



VALIDATION REPORT

HEBEI CONSTRUCTION INVESTMENT YUZHOU WIND ENERGY Co., LTD.

VALIDATION OF THE

YUXIAN BAIYANTUO 49.3 MW WIND POWER PROJECT

BUREAU VERITAS CERTIFICATION

REPORT No. CHINA-VAL/6037/2010

REVISION No. 01

Great Guildford House, 30 Great Guildford Street
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VALIDATION REPORT

Date of first issue: 28/01/2011	Organizational unit: Bureau Veritas Certification Holding SAS
Client: Hebei Construction Investment Yuzhou Wind Energy Co., Ltd	Client ref.: Mr. Du Guang
Summary: Bureau Veritas Certification has completed the validation of Yuxian Baiyantuo 49.3 MW Wind Power Project owned by Hebei Construction Investment Yuzhou Wind Energy Co., Ltd. and located in Yu County, Zhangjiakou City, Hebei Province, P.R.China. The validation was carried out on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria. The validation scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up on site visit and interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion. The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures. The first output of the validation process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document. In summary, it is Bureau Veritas Certification's opinion that the project correctly applies the baseline and monitoring methodology ACM0002 version 12.1.0 and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.	

Report No.: CHINA-Val/6037/2010	Subject Group: CDM
Project title: Yuxian Baiyantuo 49.3 MW Wind Power Project	
Work carried out by: Li Xingtong - Team Leader Gabriele Limonta - Team Member (Trainee)	
Internal Technical Review carried out by: Jasmine Tang (Internal Reviewer)	
Date of this revision: 16/05/2011	Rev. No.: 01
Number of pages: 120	

Indexing terms

Work approved by

Flavio Gomes

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1 INTRODUCTION

Hebei Construction Investment Yuzhou Wind Energy Co., Ltd. (the Project Participant, hereafter called “**the PP**”) has commissioned Bureau Veritas Certification (hereafter called “**BVC**”) the validation of the CDM project Yuxian Baiyantuo 49.3 MW Wind Power Project (Stage I) (hereafter called “**the Project**”) located in Yu County, Zhangjiakou City, Hebei Province, P.R.China.

This report summarizes the findings of the validation of the project, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1 OBJECTIVE

The validation serves as project design verification and is a requirement of all projects. It is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design, as documented, is sound and reasonable, and meet the stated requirements and identified criteria. Validation is a requirement for all CDM projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).

UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

1.2 SCOPE

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

The validation is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

1.3 VALIDATION TEAM AND INTERNAL TECHNICAL REVIEWER

FUNCTION	NAME	CODE HOLDER*	TASK PERFORMED
Team Leader	Mr. Li Xingtong	☒ Yes ☐ No	☒ DR ☒ SV ☒ RI
Team Member (Trainee)	Mr. Limonta Gabriele	☐ Yes ☒ No	☒ DR ☒ SV ☐ RI
Technical Specialist	N.A.	☐ Yes ☐ No	☐ DR ☐ SV ☐ RI
Financial Specialist	N.A.	☐ Yes ☐ No	☐ DR ☐ SV ☐ RI
Internal	Ms. Jasmine Tang	☒ Yes ☐ No	☒ DR ☐ SV ☐ RI



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Technical Reviewer (ITR)			RI
Specialist supporting ITR	N.A.	☐ Yes ☐ No	☐ DR ☐ SV ☐ RI

*DR = Document Review; SV = Site Visit; RI = Report issuance

2 METHODOLOGY

The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a validation protocol was customized for the project, according to the version 01.2 of the Clean Development Mechanism Validation and Verification Manual issued by CDM Executive Board at its 55th meeting on 30/07/2010 /Ref-1/. The protocol shows, in a transparent manner, criteria (requirements), means of validation and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The completed validation protocol is enclosed in Appendix A to this report.

2.1 REVIEW OF DOCUMENTS

The Project Design Document (PDD) /1/ submitted by Additional Consulting and Engineering and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for Completing the Project Design Document (CDM-PDD), Approved methodology, Kyoto Protocol, Clarifications on Validation Requirements to be Checked by a Designated Operational Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests Additional Consulting and Engineering revised the PDD and resubmitted it on 16/05/2011 /2/ and the validation conclusion presented in this report relate to the Project as described in the PDD version 03.

2.2 FOLLOW-UP INTERVIEWS

On 08/09/2010, Mr. Li Xingtong and Mr. Limonta Gabriele, respectively Team Leader and Team Member (Trainee) of Bureau Veritas Certification performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of the PP, the consultant and local stakeholders were interviewed (see Section 6-References). The main topics of the interviews are summarized in Table 1.

**Table 1 Interview topics**

Interviewed organization	Interview topics
Hebei Construction Investment Yuzhou Wind Energy Co., Ltd. (The PP)	↪ Project background information and CDM consideration. ↪ Project technology, operation, maintenance and monitoring capability. ↪ Project monitoring and management plan. ↪ Stakeholder consultation process. ↪ Project approval status (incl. EIA approval, CDM project approval status) ↪ Wind power development in the area ↪ Government policies related to wind power projects
Local Stakeholder	↪ Project background in details ↪ Stakeholder comments ↪ Social and environmental impact of the project
Additional Consulting and Engineering (the consultant)	↪ Applicability of selected methodology. ↪ Baseline determination. ↪ Emission reductions calculation. ↪ Emission reduction monitoring plan.

