

JIANGSU DONGTAI PHASE II WIND POWER PROJECT¹

Document Prepared By Beijing Ruifang Technology Co., Ltd.

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Monitoring Period	01/06/2014 to 31/10/2018 (1614days)
Prepared By	Beijing Ruifang Technology Co., Ltd.
Contact	Haidian District, Beijing, PRC China. Teng_hp@126.com

¹ The project name in the PD and previous MR is Jiangsu Dongtai Phase II Wind Power Project, which is also the name in FSR approval and EIA approval. However, the name in the registration platform is Dongtai Phase II Wind Power Project, which lack the word of Jiangsu. This MR uses “Jiangsu Dongtai Phase II Wind Power Project”.

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1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

The objective of Jiangsu Dongtai Phase II Wind Power Project (here after refer to the Project), a grid-connected renewable power project, is to utilize the wind resources for generating renewable electricity to sell into the East China Power Grid, so as to be a self-sustained green-power investment project in the market of the PRC. The Project achieve the greenhouse gas (GHG) emission reductions by avoiding CO₂ emissions from the business-as-usual scenario, the electricity generation of those fossil fuel-fired power plants connected into the East China Power Grid.

The Project is sited within the Jianggang Town, Dongtai County, Yancheng City, Jiangsu Province, in the East China. The Project involves the installation of 100 turbines, each of which have a capacity of 2000kW, providing a total installed capacity of 200MW. The annual operating hours of the Project are 2030 hours and it is expected to generate 406,020 MWh per year to be sold into the Jiangsu Power Grid, which is part of the East China Power Grid, and generate emission reductions for 338,011 tCO₂e annually.

The project started construction on 26/05/2010, the first power unit started operation on 10/12/2010. The project has issued for three times. This monitoring period is from 01/06/2014 to 31/10/2018. In this monitoring period, the total emission reductions achieved is 1,686,838tCO₂e.

1.2 Sectoral Scope and Project Type

Sectoral Scope 1, category “Energy industries (renewable - / non- renewable sources)”.

The project is a single Greenfield project and is not part of a project group or bundle.

1.3 Project Proponent

Organization name	Guohua (Jiangsu) Wind Power Co., Ltd.
Contact person	Yuan Liang
Title	Project Manager
Address	No.15 Yingbin Avenue, Economic Development District, Dongtai City Jiangsu Province, China
Telephone	+86 138 5103 5344
Email	yuanliang@guohua.com.cn

1.4 Other Entities Involved in the Project

N/A

1.5 Project Start Date

This project starts on 10/12/2010 (project started commissioning, which means that the wind turbines came into operation and started to generate electricity and emission reductions).

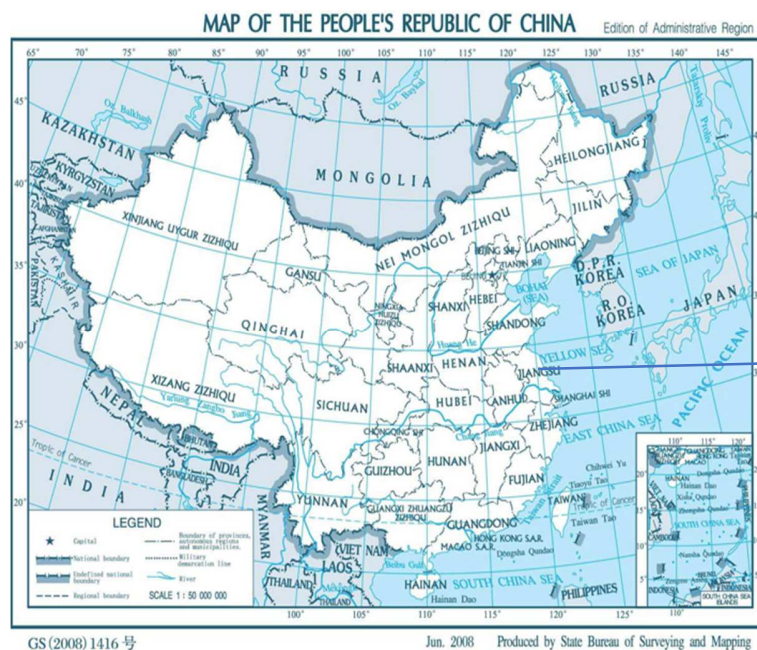
1.6 Project Crediting Period

The first CDM crediting period of the project is from 01/04/2012 to 31/03/2019, which could be renewed twice. the total crediting periods under CDM is from 01/04/2012 to 31/03/2033.

The first VCS crediting period of the Project is from 10/12/2010 to 09/12/2020 (10years), which could be renewed twice. According to VCS standard, the total crediting period is from 10/12/2010 to 31/03/2033.

1.7 Project Location

The project is located in Jiangggang Town, Dongtai County, Yancheng City, Jiangsu Province, China. The coordinates of the project are E120°54'11" and N32°39'35". The project location is shown in the following maps.



