

VALIDATION REPORT FOR THE VCS PROJECT:

Beijing Guanting Wind Power Project Phase II and Phase II addition

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Summary:

China Quality Certification Centre (CQC) is commissioned by Beijing Jingneng Clean Energy Co., Ltd. to perform a validation the project -'Beijing Guanting Wind Power Project Phase II and Phase II addition' with regard to the requirements of VCS (version 3.1/3.2) and ACM0002 (Version 11).

The proposed project -'Beijing Guanting Wind Power Project Phase II and Phase II addition' was registered as a CDM project on Feb.28th 2011 and the UNFCCC reference number is 4413. This validation of VCS PD template sections 1.2,1.3,1.5,1.6,1.7,1.9,1.10,1.12.1,1.12.2,1.12.3.1.12.4 and 1.13 is included to cover all the requirements set out in the VCS (version 3.1/3.2) standards for project validation together with the validated PDD (Version 05.4, dated Jan.13th 2011) and CDM validation report (Version 04.1, dated Jan.24th 2011).

The objective of the validation of the project is to determine whether the validated CDM project meet all the criteria defined under VCS (version 3.1/3.2), especially specified in section 3.12.4 of VCS (version 3.1) or 3.12.8 of VCS (version 3.2).

CQC team has employed a risk-based approach in the validation, focusing on the identification of significant risks and reliability of project design and generation of emission reductions according to the relevant applicable rules for VCUs verification under the VCS.

The validation under CDM was conducted within two years of the project start date and no non-conformity was found during this validation. Concurrently with the validation, the verification of emission reductions achieved during the monitoring period from Dec.23rd, 2009 to Feb.27th, 2011 as conducted.

A risk-based approach and document review and an on-site visit combined method were followed by CQC team to perform this verification. As a result of the validation, the validation team confirms that the project follows the VCS (version 3.1/3.2).

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1 INTRODUCTION

1.1 Objective

The objective of the validation of the project is to determine whether the validated CDM project, Beijing Guanting Wind Power Project Phase II and Phase II addition, meet all the criteria defined under VCS (version 3.1/3.2), especially specified in section 3.12.4 of VCS (version 3.1) or 3.12.8 of VCS (version 3.2) ^{/1/}.

1.2 Scope and Criteria

CQC team has employed a risk-based approach in the validation and verification, focusing on the identification of significant risks and reliability of project design, system monitoring and generation of emission reductions according to the relevant applicable rules for VCUs verification under the VCS.

The validation of this VCS project are based on the supplement VCS project description ^{/6/} defined in section 3.12.4 of VCS (version 3.1) or 3.12.8 of VCS (version 3.2) ^{/1/}, Monitoring Report ^{/2/3/}, the validated CDM project design document (PDD) ^{/4/} and report ^{/5/}, CDM VVM ver.01.2 ^{/7/}, ACM0002 (Version 11) ^{/8/}, CDM Monitoring & QC/QA Manual of this project ^{/9/} and the supporting documents and information, combined with the on-site assessment. Furthermore, publicly available information was considered as well.

This validation are not intended to provide any consulting services to the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project monitoring towards reductions in the GHG emissions.

1.3 Level of assurance

As the VCS (version 3.1/3.2) only recognizes verified emission reductions, CQC has focused on providing a reasonable level of assurance that the emission reduction calculation methodology used is appropriate and correctly applied, and that emission reductions have been accurately monitored.

The validation and verification report is based on supplement VCS PD ^{/6/}, CDM PDD ^{/4/}, CDM validation report ^{/5/}, VCS Monitoring Report ^{/2-3/}, supporting evidence made available to the verifier and information collected through performing interviews and during the on-site visit.

1.4 Summary Description of the Project

Beijing Guanting Wind Power Project Phase II and Phase II addition is a wind power utilization project developed by Beijing Jingneng Clean Energy Co., Ltd. sited on northwest side of Beijing, the north bank of Guanting Reservoir which situated in south-east side of Langshan wind valley in Huailai County, Hebei Province, with geographical coordinates of north latitude of 40.3192°~40.3507° and east longitude of 115.6112°~115.6999° for Guanting Phase II and with north latitude of 40.3263°~40.3499° and east longitude of 115.5734~ 115.6144° for Phase II addition. The central geographical coordinates for Guanting Phase II are north latitude 40.3375° and east longitude 115.6750°, while the central geographical coordinates for Phase II addition are north latitude 40.3381° and east longitude 115.6029°.