2.3 RESOLUTION OF CLARIFICATION AND CORRECTIVE ACTION REQUESTS

The objective of this phase of the validation is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the project design.

Corrective Action Request (CAR) is issued, where:

- (a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- (b) The CDM requirements have not been met;
- (c) There is a risk that emission reductions cannot be monitored or calculated.

BVC may also use the term Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

To guarantee the transparency of the verification process, the concerns raised are documented in more detail in the verification protocol in Appendix A.

2.4 INTERNAL QUALITY CONTROL

The validation report underwent an Internal Technical Review (ITR) before requesting registration of the project activity.

The ITR is an independent process performed to examine thoroughly that the process of validation has been carried out in conformance with the requirements of the validation scheme as well as internal Bureau Veritas Certification procedures.



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The Team Leader provides a copy of the validation report to the reviewer, including any necessary validation documentation. The reviewer reviews the submitted documentation for conformance with the validation scheme. This will be a comprehensive review of all documentation generated during the validation process.

When performing an Internal Technical Review, the reviewer ensures that:

The validation activity has been performed by the team by exercising utmost diligence and complete adherence to the CDM rules and requirements.

The review encompasses all aspects related to the project which includes project design, baseline, additionality, monitoring plans and emission reduction calculations, internal quality assurance systems of the project participant as well as the project activity, review of the stakeholder comments and responses, closure of CARs, CLs and FARs during the validation exercise, review of sample documents.

The reviewer compiles clarification questions for the Team Leader and Validation Team and discusses these matters with Team Leader.

After the agreement of the responses on the 'Clarification Request' from the Team Leader as well as the PP(s) the finalized validation report is accepted for further processing such as uploading on the UNFCCC webpage.

3 VALIDATION CONCLUSIONS

In the following sections, the conclusions of the validation are stated.

The findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are described in the Validation Protocol in Appendix A.

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A. The validation of the Project resulted in 7 Corrective Action Requests (CARs) and 8 Clarification Requests (CLs).

The CARs and CLs were closed based on adequate responses from the Project Participant(s) which meets the applicable requirements. They have been reassessed before their formal acceptance and closure.

The number between brackets at the end of each section correspond to the VVM paragraph

3.1 APPROVAL (49-50)

The letter of approval has been provided and the following support documentation has been verified by BVC.

 The China's DNA has issued a Letter of Approval in November 2010 (code 2723), authorizing Hebei Construction Investment Yuzhou Wind Energy Co., Ltd. as the Project Participant and confirming that Yuxian Baiyantuo 49.3 MW Wind Power Project contributes to China's Sustainable development/3/.

BVC received the letter of approval from the project participant and does not doubt its authenticity.

The letter of approval does not contain a specific version of both the PDD and the validation report.

The title and contents of the letter of approval refer to the precise proposed CDM project activity title in the PDD being submitted for registration.


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✎ Bureau Veritas Certification considers the letter of approval in accordance with **para. 45 - 48 /VVM**.

There are also additional evidences in various approval issued by the local government of China. These are:

- ✎ Feasibility Study Report (FSR) of the Project dated December 2008 and approved by the Hebei Development and Reform Commission on 27/07/2009 (Code: Ji Fa Gai Neng Yuan He Zi [2009] No.137). /4//5/
- ✎ Environment Impact Assessment (EIA) approved on 31/03/2009 by Environmental Protection Bureau of Hebei Province. /6//7/
- ✎ The Project is a grid connected wind power and the development of such Grid connected wind power is listed in the Renewable Energy Law. /8/

3.2 PARTICIPATION (54)

The participation for each project participant has been approved by a Party of the Kyoto Protocol.

✎ Complying with **para.54/VVM**, BVC hereby confirms that by referring to the information on UNFCCC website i.e.

<http://maindb.unfccc.int/public/country.pl?country=CN>.

3.3 PROJECT DESIGN DOCUMENT (57)

✎ Complying with **para.57/VVM**, BVC hereby confirms that the PDD complies with the latest Project Design Document Form (CDM-PDD) version 03.2 and guidance documents for completion of PDD version 07.

3.4 CHANGES IN THE PROJECT ACTIVITY

During the site visit, no physical changes were observed in the Project as compared to details mentioned in web-hosted PDD. The Project involves the installation of 58 wind turbines with unit capacity of 850kW. This is consistent with BVC on-site observations.

The main differences between the GSP-PDD and the final PDD version are summarized below:

Items	The first web-hosted PDD (version 01 dated 11/06/2010)	The last PDD (version 03 dated 16/05/2011)	Validation opinion
1. Methodology version	ACM0002 version 11	ACM0002 version 12.1.0	The methodology ACM0002 has been correctly updated according to the latest version available 12.1.0 Please refer to CAR 2 for detail.
2. EG _{facility,y}	Not specified	EG _{facility,y} will be continuously measured by one bi-directional meter installed on the 35 kV transmission line at the Project	The Information added in the PDD has been verified and BVC can confirm that EG _{facility,y} will