Jiangsu
province

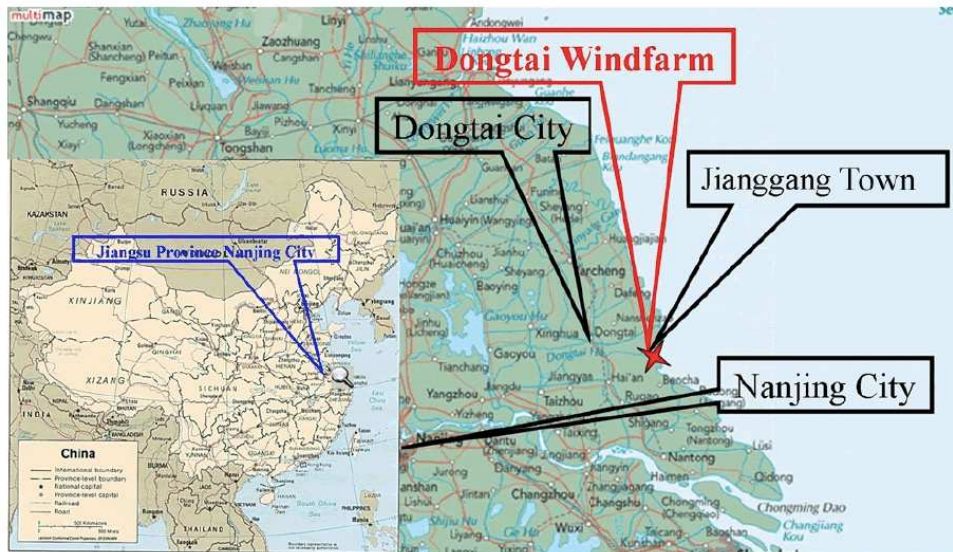


Figure 1. Project location

1.8 Title and Reference of Methodology

The approved consolidated baseline and monitoring methodology ACM0002: “Consolidated methodology for grid-connected electricity generation from renewable sources”, Version 12.1.0

The following tools are also used:

Tool for the demonstration and assessment of additionality (Version 05.2.1), and
Tool to calculate the emission factor for an electricity system (Version 02.2.1).

1.9 Other Programs

This project has been registered as a CDM project on 26/03/2012, and the registration number is 5924. The project has not claimed any other forms of environment credit. It has been issued under CDM mechanism with monitoring period from 01/04/2012 to 31/10/2012 and from 01/11/2012 to 31/05/2014.

1.10 Sustainable Development

The Project promotes sustainable development through the following aspects:

Reducing GHG emissions in China compared to the business-as-usual scenario;

Helping to stimulate the growth of wind power industry in China;

Reducing other pollutants resulting from the power generation industry in China, compared to a business-as-usual scenario;

Creating local employment opportunities during the project construction and operation;
Promoting the development of local tourism industry.

2 IMPLEMENTATION STATUS

2.1 Implementation Status of the Project Activity

The main parts of the Project include wind turbine, transformer, and substation. Totally 100 sets of W2000M-93-80 turbines with a unit capacity of 2000kW were selected for the Project, providing a total installed capacity of 200MW. The Project was started construction on 26/05/2010, the first power unit started operation on 10/12/2010, and the last power unit started operation on 31/12/2012.

The Project consist two wind farms the North Wind Farm and the South Wind Farm. The electricity generated by the Project from the North Wind Farm is delivered to the Jiangsu Power Grid through the Guohua Dongtai Phase II Wind Farm North 220kV substation. The electricity generated by the the South Wind Farm is delivered to the Jiangsu Power Grid through Guohua Dongtai Phase I Wind Farm 220kV substation. The Jiangsu Power Gird is a part of the East China Power Grid.

During this monitoring period (from 01/06/2014 to 31/10/018), the Project is operated and implemented well according to the project design. All the electricity meters are calibrated annually. All the data were recorded and checked by the leader of project monitoring team. And all paper and digital documents are well kept. The equipment and production activities were supervised by the working staff. No emergencies (including of overhaul times, downtimes of equipment, exchange of equipment, etc.) happened in this monitoring period.

There are no changes compared to the project design.

The technical structure of the project is shown in figure 2.