The Project consists of two projects as follows:

1) Beijing Guanting Wind Power Project Phase II (hereafter referred to as the Guanting Phase II), the purpose of Guanting Phase II is to install 33 sets of wind turbines, with unit capacity of 1,500kW and the total installed capacity of which is 49.5MW. It is estimated that the feed-in electricity is approximately 92.784GWh per year.

2) Beijing Guanting Wind Power Project Phase II addition (hereafter referred to as the Phase II addition), the purpose of Phase II addition is to install 24 sets of wind turbines, with unit capacity of 1,500kW and the total installed capacity of which is 36MW. It is estimated that the feed-in electricity is approximately 68.335GWh per year.

A total of 57 sets of wind turbines are to be installed in the Project, with a total installed capacity of 85.5MW. It is estimated that the feed-in electricity is approximately 161.119GWh per year, which will be sold into North China Power Grid (NCPG) via an existed 110kV circuit after boosted by the No.2 main

transformer of the 110kV substation of Beijing Guanting Wind Farm. The Project is a renewable energy project and it will achieve greenhouse gas (GHG) emission reductions of 153,099 tCO₂e annually by displacing power generation of those fossil fuel-fired power plants delivered to the NCPG under the baseline scenario.

2 VALIDATION PROCESS

2.1 Method and Criteria

The validation was performed in two stages: document review and on-site assessment (including interview and inspection). The validation was in accordance with applicable criteria listed in section 1.2 of this report and no any CAR/CL was found by CQC validation team during this validation.

2.2 Document Review

The validation was planned after review of the supplementary Project Description specified as VCS PD template sections 1.2,1.3,1.5,1.6,1.7,1.9,1.10,1.12.1,1.12.2,1.12.3.1.12.4 and 1.13 to cover all the requirements set out in the VCS standard (version 3.1/3.2) , monitoring report and the methodology used to develop the project's greenhouse gas assertion. The following table lists documents consulted during the validation process:

Table 2-1 Document list during this validation

Reference	Documents
1	VCS (version 3.1 and 3.2)
2	The monitoring report covering the monitoring period from Dec.23 rd , 2009 to Feb.27 th , 2011. Version 01. Dated Oct.25 th 2011.
3	The monitoring report covering the monitoring period from Dec.23 rd , 2009 to Feb.27 th , 2011. Version 02. Dated Mar.7 th 2012.
4	The registered CDM PDD of this project, version 05.4, dated Jan.13 th 2011
5	The registered CDM validation report of this project, version 04.1, dated Jan.24 th 2011
6	The supplement VCS PD of this project defined in section 3.12.4 of VCS (version 3.1). version 01, dated Oct.25 th 2011
7	CDM VVM ver.01.2
8	ACM0002 (Version 11) – “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”.
9	Beijing Jingneng Energy Technology Investment Co., Ltd., CDM Monitoring & QC Manual, Dec. 2009.
10	Registered CDM Project UNFCCC website: http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1296190714.03/view
11	National Development and Reform Commission of P.R. China, Letter of Approval for Beijing Guanting Wind Power Project Phase II and Phase II addition, No. 2018, December, 2009.
12	Business License of Electric Power for Beijing Jingneng Clean Energy Co., Ltd., 27 February 2008.
13	Development & Reform Commission of Beijing, Approval for Beijing Guanting Wind Power Project Phase II, 15 December 2008; Development & Reform Commission of Beijing, Approval for Beijing Guanting Wind Power Project Phase II Addition, 31 May 2009.
14	The electricity measurement certification issued by local grid company, dated Jun.14 th 2011.
15	The daily operation records of this project covering this monitoring period.
16	Environmental Protection Bureau of Beijing, Approval for Environmental Impact Assessment Form of Beijing Guanting Wind Power Project Phase II, 17 October 2008; Environmental Protection Bureau of Beijing, Approval for Environmental Impact Assessment Form of Beijing Guanting Wind Power Project Phase II Addition, 22 May 2009.
17	The approval letter from the National Development and Reform Commission of the People's Republic of China on the change of the project's name dated Dec.8 th 2011.