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		Site and monthly recorded. The meter of the Project will be equipped in line with Technical Administrative Code of Electric Energy Metering (DL/T 448-2000) and will be calibrated according to national standards with precision of 0.2s. Electricity sales receipt(s) will be used for crosscheck.	be measured continuously by one-bidirectional meters installed at the Project Site. The meter of the Project will be equipped in line with Technical Administrative Code of Electric Energy Metering (DL/T 448-2000) and will be calibrated according to national standards with precision of 0.2s. Electricity sales receipt(s) will be used for crosscheck. Please refer to CAR 5 for detail.
3. IRR with and without CDM revenues	3.68% and 8.14% respectively	4.52% and 8.96% respectively	The VAT was erroneously calculated. BVC verified the updated IRR spreadsheet and confirms that VAT computation has been properly revised in accordance with <i>Notice of Value Added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products</i> (Cai Shui [2008]156) and <i>Notice about Implementation of VAT Reform in the Whole Country</i> (Cai Shui [2008]170). As a result the new IRRs without and with CER revenues are 4.52% and 8.96%. Please refer to CAR 7 for detail.
4. Turbine model	Turbine model: not specified	Turbine Model: the project installed 35 sets of G52-850kW and 23 sets of G58-850kW	The wind turbine contract has been verified and the information added in the updated PDD can be

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			confirmed by BVC. Please refer to CL 1 for detail.
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3.5 PROJECT DESCRIPTION (64)

The Project is a new built wind farm located in Yu County, Zhangjiakou City, Hebei Province, P.R.China with geographical coordinates of north latitude 39°40'32" and east longitude 114°33'06".

The total installed capacity of the Project is 49.3MW, consisting of 35 sets of G52-850kW and 23 sets of G58-850kW wind turbines with each a unit capacity of 850kW. The estimated annual supplied electricity, which is 104,713.2MWh, will be sold to the North China Grid (NCG). As the NCG is dominated by thermal power generation, the establishment of the Project is expected to produce annual emission reductions of 99,501tCO₂e during the first seven years of its renewable crediting period.

BVC can confirm that the estimated PLF of 24.24% sourced from the approved FSR/4/ conducted by an authorized third party, which has the contract relationship with the PP, complying with the requirement of "Guidelines for the Reporting and Validation of Plant Load Factors ver.01" (EB48, annex 11).

In the absence of the Project, equivalent amount of annual power output of the Project will be generated and supplied by North China Grid (NCG), which is dominated by the thermal power generation; this is same with the baseline scenario. The project scenario is considered additional in comparison to the baseline scenario, and therefore eligible to receive Certified Emissions Reductions (CERs) under the CDM, based on the analysis presented in the PDD.

The overall layout of the Project is sound, and the geographical (Yu County, Zhangjiakou City, Hebei Province, P.R.China) and temporal (7 years) boundary of the Project is clearly defined.

The validation did not reveal any information that indicates that the Project can be seen as a diversion of official development assistance (ODA) funding towards the host country.

The processes undertaken by BVC to validate the accuracy and completeness of the Project description include the document review and crosscheck with the FSR and relevant approvals issued by local governments.

✌ Complying with para.64/VVM, BVC hereby confirms that the project description in the PDD /2/ is accurate and complete in all respects and that there is no change to the project activity design or boundary as compared to the web hosted PDD/1/

3.6 BASELINE AND MONITORING METHODOLOGY

3.6.1 GENERAL REQUIREMENTS (76-77)

The Project uses the approved consolidated baseline and monitoring methodology ACM0002 version 12.1.0 – "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" dated 26/11/2010./Ref-2/ The steps taken to assess the relevant information contained in the PDD against each applicability condition are described below.

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By on-site visiting and interviewing with the PP, BVC confirms that the Project complies with the applicability conditions of methodology ACM0002 version 12.1.0:

- ✌ The Project is a grid-connected renewable wind power project that install a new power plant at a site where no renewable power plant was operated prior to the implementation of the Project (green-field plant);
- ✌ The Project does not involve switching from fossil fuels to renewable energy at the site of the Project.

BVC hereby confirms that the selected baseline and monitoring methodology, tool and other methodology component is previously approved by the CDM Executive Board, and is applicable to the Project, which, complies with all the applicability conditions therein.

Based on the on-site assessment, BVC hereby confirms that, as a result of the implementation of the Project, there are no greenhouse gas emissions occurring within the project boundary, which are expected to contribute more than 1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology.

3.6.2 PROJECT BOUNDARY (80)

BVC has validated the project boundary by:

- a) Assessing the relevant documents including FSR.
- b) Observing the physical site and equipment used in the process.

The spatial extent of the project boundary is clearly defined in line with ACM0002 version 12.1.0 as the physical, geographical site of the Project and all other power plants connected physically to the NCG that the Project is connected to. The greenhouse gases and emission sources included in the project boundary are CO₂ emissions from the electricity generation in fossil fuel fired power plants that are displaced due to the project activity.

- ✌ Complying with para.80/VVM, BVC hereby confirms that the identification of project boundary is in line with the delineation of grid boundaries as provided in the version of “Announcement to Publish 2009 Baseline Emission Factors for Regional Power Grids in China” (China’s DNA) on 02/07/2009 (hereafter called “Notification of China-Grid EF”). /9/

During on-site visit, via observations of the physical site, BVC hereby confirms that the identified boundary and the selected sources and gases are justified for the Project.

3.6.3 BASELINE IDENTIFICATION (87-88)

The steps taken to assess the requirement given in paragraph 81 and 82 of the VVM are described below:

The Project is the installation of a newly built and grid-connected renewable power plant that delivers the generated electricity to the NCG, hence, according to methodology ACM0002, the baseline scenario is determined properly as:

Electricity delivered to the grid by the Project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the “Tool to calculate the emission factor for an electricity system” version 02.1.0 (hereafter called “Tool-Grid EF”). /Ref-3/



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According to the “Notification of China-Grid EF”, the delineation of grid boundary of the Project is the NCG. Furthermore, the baseline of the Project determined in the PDD i.e. “electricity delivered to the grid by the Project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources” is transparent and deemed to be reasonable.