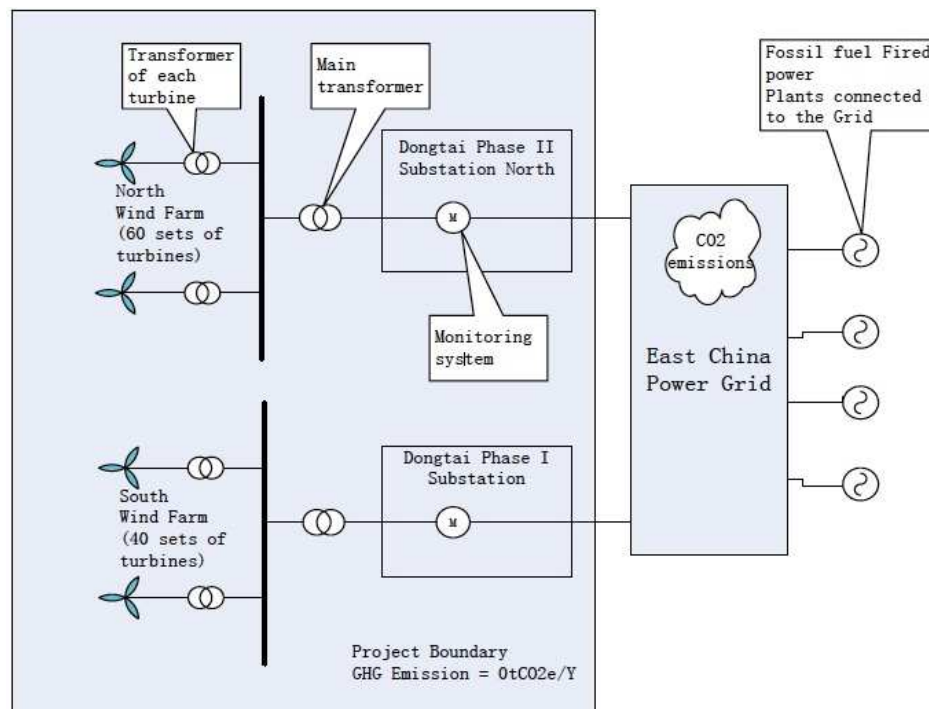


Figure 2. Technical structure

Major technical parameters of the key equipment employed by the project are illustrated in Table 1.

Table 1. Major technical parameters of the key equipment

Parameters Name	Unit	Value
Type	/	W2000M-93-80
Rated output	KW	2,000
Number of blades	piece	3
Rotor diameter	M	93
Cut-in speed	m/s	3
Cut-out speed	m/s	25
Rated voltage of generator	V	690
Frequency	Hz	50
Lifetime	years	20

2.2 Deviations

2.2.1 Methodology Deviations

There were no methodology deviations in this monitoring period.

2.2.2 Project Description Deviations

There is a crediting period deviation. According to the registered PD, the VCS crediting period is from 10/12/2010 to 31/03/2012.

Here, the first VCS crediting period is revised to 10 years which is conformed with VCS standard, from 10/12/2010 to 09/12/2020, which could be renewed twice.

2.3 Grouped Project

This is not grouped project.

2.4 Safeguards

2.4.1 No Net Harm

The project uses wind to generate electricity. It is environmentally friendly and there is no harm to the environment.

Environmental Impact Assessment (EIA) has been performed by Jiangsu Electric Power Design Institute and approved by General Office of Ministry of Environmental Protection of the People's Republic of China on 12/12/2008.

The environmental impacts arising from the Project are analyzed in the following two phases:

Construction Phase

Land use

Construction occupied land is just minor part for the whole wind farm. The Project mainly takes wasteland and wetland ground for permanent and temporary construction use. Inside the project location there are few trees, so it doesn't cut trees during the constructing phase, and no need to pay the compensation of the seeding for the peasants. There are no households within the site area, the immigration and disturbing of the residents do not exist. The vegetation, which is destroyed by the project construction, can resume in short-term time because of the vital life-force. During the construction, the problems of soil-erosion cannot be produced. Temporarily occupied land will be restored according to its characteristics after construction and will ensure its reutilization. Overall, land use impact on the local residents arising from the Project is considered to be insignificant.

Noise

The running noise of mechanical facilities and the traffic noise are the main source in the construction process. There are no households within the site area, so the noise influence to the residents during the construction does not exist. And the Project owner will control and manage the noise pollution source to be in line with the relevant rules on the environment noise during the construction period around the construction site.

Dust and exhaust gas

Due to the earthwork excavation and the running of construction vehicles dust, reentrainment of dust and tail gas are generated around. The Project owner will take measure, by means of dust wetting, adoption of advanced environment friendly equipments strengthening the workers' protection devices and so on, to control and minimize the air pollution of dust and exhaust gas.

Waste water

Certain amount of production wastewater and sanitary wastewater will be generated during the construction period. In order to reduce the pollution to the water environment nearby production wastewater and sanitary wastewater will not be directly discharged into the surrounding waters. The waste water will be treated by separation sedimentation tank, and will be recycled . Since construction workers are lived near the substation, the living wastewater produced in construction period will be collected and disposed by temporary waste water treatment facilities located in the substation.

Solid waste

The extra excavated earthwork during the construction period will be directly used, whose impact on the environment is insignificant. As to the municipal waste the Project owner will arrange garbage cans classified by areas and types of garbage and ask the environmental sanitation service company to clean and transport them.

Operation Phase

Noise

The operating noise of wind power turbine generator system comes from the friction between wind and blades and the running mechanical parts inside it. The wind farm is located in the area of wasteland and wetland, so there are no houses and local residents. As a result, the operating noise from the wind power turbine produces little impact on the surrounding residents.

It is regulated in the Code for Noise Control Design of Industrial Enterprises that the noise limit in the workshop of industrial enterprises is 96~104db(A) and the noise level at 500m from the tower foundation of the generator system is estimated to be much lower than the national standards (45db). The operators mainly work in the control tower, so it is believed that the wind farm will not do harm to the operators physically.

Electromagnetic radiation

Electromagnetic waves can be reflected for the rotation of the blades, so it can disturb the signals quality of radio and television programs. But the wind farm is located in the area of wasteland and wetland, there are no houses and local residents. So the electromagnetic radiation influences don't take into account.

