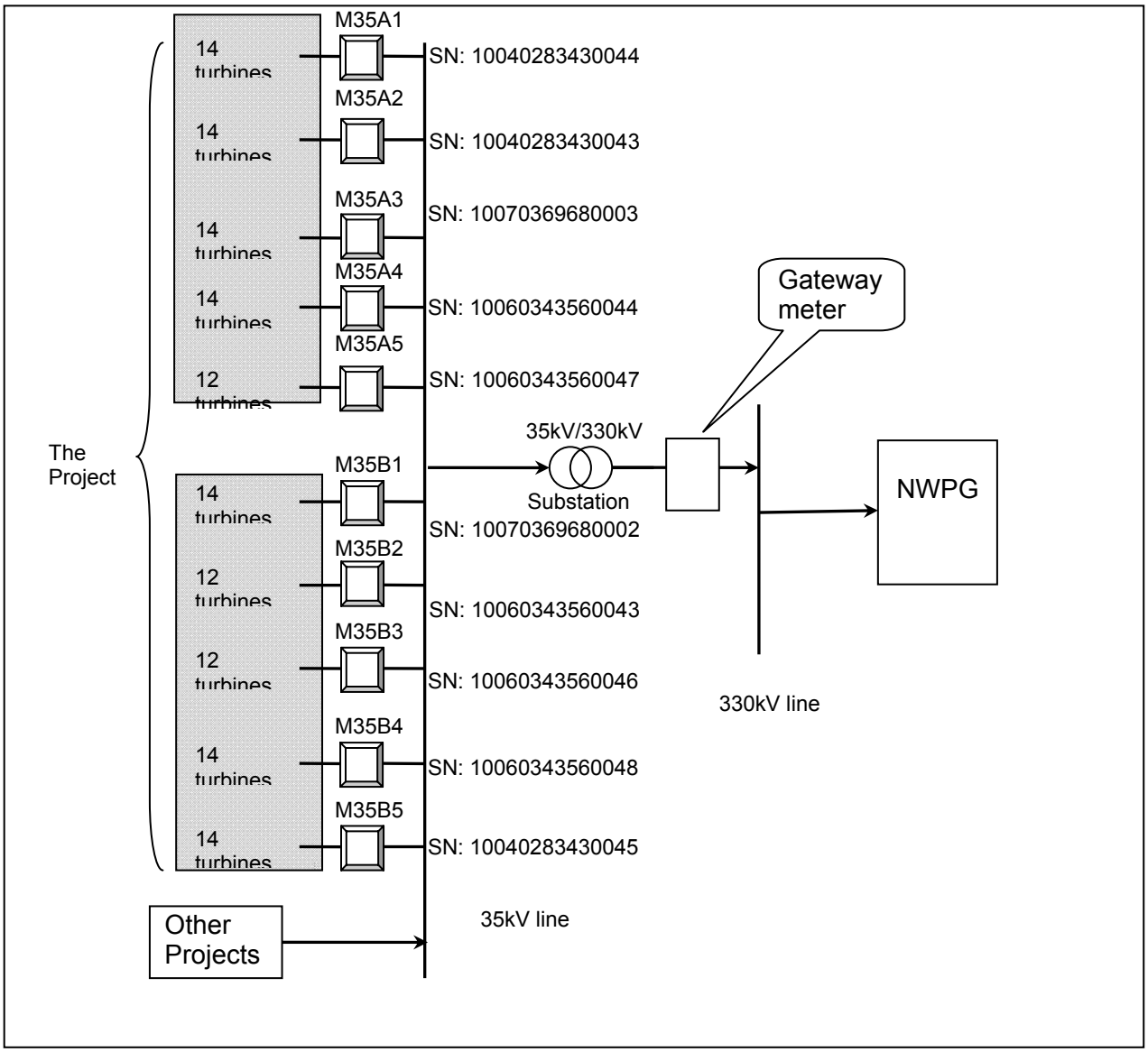
and line loss, the electricity exported to the grid by the Project and the electricity imported from the grid by the Project are calculated by the grid company according to the approach defined in the PPA. After both sides confirming, the Electricity Transaction Notes (ETNs), which serves as sales receipts, for the electricity exported to the grid by the Project and the electricity imported from the grid by the Project are issued separately by the grid company in the end of each month. The CDM manager of the Project wind farm counter-checked the reported data against with ETNs before archived. The most conservative values have been selected for the ERs calculation. The electricity imported from the grid by the Project has been deducted from the electricity exported to the grid by the Project to get the quantity of the net electricity supplied to the grid by the Project.