Complying with para. 87 and 88/VVM, BVC hereby confirms that:

- (a) All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
- (b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
- (c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- (d) Relevant national and/or sector policies and circumstances are considered and listed in the PDD;
- (e) The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CDM project activity.

3.6.4 ALGORITHMS AND/OR FORMULAE USED TO DETERMINE EMISSION REDUCTIONS (92-93)

The steps taken to assess the requirement outlined in paragraph 89 the VVM are described below:

According to the baseline methodology ACM0002 Version 12.1.0 and “*Tool-Grid EF*” version 02.1.0, /Ref-3/ the baseline emission factor was calculated as following seven steps. In addition, the calculation in the PDD refers to the “Notification of China-Grid EF” published by NDRC on 02/07/2009 /9/ which is most recent information available at the time of CDM-PDD submission to BVC for validation.

As per “*Tool-Grid EF*” version 02.1.0, seven steps therein are applied to calculate the emission factor:

Step 1.-Identify the relevant electricity systems.

NCG is selected as the electricity system of the Project as per “*Notification of China-Grid EF*” issued by China’s DNA at the time of commencing this validation. There exists net electricity import from Northeast China Grid and Central China Grid to North China Grid. The simple operating margin emission factor sourced from the electricity supplied by Northeast China Grid and Central China Grid has been used as the emission factor of the net electricity import.



BVC was able to confirm that the identified electricity system of the Project is consistent with “*Notification of China-Grid EF*”. The geographical extent of the Project system has been documented transparently and it has been identified that there is electricity imported from other grids to NCG.

Step 2.- Choose whether to include off-grid power plants in the project electricity system (optional)

Option I (only grid power plants are included in the calculation) provided in “*Tool-Grid EF*” version 02.1.0 is chosen to calculate the operating margin and build margin emission factor.



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Step 3.-Select an operating margin (OM) method.

For the calculation of the OM emission factor, the simple OM emission factor calculation method is selected because low cost/ must-run projects constitute less than 50% of the total grid generation during the last 5 years.

✌ Only grid power plants are included in the calculation. BVC has checked the calculation for low cost/must-run constitution of the total grid generation and confirmed the calculation is correct. Therefore, simple OM emission factor calculation method is selected reasonable. A 3-year generation-weighted average, based on the most recent data from China Electric Power Yearbook from 2006 to 2008, which are the data available at the time of submission of the CDM-PDD to the BVC for validation, has been applied and calculated correctly.

The renewable crediting period is adopted for the Project and the OM will be fixed for the first crediting period.

Step 4.-Calculate the operating margin emission factor according to the selected method.

Option B, Based on data on the total net electricity generation of all power plants serving the system and the fuel types and total fuel consumption of the project electricity system, is used to calculate simple OM emission factor. The data on electricity generation and auxiliary electricity consumption are obtained from the China Electric Power Yearbook from 2006 to 2008 (published annually). The data on different fuel consumptions for power generation and the net caloric values of the fuels are obtained from the China Energy Statistical Yearbook from 2006 to 2008. The emission factors of the fuels adopted are obtained from Table 1-2 and Table 1-4 of the "2006 IPCC Guidelines for National Greenhouse Gas Inventories: Workbook."

Since exists net electricity import from Northeast China Grid and Central China Grid to North China Grid, the simple operating margin emission factor sourced from the electricity supplied by Northeast China Grid and Central China Grid will be used to as the emission factor of the net electricity import.

✌ The data source are deemed reasonable and BVC confirms that the calculation can be replicated using the data and parameter provided in the PDD.

Step 5.-Identify the group of power units to be included in the build margin (BM).

The set of power capacity additions in the electricity system that comprise 20% of the system generation (in MWh) and that have been built most recently (Option b) is adopted properly for the Project.

Considering data availability, deviation accepted by EB was used in the PDD i.e.

- 1) Use of capacity additions during the last 1~3 years for estimating the build margin emission factor for grid-connected electricity.
- 2) Use of weights estimated using installed capacity in place of annual electricity generation.

✌ BVC hereby confirms that the data source and approaches taken are deemed reliable.

Step 6.-Calculate the build margin emission factor.

The BM emission factor of the power grid is calculated by multiplying the emission factor of the thermal power with the share of the thermal power in the most recently added approach to 20% of total installed capacity. The emission factor for thermal power is determined

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based on the most advanced and commercially available technology endorsed by China's DNA.



BVC hereby confirms that the data sources are deemed reliable and calculation is appropriate.

Step 7.-Calculate the combined margin (CM) emissions factor.

According to the "Tool-Grid EF", the default weights $\omega_{OM} = 0.75$ for Operating Margin and $\omega_{BM} = 0.25$ for build Margin in the first crediting period of Wind Power Projects are adopted.