Sanitary wastewater

The sanitary wastewater from the management staff of the wind farm will be discharged into waste water treatment facilities, which are located in the substation. The qualities of disposed wastewater meet the national standard grade one of wastewater discharging comprehensive standards (GB8978-96). So the wastewater influence is minor to the environment.

Impacts on bird and vision

Few birds live and feed in the Project area. The probability of this type of bird colliding with the turbine blades is nearly zero. Therefore the wind farm impact on birds living and feeding is negligible. At the same time, the construction of the wind farm can provide pleasing feeling from vision. The local residents also enjoy the wind farm. So the wind farm will be an attractive tour resource.

Through the assessment of the EIA, this project has no harm to environment.

Therefore, no net harm is generated in this project.

2.4.2 Local Stakeholder Consultation

The Project owner conducted a survey on the local villagers and residents possibly affected by the Project on 06/01/2010. The survey was conducted through distributing questionnaires and collecting responses. During the process, the announcement on introducing the project and survey was broadcasted in the nearest village. Meanwhile, the announcement was published on the village billboard by the village commission. Totally 30 questionnaires distributed to the villagers and residents were returned. The investigation had taken full account into the public advice of different ages, civilizations and occupations. The brief summary of the survey was circulated to all of the local stakeholders. The opinions expressed by the stakeholders were recorded and are available on request.

The survey was conducted through distributing questionnaires and collecting responses to the questionnaire. Totally questionnaires returned with response rate. The following is a summary of the key comments based on 30 returned questionnaires. Questions and topics for discussion are as follows:

- Are they satisfied with their surrounding environment?
- Do they know the wind power?
- Will the project improve the local development or increase job opportunities?
- Will the project have negative impacts on their livelihood?
- What impacts on environment should be considered?
- Will they support the construction of the project?

Statistic of the comments:

- All respondents (100%) are satisfied with their living conditions and surrounding environment.
- 24 (80%) persons of the respondents know well about wind power, and 6 (20%) persons know a little.
- The respondents consider construction and operation of the Project may improve living level (57%), increase employment opportunities (27%) and income (10%), mitigate air pollution (30%), and decrease local electricity price (6%).
- Among the negative impacts mentioned, the main issues concerned are garbage (50%).
- All of the 30 respondents support the construction of the Project.

This survey shows that people all agree the Project actively decrease environment pollution and mitigate local environmental quality. In addition, the construction of this Project will promote development of other industries, and partly address local employment pressure. All the stakeholders support the Project.

The residents and local government are all very supportive to the Project therefore there has been no need to modify the project due to the comments received.

3 DATA AND PARAMETERS

3.1 Data and Parameters Available at Validation

Data / Parameter	EF _y
Data unit	tCO ₂ /MWh
Description	Emission factor of East China Power Grid
Source of data	China's Energy Statistical Yearbook, 2006-2008 China Electric Yearbook, 2006-2008.
Value applied	0.8325
Justification of choice of data or description of measurement methods and procedures applied	Based on official national statistics It's calculated during the validation of CDM and used to calculate the Baseline emission. Please refer to the registered PDD for detail information.
Purpose of the data	Calculation of baseline emissions
Comments	/

3.2 Data and Parameters Monitored

Data / Parameter	EG _{out,y}
Data unit	MWh
Description	Electricity delivered to grid in year y
Source of data	electricity meters
Description of measurement methods and procedures to be applied	Measured directly and continuously through onsite meter.
Frequency of monitoring/recording	Monitoring continuously and recorded monthly
Value monitored	2030399.669 (total electricity exported to the grid in this monitoring period)
Monitoring equipment	There are two main electricity meters and two backup meters. The serial number and calibration information is in following table.

QA/QC procedures to be applied	The metering equipment are calibrated and checked for accuracy periodically (once a year) according to the industry standards so that the metering equipment shall have sufficient accuracy.			
	Serial No.	Calibration date	Valid	Accuracy
	96347859 Main meter(M1)	03/04/2014 27/03/2015 19/03/2016 13/03/2017 09/03/2018	02/04/2015 26/03/2016 18/03/2017 12/03/2018 08/03/2019	0.2s
	96386908 Backup meter (M1b)	03/04/2014 27/03/2015 19/03/2016 13/03/2017 09/03/2018	02/04/2015 26/03/2016 18/03/2017 12/03/2018 08/03/2019	0.2s
	14684234 Main meter(M2)	03/04/2014 27/03/2015 19/03/2016 13/03/2017 09/03/2018	02/04/2015 26/03/2016 18/03/2017 12/03/2018 08/03/2019	0.2s
	BJ900523 Backup meter (M2b)	03/04/2014 27/03/2015 19/03/2016 13/03/2017 09/03/2018	02/04/2015 26/03/2016 18/03/2017 12/03/2018 08/03/2019	0.2s
Purpose of the data	Calculation of baseline emissions			
Calculation method	/			
Comments	/			