2.3 Interviews

On Jan.4th 2012, CQC validation team conducted a site visit of the Project and the information on interviews are summarized in section 2.4 below.

2.4 Site Inspections

On Jan.4th 2012, CQC validation team conducted a site visit of the Project. The purpose and objective of the site visit was to interview relevant site personnel and review the Project's background, operations, eligibility and information management systems, as well as assess the Project's controls for sources of potential errors and omissions. The validation team interviewed the following persons:

Table 2-2 Interviewed persons and interview topics

Date	Interviewee	Organization	Interview Topics
Jan.4 th 2012	Ms.Shen Chunyan Project manager Mr.Wang Zheng	Beijing Jingneng Clean Energy Co., Ltd. (Project owner)	- Project background information; - Desk review findings; - General aspects of the project; - Project design, Commissioning and implementation;
	Dr.Zheng Zhaoning Ms.Xu Hongmei	Goldchina Consultancy International Co., Ltd.(Consultant)	- Technical equipment and operation of the project - Performance of the project - Involved personnel and responsibilities - Training and practice of the operational personnel - Editorial aspects of MR and supplement PD - Details of emission reduction calculation.

2.5 Resolution of Any Material Discrepancy

Material discrepancies identified in the course of the validation are addressed either as CARs, CLs or FARs.

A **Corrective Action Request (CAR)** is established where:

- mistakes have been made in assumptions, application of the methodology or the project documentation which will have a direct influence the project results,
- the requirements deemed relevant for validation of the project with certain characteristics have not been met or
- there is a risk that the project would not be registered or that emission reductions would not be able to be verified and certified.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to project implementation should be reviewed during the first verification.

3 VALIDATION FINDINGS

3.1 Project Design

The proposed project was registered as a CDM project on Feb.28th 2011 and the UNFCCC reference number is 4413^{/10/}. As per the requirements defined under VCS (version 3.1)^{/1/}, especially specified in section 3.12.4 of VCS (version 3.1) or 3.12.8 of VCS (version 3.2), sections 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS *Project Description Template* (version 03.0) shall be subject to further validation. The validation of these sections is stated as follows:

Section 1.2: Sectoral Scope and Project Type

Based on the onsite visit, the validation team concluded that the Project was appropriately classified as a Sectoral Scope 1 project under the classification scheme of the Clean Development Mechanism. Sectoral Scope 1 is “energy industries (renewable-/non-renewable sources).” The validation team also concluded that the Project activity was Grid-connected renewable power generation (wind power project). Based on the registered CDM PDD and CDM validation report, combined with the onsite visit, CQC team confirms that this project is not a grouped project.

The estimated ERs achieved by this project are 153,099 tonnes of CO₂e, exceeding 60,000 metric tons per year. The applied baseline and monitoring methodologies and tools are:

- ACM0002 (Version 11) – “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”^{/8/};
- Demonstration and Assessment of Additionality, version 05.2;
- Tool to calculate the emission factor for an electricity system, version 02.

For more information regarding the methodology, please refer to the link:

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

Section 1.3: Project Proponent

CQC validation team has reviewed the letter of approval issued by the National Development and Reform Commission of the People’s Republic of China^{/11/} under CDM and Business License^{/12/} and the Feasibility Study Report (FSR) Approvals^{/13/} issued by the Development and Reform Commission of Beijing. Moreover, CQC validation team performed an onsite assessment for this project on Jan.4th 2012. All of these activities have provided CQC validation team with sufficient evidence that Beijing Jingneng Clean Energy Co., Ltd. is the project owner of this project and the contact information in the supplement VCS PD^{/12/} is accurate.

Section 1.5: Project Start Date

CQC validation team has reviewed the electricity measurement certification^{/14/} issued by local grid company which confirmed that the earliest operation time is Dec.23rd 2009. PP has supplied the daily operation records^{/15/} which shows that the project was put to operation on Dec.23rd 2009. Based on the evidence above, CQC concludes the project start date is Dec.23rd 2009, which is consistent with the definition in the VCS standard (version 3.1/3.2).

Section 1.6: Project Crediting Period

This project was registered as a CDM project on Feb.28th 2011 (UNFCCC registration reference number: 4413)^{/10/} and the start crediting date under CDM was Feb.28th 2011 according to the registered CDM PDD^{/4/}.