As per baseline methodology ACM0002 and "Tool-Grid EF", the baseline emission sources considered are the emission reduction ER_y during the crediting period is the difference between baseline emissions, project emissions and leakage. These are:

- 1) Baseline emissions: baseline emissions BE_y (tCO₂) are equal to baseline emission factor $EF_{grid,CM,y}$ (tCO₂/MWh) times the net electricity supplied to the grid $EG_{facility,y}$ (MWh) (the Project is a Greenfield wind power plant, therefore $EG_{PJtoGRID,y} - EG_{GRIDtoPJ,y}$ equals to $EG_{facility,y}$ that is quantity of net electricity generation supplied by the project plant/unit)
- 2) Project Emissions: the project emissions are regarded as zero as per methodology ACM0002 version 12.1.0.
- 3) Leakage: no leakage has to be considered as per methodology.
- 4) Emission reductions:

$$ER_y = BE_y - PE_y = BE_y = EG_{facility,y} * EF_{grid,CM,y}$$

With reference to the Tool-Grid EF, the Simple OM emission factor ($EF_{grid,OM,y}$) of NCG is calculated as 1.0069tCO₂e/MWh. Similarly, the build margin emission factor ($EF_{grid,BM,y}$) of the NCG is calculated as 0.7802tCO₂e/MWh.

Therefore, the combined baseline emission factor is determined ex-ante and will remain fixed during the first crediting period, viz.

$$EF_{grid,CM,y} = 1.0069 \times 0.75 + 0.7802 \times 0.25 = 0.950225 \text{ tCO}_2\text{e/MWh}$$

As a consequence the estimated annual emission reductions of the Project results being 99,501tCO₂e (estimated annual electricity generation*emission factor = 104,713.2MWh*0.950225tCO₂e/MWh=99,501tCO₂e) during the first crediting period. This is considered to be a reasonable estimation using the assumptions given by the Project.



Complying with para.92 and 93/VVM, based on the above assessment, BVC hereby confirms that:

- (a) All assumptions and data used by the project participants are listed in the PDD, including their references and sources;
- (b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PDD;
- (c) All values used in the PDD are considered reasonable in the context of the proposed CDM project activity;
- (d) The baseline methodology ACM0002 and "Tool-Grid EF" has been applied correctly to calculate project emissions, baseline emissions, leakages and emission reductions;



(e) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PDD.

3.7 ADDITIONALITY OF A PROJECT ACTIVITY (97)

The steps taken and sources of information used to cross-check the information contained in the PDD on this matter are described below:

“Tool for Demonstration and Assessment of Additionality” version 5.2 dated 26/08/2008 (hereinafter called *“Tool-Additionality”*)/Ref-4/ has been employed for demonstrating and assessing the additionality of the Project. The additionality of the Project has been carefully checked, in doing so BVC has put the main focus on the following issues:

3.7.1 PRIOR CONSIDERATION OF THE CLEAN DEVELOPMENT MECHANISM (104)

The FSR of the Project was completed in December 2008 by Hebei Electric Power Design & Research Institute and then approved by Hebei Development and Reform Commission (Code: Ji Fa Gai Neng Yuan He Zi [2009] No.137) on 27/07/2009. The FSR showed that the Project would not have been realized without CDM financial support. Based on the conclusion of the FSR, the PP decided to implement the Project with CDM support on 05/08/2009. On 19/11/2009, the wind turbines purchase contract was signed. This is the earliest of the dates at which the implementation or construction or real action of the Project began and has been identified as the project start date.

From the table analyzed in section 3.7.1.1 of this report, BVC was able to verify that the start date of the Project determined as 19/11/2009 is appropriate (the signed date of the wind turbines purchasing agreement) and is the earliest of the dates at which the implementation or construction or real action of the Project began. This is in accordance with the latest CDM glossary./Ref-6/

The Project is a new project according to the definition in the “Guidelines on the demonstration and assessment of prior consideration of the CDM” version 03 (Annex 22, EB 49, 11/09/2009) (hereinafter called “Guidance-Prior Consideration”), i.e. the start date of the Project is after 02/08/2008 and the PDD has been published for global stakeholder consultation on 22/07/2010, after the starting date of the Project. As per the “Guidance-Prior Consideration”, for new projects with starting date after 02/08/2008 the project participant must inform the Host Party DNA and the UNFCCC secretariat in writing of the commencement of the project activity and the intention of seek the CDM status within six months from the starting date.

According to the evidence gathered, the PP sent a notification of commencement of the project activity and prior consideration on 25/03/2010 to China DNA (Host Party) and on 12/04/2010 to UNFCCC using the standardized F-CDM-Prior Consideration form. Taking into consideration that the Project starting date has been individuated being 19/11/2009, it has been verified that both the notice of “commencement of the project activity and intention of seek the CDM status” has been sent to the required Parties within the 6-month terms. Hence, BVC can confirm that CDM was seriously considered in the decision to implement the Project.

3.7.1.1 Historical information on project timeline

It has been demonstrated by the timeline of events of the Project that the CDM revenues was seriously considered in the decision to proceed with the Project prior to start of the Project and, the continuing and real action were taken to secure CDM status for the Project in parallel with its implementation:

**Table 2 Timeline of the Project**

Date	Events	Evidence verified
December 2008	Feasibility Study Report (FSR) of the Project completed by Hebei Electric Power Design & Research Institute. The FSR states that the Project is not financially attractive and could not be carried out without the CDM incentive.	<u>/4/</u>
18/02/2009	EIA is completed by Hebei Institute of Geography	<u>/6/</u>
31/03/2009	EIA approval issued by Environmental Protection Bureau of Hebei Province	<u>/7/</u>
27/07/2009	The FSR obtained Approval from Hebei Development and Reform Commission (Code: Ji Fa Gai Neng Yuan He Zi [2009] No.137)	<u>/5/</u>
05/08/2009	Investment Decision Meeting which, on the basis of the FSR, concluded to invest in the Project by applying to the CDM.	<u>/10/</u>
19/11/2009	The wind turbines Supply Contract was signed	<u>/11/</u>
25/11/2009	The Civil Engineering Contract was signed	<u>/12/</u>
22/12/2009	Construction of the Project started	<u>/13/</u>
25/03/2010	Commencement of the Project and Prior CDM consideration notification was sent to China DNA	<u>/14/</u>
12/04/2010	Commencement of the Project and Prior CDM consideration notification was sent to UNFCCC Secretariat	<u>/15/</u>
22/07/2010	PDD was published for global stakeholder consultation	<u>/1/</u>
20/08/2010	The loan contract was signed	<u>/16/</u>

✌ According to the latest Glossary of CDM terms Ver. 05 /Ref-6/ and “*Guidance-Prior Consideration*”, BVC confirms that the start date of the Project in the PDD is appropriate and reasonable at that situation.

✌ Complying with para.100-103/VVM, BVC has verified this issue, which could significantly influence the additionality of the Project, and confirms that the serious consideration under the context of the Project has been addressed appropriately in accordance with the above guidance. Consequently, the chronological events described with the relevant documented evidences are the objective foundation on which BVC developed its validation opinions.

3.7.2 IDENTIFICATION OF ALTERNATIVES (107)

The plausible and credible alternatives to the Project were identified as per the “*Tool-Additionality*” Version 05.2 /Ref-4/:



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Baseline Alternative I	Construction of a thermal power plant with an equivalent amount of annual electricity generation
Baseline Alternative II	The Project undertaken without being registered as a CDM project activity
Baseline Alternative III	Construction of a power plant using other sources of renewable energy with equivalent amount of annual electricity generation
Baseline Alternative IV	Provision of an equivalent amount of annual power output by North China Grid which the Project is connected to.

BVC confirms that the list of alternatives is credible and complete.

Baseline Alternative I was correctly eliminated through examination of the laws or regulations in China. According to the Notice on Strictly Prohibiting the Installation of Thermal Generators with the Capacity of 135MW or below issued by the General Office of the State Council, Decree No. [2002]6 /17/, construction of thermal power plants less than 135MW are prohibited in the areas covered by the large grid such as provincial grids in China.

Baseline Alternative III was eliminated by analyzing the feasibility of development of local renewable energy resources including solar PV, geothermal, biomass and hydropower. As a matter of facts due to the technology development status and the high cost of power generation/18/, the development of a solar plant with equivalent output is unfeasible in the Project area. Due to lack of geothermal/19/, and hydropower/21/ resources, and short supply and high price of biomass fuels, and uncontrollable cost of power generation /20/ at the Project site, geothermal, biomass and hydroelectric projects can not be realized.

✌ Complying with para.107/VVM, BVC was able to verify that the alternatives identified to the Project are credible and complete, and found satisfactory to exclude Baseline Alternative I and III. Hence **Step 1** of “Tool-Additionality” was applied appropriately.

3.7.3 INVESTMENT ANALYSIS (114)

Considering the baseline scenario identified above, option III, the Benchmark Analysis, is applied in the investment analysis as per the *Sub-step 2b* of **Step 2** of “Tool-Additionality”, which is in accordance with “Guidelines on the Assessment of Investment Analysis” (Ver. 3.1) /Ref-8/.

Project IRR of 8% (post-tax), sourced from the “Interim Rules on Economic Assessment of Electric Power Engineering Retrofit Projects” /22/ issued by State Power Corporation of China in 2002, was employed by the Project as benchmark. BVC has verified this benchmark and confirms that it is widely applied in Chinese power generation industries. Therefore, BVC confirms that the benchmark is suitable for the Project.

Before reviewing the IRR calculation, BVC has validated the basic parameters listed in the PDD in accordance with the **Para. 113VVM** /Ref-7/.

As per the relevant evidence provided and described in section 3.7.1, BVC confirms that the PP’s final decision to proceed with the investment in the Project has been made based on the FSR /4/ approved Hebei Development and Reform Commission (Code: Ji Fa Gai Neng Yuan He Zi [2009] No.137) on 27/07/2009/5/. The FSR showed that the Project would not have been realized without CDM financial support. Based on the conclusion of the FSR, the PP decided to implement the Project with CDM support on 05/08/2009 /10/.

Therefore, BVC confirms that the input values from the FSR were valid and applicable at the time of the investment decision. In addition, given the short period of time between the



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FSR and the decision to proceed with the Project, BVC was therefore confident that it is unlikely in the context of the underlying Project that the input values would have materially changed, which is in line with the **Para. (a) 113/VVM**.

At the same time, BVC compared the input values for the financial analysis in the PDD and the FSR, and confirms that all input parameters used in the financial analysis, apart from the VAT rate, are taken from the FSR. With regard to the VAT, its calculation at 17%* considering equipment purchase deduction and 50% repayment of actual VAT on electricity sales results to be in line with the regulations valid at the time of the investment decision/10//38//40/. Thus it has been considered appropriate by BVC. A further analysis on this issue has been presented in the section below. BVC is therefore of the opinion that the investment analysis is in accordance with **Para. (b) 113/VVM**.