Data / Parameter	EG _{in,y}
Data unit	MWh
Description	Electricity imported from grid in year y
Source of data	Electricity meters
Description of measurement methods and procedures to be applied	The electricity imported is monitored by the electricity meter and recorded by working staff.
Frequency of monitoring/recording	Monitoring continuously and recorded monthly
Value monitored	4165.523 (total electricity imported from the grid in this monitoring period)
Monitoring equipment	There are two main electricity meters and two backup meters. The serial number and calibration information is in following table.
QA/QC procedures to be applied	The metering equipment are calibrated and checked for accuracy periodically (once a year) according to the

	industry standards so that the metering equipment shall have sufficient accuracy.			
	Serial No.	Calibration date	Valid	Accuracy
	96347859 Main meter(M1)	03/04/2014 27/03/2015 19/03/2016 13/03/2017 09/03/2018	02/04/2015 26/03/2016 18/03/2017 12/03/2018 08/03/2019	0.2s
	96386908 Backup meter (M1b)	03/04/2014 27/03/2015 19/03/2016 13/03/2017 09/03/2018	02/04/2015 26/03/2016 18/03/2017 12/03/2018 08/03/2019	0.2s
	14684234 Main meter(M2)	03/04/2014 27/03/2015 19/03/2016 13/03/2017 09/03/2018	02/04/2015 26/03/2016 18/03/2017 12/03/2018 08/03/2019	0.2s
	BJ900523 Backup meter (M2b)	03/04/2014 27/03/2015 19/03/2016 13/03/2017 09/03/2018	02/04/2015 26/03/2016 18/03/2017 12/03/2018 08/03/2019	0.2s
Purpose of the data	Calculation of baseline emissions			
Calculation method	/			
Comments	/			

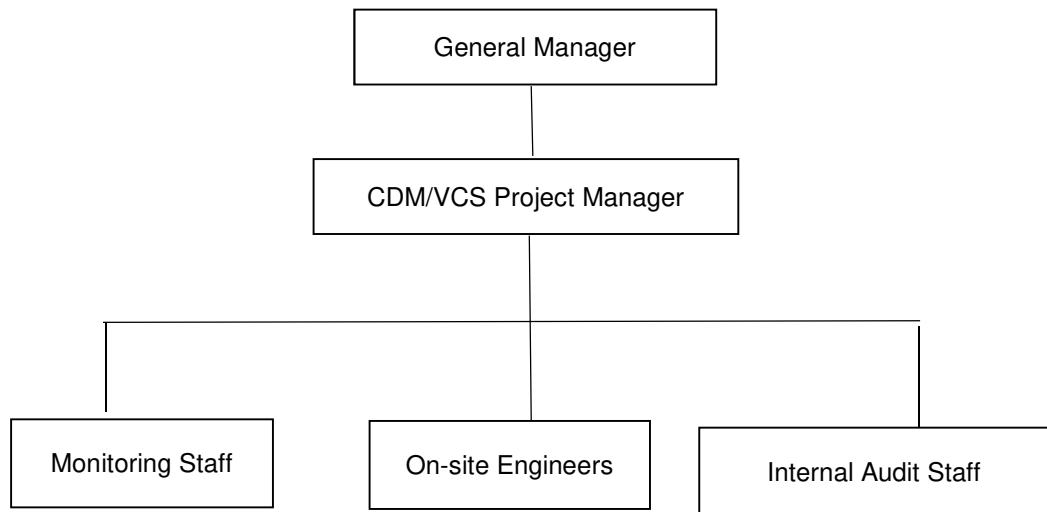
Data / Parameter	EG _y			
Data unit	MWh			
Description	Net electricity delivered to the Grid by the Project activity in year y.			
Source of data	Electricity meter			
Description of measurement methods and procedures to be applied	EG _y = EG _{out,y} - EG _{in,y}			
Frequency of monitoring/recording	Monitoring continuously and recorded monthly			
Value monitored	2026234.146 (total net electricity supplied to the grid in this monitoring period)			
Monitoring equipment	There are two main electricity meters and two backup meters. The serial number and calibration information is in following table.			
QA/QC procedures to be applied	The metering equipment are calibrated and checked for accuracy periodically (once a year) according to the industry standards so that the metering equipment shall have sufficient accuracy.			
	Serial No.	Calibration	Valid	Accuracy

		date		
	96347859	03/04/2014	02/04/2015	0.2s
	Main	27/03/2015	26/03/2016	
	meter(M1)	19/03/2016	18/03/2017	
		13/03/2017	12/03/2018	
		09/03/2018	08/03/2019	
	96386908	03/04/2014	02/04/2015	0.2s
	Backup	27/03/2015	26/03/2016	
	meter (M1b)	19/03/2016	18/03/2017	
		13/03/2017	12/03/2018	
		09/03/2018	08/03/2019	
	14684234	03/04/2014	02/04/2015	0.2s
	Main	27/03/2015	26/03/2016	
	meter(M2)	19/03/2016	18/03/2017	
		13/03/2017	12/03/2018	
		09/03/2018	08/03/2019	
	BJ900523	03/04/2014	02/04/2015	0.2s
	Backup	27/03/2015	26/03/2016	
	meter (M2b)	19/03/2016	18/03/2017	
		13/03/2017	12/03/2018	
		09/03/2018	08/03/2019	
Purpose of the data	Calculation of baseline emissions			
Calculation method	/			
Comments	/			

