GUOHUA RONGCHENG PHASE II WIND FARM PROJECT

Document Prepared By Beijing Cronus Technology Consultancy Centre

Project Title	Guohua Rongcheng Phase III Wind Farm Project
Version	1.0
1	17/03/2014
Prepared By	Ms. Trace Wang .
Contact	Beijing Cronus Technology Consultancy Centre
	Tel: +86 10 62258766

Table of Contents

1 PROJECT DETAILS

1.1 Summary Description of the Project

Please refer to UNFCCC registered CDM project with Ref. No. 4882.

1.2 Sectoral Scope and Project Type

Sectoral Scope 1: Energy industries (renewable-/ non-renewable sources)

The Project is not a grouped project.

1.3 Project Proponent

Organization name	Guohua Resourceful (Rongcheng) Wind Power Generation Co., Ltd.
Contact person	Xuepei Feng
Title	Manager
Address	No.3 South Road of Dongzhimen, Dongcheng District, Beijing People's Republic of China
Telephone	+86 010-58157576
Email	fengxuepei@guohua.com.cn

1.4 Other Entities Involved in the Project

Organization name	DEMETER VENTURE UK LIMITED (Project Proponent)
Role in the project	VER buyer
Contact person	Tao Xue
Title	CEO
Address	CHASE BUSINESS CENTRE-CHD 39 - 41 CHASE SIDE LONDON N14 5BP
Email	taorholland@gmail.com

1.5 Project Start Date

The Project started on 30/06/2010, which is the date when the first power unit started operation.

1.6 Project Crediting Period

The Project crediting period is from 30/06/2010 to 21/06/2011 (both days included). The total crediting period is 357 days.

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

Project Scale	
Project	✓
Large project	

Year	Estimated GHG emission reductions or removals (tCO_2e)
Year 2010 (30/06/2010 - 31/12/2010)	49,286
Year 2011 (01/01/2010 - 24/06/2011)	45,822
Total estimated ERs	95,108
Total number of crediting years	357 days
Average annual ERs	97,240

1.8 Description of the Project Activity

Please refer to UNFCCC registered CDM project with Ref. No.4882.

1.9 Project Location

The proposed project is located in Chengshan Town, Rongcheng City, Shandong Province, People's Republic of China. The coordinates of the proposed project location area are 122º26′-122º31′east longitude and 37º20′-37º23′ north latitude, and the coordinates of the substation centre is 122º30′ 54.48″east longitude and 37º21′31.78″ north latitude.

1.10 Conditions Prior to Project Initiation

The goal of the project is to generate electricity by making use of wind energy. And then the electricity is delivered to the North China Power Grid (NCPG). In the absence of the project, it would have resulted in equivalent power generation from grid-connected power plants and the addition of new generation sources. Therefore, the baseline scenario of the project is identified as the equivalent electricity service would be provided by the power grid.

The Project is a renewable resource based on wind farm project without GHG emissions during operation period. Therefore, it was confirmed that the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction.

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

The Project complies with all Chinese relevant laws and regulations. It also obtained the approval letters from governmental authorities: Development and Reform Commission (DRC), as well as

Environment Protection Administration (EPA) of Shandong Province. The two approvals well demonstrate that local government permits the construction of the project. Consequently, the Project is compliance with laws, status and other regulatory frameworks.

1.12 Ownership and Other Programs

1.12.1 Right of Use

The business license is the evidence for right of use. The approval of Feasibility Survey Report (FSR) and Environmental Impact Assessment (EIA) are evidences for legislative right. Besides, the power purchase agreement is the evidence for the ownership of the plant, equipment and process generating.

1.12.2 Emissions Trading Programs and Other Binding Limits

The Project has been registered as a CDM project on 22/06/2011, for which a renewable crediting period of 3×7 years started from 25/06/2011 will be used under the CDM GHG Program. Therefore, CO_2 emission reductions generated by the project during the CDM crediting period will be verified as unique CERs, but not VCUs to avoid double counting. As to the project under VCS (Version.3.4), only emission reductions achieved from 30/06/2010~ 21/06/2011 will be considered as VCUs.