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.

2. Meters Distribution

More details for the distribution of metering equipments installation and monitoring points can be found at following figure2.

Figure2. The distribution of meters installation



3. 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 Table2.

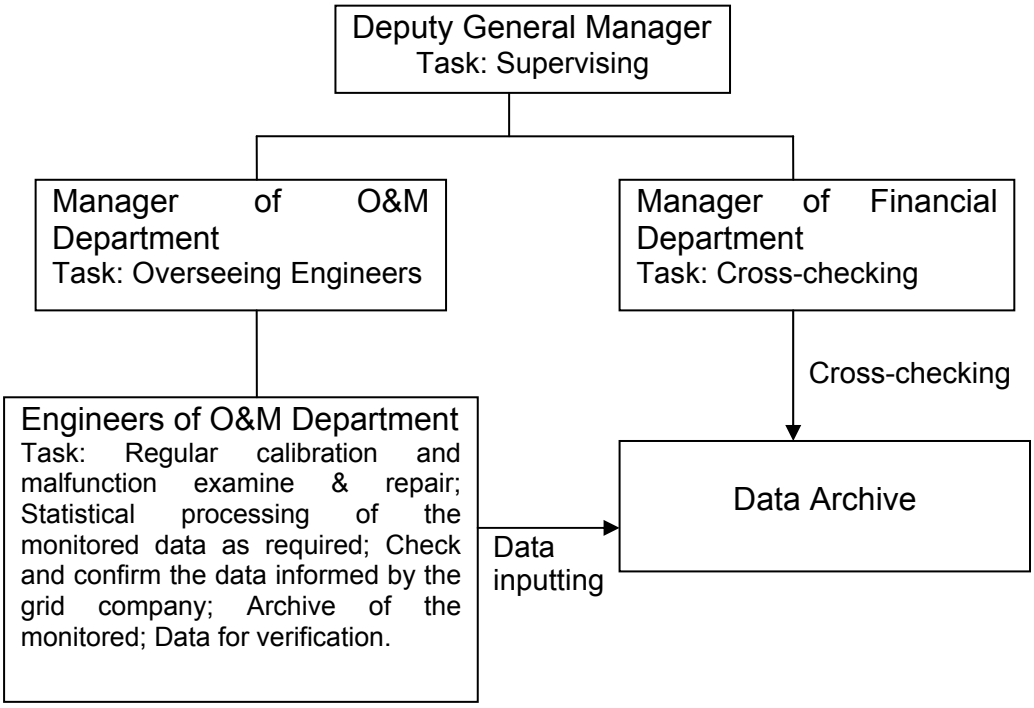
Table2. Calibration record of the meters

No.	Type	SN	Accuracy class	Required Calibration frequency	Calibration date	Calibration due on	Calibrated by
M35A1	Electric meter	10040283430044	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation
M35A2	Electric meter	10040283430043	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation
M35A3	Electric meter	10070369680003	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation
M35A4	Electric meter	10060343560044	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation
M35A5	Electric meter	10060343560047	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation
M35B1	Electric meter	10070369680002	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation
M35B2	Electric meter	10060343560043	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation

M35B3	Electric meter	10060343560046	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation
M35B4	Electric meter	10060343560048	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation
M35B5	Electric meter	10040283430045	0.5s	Annually	28/03/2012 22/03/2013 17/03/2014	16/03/2015	Metrological Centre of Jiayuguan Power Supply Corporation
Gateway meter (Main meter)	Electric meter	57033315	0.2s	Annually	20/08/2012 02/07/2013 06/04/2014	05/04/2015	Electric Energy Measurement Centre of Gansu Electric Power Corporation
Gateway meter (Backup meter)	Electric meter	57033312	0.2s	Annually	20/08/2012 02/07/2013 06/04/2014	05/04/2015	Electric Energy Measurement Centre of Gansu Electric Power Corporation

4. Organizational structure and responsibilities

The Project owner (CECIC Wind-power (Gansu) Co., Ltd.) established a CDM Project Management Office (PMO). The organization structure of PMO is illustrated as follows:



5. Emergency Procedures

When reading error of any meter exceeds the allowable range or any inconsistency occurs, the meter should be repaired and followed by calibration by a third party in accordance with the standard, within 10 days. The grid company shall inform the project company before the calibration and all the record should be kept by the project company.