3.3 Monitoring Plan

1. Monitoring organization

Project owner organized a special CDM/VCS workgroup to take charge of the monitoring work of the whole project. The general manager of the project entity appointed a CDM/VCS project manager. Monitoring staff, on-site engineers and internal audit staff are responsible for the collection of the data and information required in the monitoring plan. The collected data and information is documented and sent to the CDM/VCS manager monthly. The CDM/VCS manager is in charge of the implementation of the monitoring plan and report to the general manager of the project owner. The general manager makes the confirmations on monitoring, calculation data and reports. The management framework is illustrated as follows:



CDM/VCS project manager is responsible for supervising and checking data and whole data record process as well as keeping receipt of sales for cross check. Record keeping is the most important exercise in relation to the monitoring process. In order to facilitate auditor's reference, monitoring results is indexed. All paper-based information is stored by the Project owner and kept at least in one copy. And all data collected were archived electronically and will be kept for at least 2 years after the end of the last crediting period.

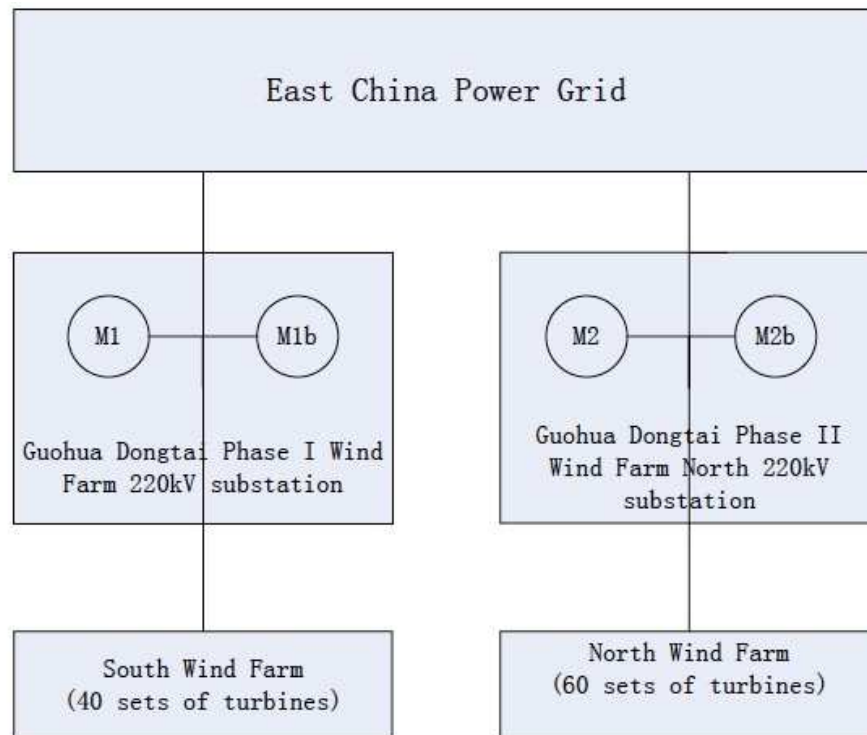
2. Monitoring equipments

The Project consist two wind farms, 60 sets of turbines will be installed in north wind farm and the other 40 sets of turbines will be installed in south wind farm. One pair (meter M1 and its backup meter M1b) were installed at Guohua Dongtai Phase I Wind Farm 220kV substation to measure the electricity export to the grid and electricity import from the grid by south wind farm of the project. Another pair (meter M2 and its backup meter M2b) were installed at Guohua Dongtai Phase II Wind Farm North 220kV substation to measure the electricity generated from the north wind farm of the project.

All the metering equipments used were properly configured and checked according to the national standard. The metering equipment were checked by the project owner and Grid Company before operation. The main meter is owned, operated and maintained by East China Power Grid, and the backup meter is owned, operated and maintained by the owner company. When the main meter is out of order, the readings from the backup meter will be used for reference.

All meters mentioned above has the accuracy of 0.2s and all parameters measured by these meters are continuously measurement daily read at 24:00 and monthly recorded on the last day of each month, and all the data collected are used to calculate the Project's net electricity delivered to the grid. All the records were documented and maintained by the Project owner for DOE's verification.

The location of those meters is presented in following figure:



3. Calibration of Meters & Metering

All the meters were calibrated annually according to national standard by qualified third party to make sure that the electricity meters are accurate. And these calibration records are maintained by the Project owner.

4. Data collection and Emergency procedures

Project manager is responsible for supervising and checking data and whole data record process as well as keeping receipt of sales for cross check. All paper-based information will be stored by the Project owner and kept at least in one copy. And all data collected should be archived electronically and be kept for at least 2 years after the end of the last crediting period.

If the main meter is inaccurate by detecting errors larger than the allowable one, or functions improperly, the grid-connected electricity generated by the Project shall be determined by the reading of its backup meter.