1.12.3 Other Forms of Environmental Credit

The Project participants choose a clear VCS crediting period from 30/06/2010~ 21/06/2011, which has not created another form of environmental credits.

1.12.4 Participation under Other GHG Programs

The Project has been registered as a CDM project on 22/06/2011, and the registration number is 4882.

1.12.5 Projects Rejected by Other GHG Programs

N/A

1.13 Additional Information Relevant to the Project

Eligibility Criteria

N/A

Leakage Management

According to ACM0002 (Version 12.1.0) no leakage is considered.

Commercially Sensitive Information

N/A

Further Information

N/A

2 APPLICATION OF METHODOLOGY

2.1 Title and Reference of Methodology

The CDM consolidated baseline and monitoring methodology:

ACM0002 (Version 12.1.0): "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"

http://cdm.unfccc.int/methodologies/PAmethodologies/approved.html

2.2 Applicability of Methodology

Please refer to UNFCCC registered CDM project with Ref No. 4882.

2.3 Project Boundary

Source		Gas	Included?	Justification/Explanation
Baseline	CO2 emission from electricity generation in fossil fuel fired power plants that are displaced due to the project activity.	CO_2	Yes	Main Emission Source
		CH_4	No	Minor emission source
		N_2O	No	Minor emission source
Project	Emission from reservoir of the proposed project (inside the project boundary)	CO_2	No	According to ACM0002 (Version 12.1.0), project emission is zero.
		CH_4	No	According to ACM0002 (Version 12.1.0), project emission is zero.
		N_2O	No	According to ACM0002 (Version 12.1.0), project emission is zero..

2.4 Baseline Scenario

Please refer to UNFCCC registered CDM project with Ref No. 4882.

2.5 Additionality

Please refer to UNFCCC registered CDM project with Ref No. 4882.

2.6 Methodology Deviations

N/A

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

3.1 Baseline Emissions

Please refer to UNFCCC registered CDM project with Ref No. 4882.

3.2 Project Emissions

Please refer to UNFCCC registered CDM project with Ref No. 4882.

3.3 Leakage

Please refer to UNFCCC registered CDM project with Ref No. 4882.

3.4 Net GHG Emission Reductions and Removals

Year	Estimated baseline emissions or removals (tCO_2e)	Estimated project emissions or removals (tCO_2e)	Estimated leakage emissions (tCO_2e)	Estimated net GHG emission reductions or removals (tCO_2e)
Year 2010	49,286	0	0	49,286
Year 2011	45,822	0	0	45,822
Total	95,108	0	0	95,108

4 MONITORING

4.1 Data and Parameters Available at Validation

Data / Parameter	$EF_{grid,CM,y}$
Data unit	tCO_2/MWh
Description	The combined margin emission factor of NCPG
Source of data	The registered PDD of the project
Value applied:	0.9502
Justification of choice of data or description of measurement methods and procedures applied	Official and authoritative statistics
Purpose of Data	Calculation of baseline emission
Comments	N/A