Then PP has chosen the Project Crediting Period of this project under VCS from Dec.23rd 2009 (Project Start Date) to Feb.27th 2011. CQC validation team confirms that the chosen project crediting period is in conformity with VCS (version 3.1) rules (§ 3.9) and VCS (version 3.2) rules (§ 3.9).

Section 1.7: Project Scale and Estimated GHG Emission Reductions or Removals

CQC validation team has reviewed the PDD^{/4/} and validation report^{/5/} under CDM and confirms the

estimated calculation of ER is 153,099 tonnes of CO₂e annually and reasonable, which is far less than 1,000,000 tonnes of CO₂e annually. So this proposed project is clarified as Project as per VCS (version 3.2) rules (§ 3.10).

Section 1.9: Project Location

The Project is sited on northwest side of Beijing, the north bank of Guanting Reservoir which situated in south-east side of Langshan wind valley in Huailai County, Hebei Province, with geographical coordinates of north latitude of 40.3192°~40.3507° and east longitude of 115.6112°~115.6999° for Guanting Phase II and with north latitude of 40.3263°~40.3499° and east longitude of 115.5734~115.6144° for Phase II addition. The central geographical coordinates for Guanting Phase II are north latitude 40.3375° and east longitude 115.6750°, while the central geographical coordinates for Phase II addition are north latitude 40.3381° and east longitude 115.6029°.

The CQC validation team performed an on-site visit to the project on Jan.4th 2012 and confirmed that the project falls in multiple project activity instances defined in VCS (version 3.2) rules (§ 3.3 and § 3.11.1) and the description of project location consists with the VCS PD and VCS (version 3.2).

Section 1.10: Conditions Prior to Project Initiation

CQC validation team has reviewed the registered CDM PDD and VCS supplementary VCS PD and confirms that the conditions existing prior to project initiation is that the electricity requirement was satisfied by Heibei power grid which is a sub-grid of the North China Power Grid (NCPG).

The development and implementation of the Project fits into the priority areas of the development of China's energy industry. The Project is not only supply renewable electricity to grid, but also contribute to sustainable development of the local community and the host country.

Section 1.12.1: Proof of Title

Evidence of proof of title has been demonstrated via document proving ownership of the plant and equipment at the site during the on-site visit. In addition to the letter of approval granted by the National Development and Reform Commission of the People's Republic of China^{/11/}, the owner has also obtained all relevant permits for the proposed project including a Business License^{/12/}, Feasibility Study Report (FSR) approvals^{/13/} issued by the Development and Reform Commission of Beijing, Environmental Impact Assessment (EIA) approvals^{/16/} issued by Environment Protection Bureau of Beijing. During the onsite visit, PP also supplied an approval letter from the National Development and Reform Commission of the People's Republic of China^{/17/} on the change of the project's name. As per this approval letter, NDRC agreed that the project that only the name of the project owner was changed from the previous name in the registered CDM PDD, Beijing Jingneng Energy Technology Investment Co., Ltd., to current one, Beijing Jingneng Clean Energy Co., Ltd., and any other provision remains unchanged.

The CQC validation team confirms that the project's design and implementation has been subject to relevant national legislation in China, which also meets the standard for proof of title set forth in the VCS v. 3.1, § 3.12.1.

Although the term **proof of title** has been replaced with **evidence of right of use** in VCS (version 3.2), CQC team confirms that the evidence of proof of title fulfills the requirement of **evidence of right of use** in VCS (version 3.2).

Section 1.12.2: Emissions Trading Programs and Other Binding Limits

Emissions from this project during this monitoring period will be only claimed as VCU's under VCS. GHG emission reductions generated by the proposed project during the CDM crediting period will be verified as unique CERs during the CDM crediting period.

The CQC validation team confirms that there is no Chinese domestic scheme for renewable energy certificates in existence. The team also checked the Gold Standard Registry and the Climate Action Reserve to determine if the project is producing other environmental credits. It was confirmed by the CQC validation team that the project is not listed on these registries. Emissions from this project were not subject to any other emissions trading programs or other binding limits on emissions and none were proposed for implementation by any local regional or national authorities at the date of the project

validation.