4 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

4.1 Baseline Emissions

According to latest ACM0002, the baseline emissions calculated as follows:

$$BE_y = EG_y * EF_y$$

Where:

BE_y	Baseline emissions in year y (tCO ₂ /yr)
EG_y	Net electricity supplied by the Project to the grid (MWh/yr)
EF_y	Baseline emission factor (tCO ₂ /MWh)

$$EG_y = E_{out,y} - E_{in,y}$$

So,

$$BE_y = (E_{out,y} - E_{in,y}) * EF_y$$

Where:

BE_y = Baseline emissions in year y (tCO₂/yr)

$E_{out,y}$ = Electricity exported by the project activity to the grid in year y

$E_{in,y}$ = Electricity imported by the project activity to the grid (MWh)

EF_y = Baseline emission factor (tCO₂/MWh)

Monitoring period	$E_{out,y}$ (MWh)	$E_{in,y}$ (MWh)	EG_y	EF_y (tCO ₂ /MWh)	BE_y (tCO ₂)
01/06/2014- 31/12/2014	232,962.049	603.659	232,358.390	0.8325	193,438
01/01/2015- 31/12/2015	446,644.809	932.205	445,712.604	0.8325	371,055
01/01/2016- 31/12/2016	461,774.483	935.775	460,838.708	0.8325	383,648
01/01/2017- 31/12/2017	464,902.734	937.367	463,965.367	0.8325	386,251
01/01/2018- 31/10/2018	424,115.594	756.517	423,359.077	0.8325	352,446
Total in this monitoring period (1614days)	2,030,399.669	4,165.523	2,026,234.146	0.8325	1,686,838

The monthly data and ER breakdown are shown in appendix 1.

4.2 Project Emissions

According to the ACM0002 methodology, the project emissions (PE_y) are zero for wind power projects, and therefore the emission reductions are equal to the baseline emissions.

4.3 Leakage

According to ACM0002, no leakage needs to be considered.

4.4 Net GHG Emission Reductions and Removals

$$ER_y = BE_y - PE_y = BE_y = 1,686,838$$

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
01/06/2014-31/12/2014	193,438	0	0	193,438
01/01/2015-31/12/2015	371,055	0	0	371,055
01/01/2016-31/12/2016	383,648	0	0	383,648
01/01/2017-31/12/2017	386,251	0	0	386,251
01/01/2018-31/10/2018	352,446	0	0	352,446
Total	1,686,838	0	0	1,686,838

The estimated annual emission reductions are 338,011tCO₂e as per registered PDD. The monitoring period covers 1614days. The ex-ante emission reductions during this monitoring period are $338,011/365 \times 1614 = 1,494,657$ tCO₂e. The actual emission reductions in this period are 1,686,838tCO₂e, which are 13% more than the estimated value. This will not influence the additionality as per the registered PDD. The increase may be because of the following two reasons, first, wind volume is larger than the wind volume estimation of project design. Second, the wind turbine generators operate well and the allowed electricity generation is larger than before.

Appendix 1. Electricity Record and ER breakdown

Time	Exported electricity via M1(MWh)	Exported electricity via M2 (MWh)	EG _{out,y} (MWh)	Imported electricity via M1(MWh)	Imported electricity via M2(MWh)	EG _{in,y} (MWh)	EG _y (MWh)	ER _y
			A			B	C = A - B	
01/06/2014-30/06/2014	12559.457	16909.394	29,468.851	17.349	50.301	67.650	29,401.201	
01/07/2014-31/07/2014	13153.906	18456.099	31,610.005	14.045	58.485	72.530	31,537.475	
01/08/2014-31/08/2014	14180.813	22921.536	37,102.349	14.045	70.752	84.797	37,017.552	
01/09/2014-30/09/2014	11350.02	17050.44	28,400.460	29.753	95.462	125.215	28,275.245	
01/10/2014-31/10/2014	16704.574	21263.299	37,967.873	12.751	46.570	59.321	37,908.552	
01/11/2014-30/11/2014	13135.399	20364.907	33,500.306	18.110	70.400	88.510	33,411.796	
01/12/2014-31/12/2014	13873.411	21038.794	34,912.205	23.338	82.298	105.636	34,806.569	
Total in 2014	94,957.580	138,004.469	232,962.049	129.391	72.530	201.921	232,358.390	193438
01/01/2015-31/01/2015	9541.145	5482.717	15,023.862	26.638	37.154	63.792	14,960.070	
01/02/2015-28/02/2015	11541.42	18265.262	29,806.682	24.869	64.698	89.567	29,717.115	
01/03/2015-31/03/2015	21963.77	28541.163	50,504.933	16.210	51.198	67.408	50,437.525	
01/04/2015-30/04/2015	20536.56	30683.013	51,219.573	6.785	40.181	46.966	51,172.607	
01/05/2015-31/05/2015	17834.494	27725.421	45,559.915	11.748	49.069	60.817	45,499.098	
01/06/2015-30/06/2015	13801.603	18401.346	32,202.949	17.345	50.301	67.646	32,135.303	
01/07/2015-31/07/2015	14454.845	20084.522	34,539.367	14.045	58.485	72.530	34,466.837	
01/08/2015-31/08/2015	15583.313	24943.952	40,527.265	14.045	70.752	84.797	40,442.468	
01/09/2015-30/09/2015	12472.548	18554.835	31,027.383	29.753	95.462	125.215	30,902.168	
01/10/2015-31/10/2015	18356.659	23139.406	41,496.065	12.751	46.570	59.321	41,436.744	
01/11/2015-30/11/2015	14434.49	22161.744	36,596.234	18.110	70.400	88.510	36,507.724	
01/12/2015-31/12/2015	15245.498	22895.083	38,140.581	23.338	82.298	105.636	38,034.945	
Total in 2015	185,766.345	39,437.578	446,644.809	215.637	716.568	932.205	445,712.604	371055
01/01/2016-	9819.058	5686.982	15,506.040	26.902	37.224	64.126	15,441.914	