4.2 Data and Parameters Monitored

Data / Parameter	$EG_{facility,y}$
Data unit	MWh/yr

Description	The net electricity supplied by the project activity to the grid in year y.
Source of data	Calculated based on the data of $EG_{export, y}$, $EG_{import, y}$ and $EG_{import\ backup, y}$
Description of measurement methods and procedures to be applied	$EG_{export, y}$, $EG_{import, y}$ and $EG_{import\ backup, y}$ are continously measured and recorded monthly. $EG_{facility, y}$ is calculated as $EG_{facility, y}=EG_{export, y}-EG_{import, y}-EG_{import\ backup, y}$
Frequency of monitoring/recording	Monitoring continuously and recording monthly
Value monitored:	102,337 (Estimated annual value)
Monitoring equipment	Monitored by bidirectional electricity meter (electronic) Serial number: 10030265270079 (M1) 3011500 (M2) 10030265270067(M3) Accuracy: 0.5
QA/QC procedures to be applied	The data of $EG_{export, y}$, $EG_{import, y}$ and $EG_{import\ backup, y}$ will be double checked by receipt of sales or relevant commercial data.
Purpose of the data	Calculation of baseline emission
Calculation method	$EG_{facility, y}=EG_{export, y}-EG_{import, y}-EG_{import\ backup, y}$
Comments	-

Data / Parameter	$EG_{export, y}$
Data unit	*MWh/yr*
Description	*Electricity delivered to NCPG by the proposed project in the year y.*
Source of data	Electricity meter
Description of measurement methods and procedures to be applied	The electricity delivered to NCPG by the proposed project in the year y will be monitored and measured by meter installed in the project site. The readings of electricity meter will be continuously measured and monthly recorded.
Frequency of monitoring/recording	Monitoring continuously and recording monthly
Value monitored:	102,337
Monitoring equipment	Monitored by bidirectional electricity meter (electronic) Serial number: 10030265270079 (M1) 3011500 (M2) Accuracy: 0.5
QA/QC procedures to be applied	The meters will be calibrated by qualified third party according to the relevant regulations. The accuracy of

	electricity meter is 0.5.
Purpose of the data	Calculation of baseline emission
Calculation method	-
Comments	-

Data / Parameter	$EG_{import, y}$
Data unit	MWh/yr
Description	*Electricity consumed by the proposed project which is imported from the NCPG at the main line in the year y.*
Source of data	Electricity meter
Description of measurement methods and procedures to be applied	The electricity consumed by the proposed project which is imported from the NCPG at the main line in the year y will be monitored and measured by meter installed in the project site. The readings of electricity meter will be continuously measured and monthly recorded.
Frequency of monitoring/recording	Monitoring continuously and recording monthly
Value monitored:	0 MWh/yr and this data will be measured after the operation of the proposed project
Monitoring equipment	Monitored by bidirectional electricity meter (electronic) Serial number: 10030265270079 (M1) 3011500 (M2) Accuracy: 0.5
QA/QC procedures to be applied	The meters will be calibrated by qualified third party according to the relevant regulations. The accuracy of electricity meter is 0.5.
Purpose of the data	Calculation of baseline emission
Calculation method	-
Comments	Uncertainty level of data is low.

Data / Parameter	$EG_{import\ backup\ ,y}$
Data unit	MWh/yr
Description	*Electricity consumed by the proposed project which is imported from the NCPG at the backup line in the year y.*
Source of data	Electricity meter
Description of measurement methods and procedures to be applied	*The electricity consumed by the proposed project which is imported from the NCPG at the backup line in the year y will be monitored and measured by meter installed in the project site. The readings of electricity meter will be continuously measured and monthly recorded.*

Frequency of monitoring/recording	Monitoring continuously and recording monthly
Value monitored:	0 MWh/yr and this data will be measured after the operation of the proposed project
Monitoring equipment	Monitored by bidirectional electricity meter (electronic) Serial number: 10030265270067(M3) Accuracy: 0.5
QA/QC procedures to be applied	The meters will be calibrated by qualified third party according to the relevant regulations. The accuracy of electricity meter is 0.5.
Purpose of the data	Calculation of baseline emission
Calculation method	-
Comments	Uncertainty level of data is low.

4.3 Monitoring Plan

Please refer to UNFCCC registered CDM project with Ref No. 4882.

5 ENVIRONMENTAL IMPACT

Please refer to UNFCCC registered CDM project with Ref No. 4882.

6 STAKEHOLDER COMMENTS

Please refer to UNFCCC registered CDM project with Ref No. 4882.