When any meter detects the error beyond the allowable range or inconsistency, the grid company shall repair the meter, recalibrate, or replace, while giving the project company sufficient notice to allow their representative to attend during any corrective activities. When it happens, the electricity will be calculated and estimated by the project company and the grid company using a reasonable and conservative method, based on the reading of gateway meter and other projects meters, and historical generation data. Also, the project owner should provide the evidence to testify whether the method is reasonable and conservative.
The Project is operated and implemented smoothly during this monitoring period. There have been no emergencies happened to the monitoring system, also no events or situations 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_2e/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):	0.9180
Purpose of data:	Calculation of baseline emissions
Additional comment:	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
Description:	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y
Measured/ Calculated / Default:	Measured
Source of data:	Meter reading records of onsite meters.
Value(s) of monitored parameter:	The quantity of net electricity generation supplied by the Project plant/unit to the grid during this monitoring period is 676,428.765 MWh. The electricity exported to the grid by the Project is 677,603.610 MWh, and the electricity imported from the grid by the Project is 1,174.845 MWh.
Monitoring equipment:	More detail, please refer to Section C table2.
Measuring/ Reading/ Recording frequency:	Measuring continuously/Reading monthly/Recording monthly
Calculation method (if applicable):	
QA/QC procedures:	Monthly power exported and imported to the NWPG are cross-checked against the sales receipts. Based on the standard of DL/T448-2000, the calibrations are done by a qualified organization at least once per year for the monitoring meters.
Purpose of data:	Calculation of baseline emissions.
Additional comment:	

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

>>

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 (tCO_2/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 table3:

Table3. Calculation of the quantity of net electricity supplied to the grid by the Project

Period	Electricity exported to the grid by the Project			Electricity imported from the grid by the Project			$EG_{facility,y}$
	data from meter readings	data from the sales receipts	data used to calculate the ER	data from meter readings	data from the sales receipts	data used to calculate the ER	
	A	B*	C=MIN(A,B)	D	E**	F=MAX(D,E)	G=C-F
01/01/2013-29/01/2013	32,119.500	30,924.470	30,924.470	44.100	42.669	44.100	30,880.370
30/01/2013-26/02/2013	28,761.600	28,493.710	28,493.710	33.600	36.960	36.960	28,456.750
27/02/2013-29/03/2013	36,594.600	36,481.070	36,481.070	16.800	18.480	18.480	36,462.590
30/03/2013-28/04/2013	19,309.500	18,933.890	18,933.890	37.800	41.580	41.580	18,892.310
29/04/2013-29/05/2013	26,373.900	25,980.600	25,980.600	21.000	23.100	23.100	25,957.500
30/05/2013-28/06/2013	26,707.800	26,387.390	26,387.390	25.200	27.720	27.720	26,359.670
29/06/2013-29/07/2013	22,562.400	22,353.190	22,353.190	48.300	53.130	53.130	22,300.060
30/07/2013-29/08/2013	28,308.000	27,963.390	27,963.390	39.900	43.890	43.890	27,919.500
30/08/2013-28/09/2013	34,181.700	33,928.670	33,928.670	37.800	41.580	41.580	33,887.090
29/09/2013-29/10/2013	39,717.300	39,634.830	39,634.830	25.200	27.720	27.720	39,607.110
30/10/2013-28/11/2013	37,968.000	37,410.000	37,410.000	42.000	46.200	46.200	37,363.800
29/11/2013-29/12/2013	31,090.500	31,061.430	31,061.430	63.000	69.300	69.300	30,992.130
30/12/2013-29/01/2014	33,969.600	33,919.710	33,919.710	77.700	85.470	85.470	33,834.240
30/01/2014-26/02/2014	28,041.300	27,986.400	27,986.400	73.500	80.850	80.850	27,905.550
27/02/2014-29/03/2014	24,700.200	24,662.760	24,662.760	44.100	48.510	48.510	24,614.250