31/01/2016								
01/02/2016- 28/02/2016	11877.59 8	18945.73 1	30,823.329	25.133	64.838	89.971	30,733.358	
01/03/2016- 31/03/2016	21603.49	29604.46 7	51,207.957	16.368	51.304	67.672	51,140.285	
01/04/2016- 30/04/2016	22134.71	31826.11 5	53,960.825	6.864	40.251	47.115	53,913.710	
01/05/2016- 31/05/2016	18353.94	28758.33	47,112.270	11.854	49.157	61.011	47,051.259	
01/06/2016- 30/06/2016	15203.57 5	19086.88 3	34,290.458	17.530	50.406	67.936	34,222.522	
01/07/2016- 31/07/2016	13875.84	20832.76 8	34,708.608	14.177	58.590	72.767	34,635.841	
01/08/2016- 31/08/2016	16037.18 2	25873.23 2	41,910.414	14.177	70.893	85.070	41,825.344	
01/09/2016- 30/09/2016	13835.81 8	19246.09 3	33,081.911	30.043	95.638	125.681	32,956.230	
01/10/2016- 31/10/2016	17891.33 3	24001.47 2	41,892.805	12.883	46.658	59.541	41,833.264	
01/11/2016- 30/11/2016	14854.91	22987.37 8	37,842.288	18.295	70.541	88.836	37,753.452	
01/12/2016- 31/12/2016	15689.54 6	23748.03 2	39,437.578	23.575	82.474	106.049	39,331.529	
Total in 2016	191,177.0 00	270,597.4 83	461,774.48 3	217.801	717.974	935.775	460,838.70 8	38364 8
01/01/2017- 31/01/2017	9874.63	5729.979	15,604.609	26.928	37.294	64.222	15,540.387	
01/02/2017- 28/02/2017	11944.81 2	19088.99 5	31,033.807	25.159	63.958	89.117	30,944.690	
01/03/2017- 31/03/2017	22731.43	29828.32 2	52,559.752	16.368	51.392	67.760	52,491.992	
01/04/2017- 30/04/2017	21254.35	32066.76	53,321.110	6.864	40.339	47.203	53,273.907	
01/05/2017- 31/05/2017	18457.85	28975.79 5	47,433.645	11.880	49.262	61.142	47,372.503	
01/06/2017- 30/06/2017	14283.98 4	19231.20 3	33,515.187	17.556	52.501	70.057	33,445.130	
01/07/2017- 31/07/2017	14960.06 2	20990.28 8	35,950.350	14.203	58.714	72.917	35,877.433	
01/08/2017- 31/08/2017	16127.97 1	26068.87 4	42,196.845	14.177	71.034	85.211	42,111.634	
01/09/2017- 30/09/2017	12908.46 5	19391.61	32,300.075	30.070	94.829	124.899	32,175.176	
01/10/2017- 31/10/2017	18998.25 8	24182.94 6	43,181.204	12.883	46.763	59.646	43,121.558	
01/11/2017- 30/11/2017	14938.99 4	23161.19 5	38,100.189	18.295	70.664	88.959	38,011.230	
01/12/2017- 31/12/2017	15778.35 6	23927.60 5	39,705.961	23.602	82.632	106.234	39,599.727	
Total in 2017	192,259.1 62	40,827.28 3	85,840.472	104.070	194.304	298.374	463,965.36 7	38625 1
01/01/2018- 31/01/2018	10818.95 8	6277.955	17,096.913	27.086	37.523	64.609	17,032.304	
01/02/2018- 28/02/2018	13087.14	20914.52	34,001.660	25.291	65.349	90.640	33,911.020	
01/03/2018- 31/03/2018	24905.31 1	32680.87 7	57,586.188	16.474	51.709	68.183	57,518.005	

01/04/2018-30/04/2018	23286.965	35133.384	58,420.349	16.896	40.568	57.464	58,362.885	
01/05/2018-31/05/2018	20223.007	31746.827	51,969.834	11.933	49.544	61.477	51,908.357	
01/06/2018-30/06/2018	15649.999	21070.333	36,720.332	17.635	50.811	68.446	36,651.886	
01/07/2018-31/07/2018	16390.73	22997.638	39,388.368	14.282	59.066	73.348	39,315.020	
01/08/2018-31/08/2018	17670.312	28561.896	46,232.208	14.256	71.456	85.712	46,146.496	
01/09/2018-30/09/2018	14142.929	21246.086	35,389.015	30.254	96.395	126.649	35,262.366	
01/10/2018-31/10/2018	20815.106	26495.621	47,310.727	12.962	47.027	59.989	47,250.738	
Total in 2018	176,990.457	247,125.137	424,115.594	187.069	569.448	756.517	423,359.077	352446
Total in this monitoring period			1,651,337.407			3,124.792	2,026,234.146	1686838