Furthermore, BVC has reviewed the IRR calculation sheet and confirms that:

- ✎ The **operation period** of 20 years were selected reasonably following the requirements of “*Interim Rules on Economic Assessment of Electric Power Engineering Retrofit Projects*” and Para.3 of “*Guidelines on the Assessment of Investment Analysis*” version 03.1”. /22//Ref-8/.
- ✎ The **residual value rate** of 5% was selected reasonably following relevant regulation in China, i.e. Enterprise Income Tax Law Implementation Regulations of People's Republic of China (The People's Republic of China State Council Order No. 512) /24/.
- ✎ The **total static investment** in the approved FSR is 546.24 million RMB which equals to circa 11,080RMB/kW.
 - BVC verified the total static investment for Hebei wind projects connected to North China Grid and registered in the UNFCCC website; below the findings are presented:

Table 3 Main Input Values of registered CDM project in Hebei Province connected to NCG

Ref.	Title	Annual Operation Hours	Unit O&M (RMB/kWh)	Unit Total Static Investment (RMB/kW)
233	Zhangbei Manjing Windfarm Project	2400	N.A.	N.A.
842	Hebei Shangyi Manjing East Wind Farm Project	2360	0.197	9,467.9
845	Zhangbei Mijiagou 49.5 MW Windfarm Project	2137	0.1	9,725.7
873	Guyuan 30.6MW Wind-farm Project	2200	0.079	10,653.6
877	Hebei Chengde Songshan Wind Farm Project	2081	N.A.	8,303
878	Hebei Kangbao Wolongtushan 30 MW Wind Farm Project	1931	0.1	9,169.7
1423	Dongbaliang 49.5MW Wind Power	2265	0.13	9,899.8

* First, according to the *Notice about Implementation of VAT Reform in the Whole Country* (Cai Shui [2008]170) /40/, the input VAT from purchase of equipments of the Project is used to offset the output VAT from sales revenues. Then, according to the *Notice of Value Added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products* (Cai Shui [2008]156) /38/, 50% of the taxable VAT is refunded right after it is imposed


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	Project in Weichang County Hebei Province			
1464	Yueliangshan 49.5MW Wind Power Project in Weichang County Hebei Province	2257	0.13	9,576.6
1715	Hebei Chengde Fengze Wind Farm Project	2405	0.12	10,161.6
1854	Hebei Shangyi Qijiashan Wind Farm Project	2316	0.08	9,211.9
1855	CECIC Zhangbei Dayangzhuang Wind Farm Project	1950	0.14	7,639.8
1873	Hebei Chengde Huifeng Windfarm Project	2159	0.12	10,798.5
2007	Hebei Haixing 49.5MW Wind Farm Project	2323	0.08	10,930.5
2040	Hebei Shangyi Manjing West Wind Farm Project	2081	0.12	9,205.4
2067	Hebei Shirensan Wind Power Project	2300	0.11	9,907.9
2088	Hebei Yuxian Kongzhongcaoyuan 49.5MW Wind Farm Project	2255	0.1	10,564.6
2125	Guohua Hebei Huanghua 49.5 MW Wind Farm Project (Phase I)	2003	0.13	9,938
2140	Hebei Chongli Qingsanying 49.3MW Wind Farm Project	2293	0.1	10,335.9
2170	CECIC HKC Danjinghe Wind Farm Project	2193	0.1	7,737.0
2205	Hebei Wanquan Yulong Wind Power Project	2240	0.1	9,351.1
2462	Hebei Fengning Luotuogou 1st Phase Wind Power Project	2236	0.1	10,545.4
2870	Hebei Weichang Longyuan Construction Investment Shanwanzi Wind Power Project	2586	0.11	10,707.9
3021	Guohua Hebei Huanghua (Phase II) 49.5MW Windfarm Project	1956	0.12	9,819
3079	Hebei Chengde Peifeng Wind Farm Project	2335	0.106	9,889.9
3160	Hebei Leting 49.5 MW Wind Farm Project Phase I	2050	0.1	11,247.3
3312	Hebei Kangbao Sanxiatian Wind Farm Project	2391	0.07	12,700.6
3356	Guyuan Wuhuaping 49.5 MW Wind Power Project	2368	0.07	12,629.7
3371	Hebei Chicheng Stage I Windfarm Project	2230	0.1	9,830.6
3399	CECIC HKE Zhangbei Lvnaobao Wind Power Project	2405	0.11	8,863.6
3758	Hebei Weichang Guangfayong Wind power project	2398	0.17	8,142.6



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4046	Dehe Zhangbei Phase I Wind Farm Project	2205	0.11	9,124
4073	Hebei Chengde Runfeng Wind Farm Project	2,334	0.11	9,927.8
4095	CECIC Zhangbei Gaojialiang Wind farm Project	1900	0.07	8,845.7
4182	Hebei Fengning Batou Wind Power Project	2325	0.1	9,727.7
4193	Hebei Fengning Dahexi Wind Power Project	2240	0.07	10,202.6
4204	Huaneng Weichang Yudaokou Phase I Wind Farm Project	2187	0.07	10,446.9
-	The Project	2,124	0.103	11,080