30/03/2014-28/04/2014	27,631.800	27,590.760	27,590.760	18.900	20.790	20.790	27,569.970
29/04/2014-29/05/2014	36,693.300	36,635.640	36,635.640	23.100	25.410	25.410	36,610.230
30/05/2014-28/06/2014	32,512.200	32,452.410	32,452.410	21.000	23.100	23.100	32,429.310
29/06/2014-29/07/2014	18,700.500	18,674.250	18,674.250	42.000	46.200	46.200	18,628.050
30/07/2014-29/08/2014	30,009.000	29,961.840	29,961.840	35.700	39.270	39.270	29,922.570
30/08/2014-28/09/2014	17,938.200	17,874.180	17,874.180	46.200	50.820	50.820	17,823.360
29/09/2014-29/10/2014	20,670.300	20,626.320	20,626.320	44.101	48.510	48.510	20,577.810
30/10/2014-28/11/2014	10,993.500	10,939.110	10,939.110	90.301	99.330	99.330	10,839.780
29/11/2014-29/12/2014	32,692.800	32,607.390	32,607.390	109.201	120.120	120.120	32,487.270
30/12/2014-31/12/2014	4,120.200	4,120.200	4,120.200	10.500	12.705	12.705	4,107.495
Total	**682,409.700**	**677,603.610**	**677,603.610**	**1,071.005**	**1,173.414**	**1,174.845**	**676,428.765**

The data in this table has been counter-checked against with the sales receipts.

The baseline emission during this monitoring period calculated as following:

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

Table4. Baseline emissions

Period	$EG_{facility,y}$ (MWh)	$EF_{grid,CM,y}$ (tCO_2e/MWh)	BE_y (tCO_2e)
01/01/2013-31/12/2014	**676,428.765**	**0.9180**	**620,961**

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

>>

Project emission (PE_y) is 0 tCO_2e as per the registered PDD.

E.3. Calculation of leakage

>>

Leakage (L_y) is 0 tCO_2e as per the registered PDD.

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

Item	Baseline emissions or baseline net GHG removals by sinks (t CO_2e)	Project emissions or actual net GHG removals by sinks (t CO_2e)	Leakage (t CO_2e)	Emission reductions or net anthropogenic GHG removals by sinks (t CO_2e)
Total	**620,961**	0	0	**620,961**

E.5. Comparison of actual emission reductions or net anthropogenic 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_2e)	851,378	620,961

* The estimated annual emission reduction in the registered PDD is 425,689 tCO_2e which is equals to 1,166.2712 tCO_2e per day. So, the estimated emission reduction is 851,378 tCO_2e in 730 days (total days of this monitoring period) based on the registered PDD. The actual emission reductions of the Project during this period are 620,961 tCO_2e.

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

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The actual emission reductions during this monitoring period are 620,845tCO_2e, which is 27.06% 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.

E.7. Actual emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Item	Actual values achieved up to 31 December 2012	Actual values achieved from 1 January 2013 onwards
Emission reductions or GHG removals by sinks (t CO_2e)	0	620,961

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

Project participant and/or responsible person/ entity	☑ Project participant ☐ Responsible person/ entity for completing the CDM-MR-FORM
Organization name	CECIC Wind -power (Gansu) Co., Ltd.
Street/P.O. Box	No. 42, Xizhimen North Street, Haidian District
Building	12th Floor, A Building Jieneng Mansion
City	Beijing
State/Region	
Postcode	100082
Country	People's Republic of China
Telephone	+86-10-62248705
Fax	+86-10-62248700
E-mail	lvxin@cecwpc.cn
Website	
Contact person	Lv Xin
Title	CDM office manager
Salutation	Ms.
Last name	Lv
Middle name	
First name	Xin
Department	
Mobile	
Direct fax	+86-10-62248700
Direct tel.	+86-10-62248705
Personal e-mail	lvxin@cecwpc.cn

Project participant and/or responsible person/ entity	☐ Project participant ☑ Responsible person/ entity for completing the CDM-MR-FORM
Organization name	Goldchina Consultancy International Co., Ltd.
Street/P.O. Box	Zhongguancun East Road, Haidian District, 100083
Building	Room 3103, Unit 3, Building 1, Tangning One, No. 16,
City	Beijing
State/Region	
Postcode	100083
Country	People's Republic of China
Telephone	+86-10-6268 2508
Fax	+86-10-6268 2682
E-mail	zzn@gcci-carbon.com
Website	
Contact person	Zheng ZhaoNing
Title	Legal Representative
Salutation	Mr.
Last name	Zheng
Middle name	
First name	ZhaoNing
Department	
Mobile	
Direct fax	+86-10-62248700
Direct tel.	+86-10-62248705
Personal e-mail	zzn@gcci-carbon.com

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Document information

Version	*Date*	*Description*
04.0	25 June 2014	Revisions to: • 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 *F-CDM-MR* to *CDM-MR-FORM*; • 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 anthropogenic 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.

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