The CQC validation team confirms that it is not applicable for the project participating in emissions trading programs and Other Binding Limits.

Section 1.12.3: Participation under Other GHG Programs

This project was registered as a CDM project on Feb.28th 2011 and only emission reductions achieved before CDM crediting start date were claimed as VCUs under VCS.

Section 1.12.4: Other Forms of Environmental Credit

As a registered CDM project, any emission reductions generated from the project starting from the crediting start date (Feb.28th 2011) will be verified under the CDM as CERs. Any qualified emission reductions generated outside of the CDM, emission reductions generated prior to the CDM registration date, were generated voluntarily. Those voluntary emission reductions of this project are validated and verified as VCUs under the VCS.

The CQC validation team confirms that there is no Chinese domestic scheme for renewable energy certificates in existence. The team also checked the Gold Standard Registry and the Climate Action Reserve to determine if the project is producing other environmental credits. It was confirmed by the CQC validation team that the project is not listed on these registries and therefore there is no other environmental credit (for example renewable energy certificate) which has or will be produced by or obtained for the project.

Section 1.13: Additional Information Relevant to the Project

- Eligibility Criteria

N/A. This project is not grouped projects.

- Leakage Management

N/A, the leakage of the project is zero. Detailed information on leakage has been stated in verification part below.

- Commercially Sensitive Information

N/A, all information stated in this report is public.

- Further Information

Key information and data derived from the PDD used to calculate emission reduction are listed in this section.

3.2 Application of Methodology

3.2.1 Title and Reference

N/A.

3.2.2 Applicability

N/A.

3.2.3 Project Boundary

N/A.

3.2.4 Baseline Scenario

N/A.

3.2.5 Additionality

N/A.

3.2.6 Quantification of GHG Emission Reductions and Removals

N/A.

3.2.7 Methodology Deviations

N/A.

3.2.8 Monitoring Plan

N/A.

3.3 Environmental Impact

N/A.

3.4 Comments by stakeholders

N/A.

4 VALIDATION CONCLUSION

Beijing Jingneng Clean Energy Co., Ltd. has commissioned CQC to carry out the supplement validation of the project “JBeijing Guanting Wind Power Project Phase II and Phase II addition”, with regard to the relevant requirements of VCS (version 3.1/3.2) Standard.

Beijing Guanting Wind Power Project Phase II and Phase II addition is a wind power utilization project developed by Beijing Jingneng Clean Energy Co., Ltd. and is located on northwest side of Beijing, the north bank of Guanting Reservoir which situated in south-east side of Langshan wind valley in Huailai County, Hebei Province, with geographical coordinates of north latitude of 40.3192°~40.3507° and east longitude of 115.6112°~115.6999° for Guanting Phase II and with north latitude of 40.3263°~40.3499° and east longitude of 115.5734~ 115.6144° for Phase II addition. The central geographical coordinates for Guanting Phase II are north latitude 40.3375° and east longitude 115.6750°, while the central geographical coordinates for Phase II addition are north latitude 40.3381° and east longitude 115.6029°.

A total of 57 sets of wind turbines are to be installed in the Project, with a total installed capacity of 85.5MW. It is estimated that the feed-in electricity is approximately 161.119GWh per year, which will be sold into North China Power Grid (NCPG) via an existed 110kV circuit after boosted by the No.2 main transformer of the 110kV substation of Beijing Guanting Wind Farm. The Project is a renewable energy project and it will achieve greenhouse gas (GHG) emission reductions of 153,099 tCO₂e annually by displacing power generation of those fossil fuel-fired power plants delivered to the NCPG under the baseline scenario.

The methodology applied for this project is ACM0002 (Version 11) – “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”.

This project which was earlier validated by other DOE as a CDM project activity was given a positive validation opinion and the project has been accepted and registered with UNFCCC (Ref. No. 4413, registration date: Feb.28th 2011).

Thus as per the VCS (version 3.1) section 3.12.4 or VCS (version 3.2 section 3.18.4, only validation is required. A risk based approach has been followed to perform this limited validation covering the sections 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS *Project Description Template* (version 03.0) and no any discrepancy is identified in the course of the validation.

As a result of the validation, the validation team confirms that the project follows the VCS (version 3.1/3.2).