- As it can be noticed, the unit total static investment spans from a maximum of 12,700.6 RMB/kW to a minimum of 7,639.8 RMB/kW. The unit total static investment of the Project is in this range.
 - BVC has cross-checked the total static investment with the signed contracts of key equipments (e.g. turbine/11/, tower/25/, box transformer/26/) and engineering /12/, and found that the total value of the contracts achieved accounts for 461.8736 million RMB, approximately 85% of the estimated of the total static investment estimated in the FSR. In addition, the verified contracts value /11//12//25//26/ has been crosschecked with the relative part in the FSR and has been found that it accounts for circa 98.5% of the FSR estimation (as per evidence the sum of the verified contracts is 461.8736 million RMB while the sum of the relative estimation in the FSR is 469.1766 million RMB).
 - Taking into consideration also that some contracts such as land processing, use and conservation, management services and additional small contracts are currently unavailable BVC can confirm that the total investment estimated in the FSR is appropriate.
- ✎ The **tariff** of 0.54 RMB/kWh (incl. VAT) used in the PDD is taken from the approved FSR which was completed by an accredited third party/23/. According to the FSR and the PDD, the Project supplies electricity to Hebei Province which is connected to NCG. BVC has studied relevant policies and local investment environment in Hebei Province for wind projects connected to NCP and has summarized them as below:

Since 2002, the reform has been implemented in China's electric power sector to separate the grid and the power plant from the state power company. From then on the state-monopoly was broken and the market mechanism was introduced into the electric market. The investment environment before and after the Electric Market Reform were very different.

In February 2002, Hebei Province DRC issued Ji Jia Ge [2002] 242 issued by Hebei NDRC in Feb 2002 approving the tariff for Zhangbei Changcheng 9MW Wind Farm and Chengde Hongsong 3.6MW Wind Farm at 0.65 RMB/kWh (incl. VAT) /27/

In 2006, the *National Renewable Energy Law* issued by China's government /8/ came into effect. From then on, the wind power projects increased rapidly in China.

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On 04/01/2006, China's government issued the *Tentative Management Measures for Price and Sharing of Expenses for Electricity Generation from Renewable Energy* (Document Fa Gai Jia Ge [2006] No.7) /28/. After that, the tariff of most wind power projects began to be approved by government.

On 29/06/2006, Price Bureau of Hebei Province issued the document Ji Jia Guan Zi[2006] No. 57/29/, in the document, tariff of wind power projects located in Hebei Province was approved as 0.60RMB/kWh (incl. VAT) in the document.

On 09/06/2007, China NDRC issued the document Fa Gai Jia Ge [2007] No.1260 /30/, and the tariff of wind power projects located in Hebei Province was approved as 0.54RMB/kWh (incl. VAT), except Haixing Wind Farm of 0.61RMB/kWh (incl. VAT).

On 03/12/2007, China NDRC issued the document Fa Gai Jia Ge [2007] No.3303 /31/, and the tariff of wind power projects located in Hebei Province was approved as 0.54RMB/kWh (incl. VAT) in the document.

On 23/07/2008, China NDRC issued the document Fa Gai Jia Ge [2008] No.1876 /32/, and the tariff of wind power projects located in Hebei Province was approved as 0.54RMB/kWh (incl. VAT) in the document.

Table 4 Approved Tariff for wind power projects in Hebei Province

Year of Tariff Approval	Project	Tariff (incl.VAT) RMB/kWh	Tariff Approval	CDM status
February 2002	Zhangbei Changcheng 9MW Wind Farm (Construction finished in 1998)	0.65	Ji Jia Ge [2002] 242 issued by Hebei DRC in Feb 2002 <u>/27/</u>	No
	Chengde Hongsong 3.6MW Wind Farm (Construction finished in 2001)			No
March 2002	Electric Power Sector Reform Program			
June 2006	Chengde Hongsong Wind Farm	0.6	Ji Jia Guan Zi[2006]57 issued by Price Bureau of Hebei Province in Jun. 2006 <u>/29/</u>	VER
	Shangyi Manjing Wind Farm	0.6		VER
	Hebei Shangyi Manjing East Wind Farm	0.6		Ref No.0842
	Zhangbei Manjing Wind Farm	0.6		Ref No.0233
	Zhangbei Mijiagou49.5MW Wind Farm	0.6		Ref No.0845
	Hebei Kangbao Wolongtushan 30MW Wind Farm	0.6		Ref No.0878
June 2007	Guyuan 30.6 MW Wind Farm	0.54	Fa Gai Jia Ge[2007]1260	Ref No.0873



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	Hebei Chengde Songshan Wind Farm	0.54	issued by NDRC in Jun 2007 /30/	Ref No.0877
	Hebei Chongli Qingsanying 49.3 MW Wind Farm	0.54		Ref No.2140
	Hebei Shirensan Wind Farm	0.54		Ref No.2067
	Hebei Wanquan Yulong Wind Farm	0.54		Ref No.2205
	Hebei Yuxian Kongzhongcaoyuan 49.5MW Wind Farm Project	0.54		Ref No.2088
	Hebei Haixing 49.5MW Wind Farm*	0.61		Ref No.2007
December 2007	Hebei Shangyi Manjing West Wind Farm	0.54	Fa Gai Jia Ge[2007]3303 issued by NDRC in Dec.2007 /31/	Ref No.2040
	Hebei Weichang Zhangjiawan Wind Farm	0.54		Ref No.3093
	Hebei Weichang Longyuan Construction Investment Shanwanzi Wind Farm	0.54		Ref No.2870
July 2008	CECIC Zhangbei Dayangzhuang Wind Farm	0.54	Fa Gai Jia Ge [2008]1876 issued by NDRC in July 2008 /32/	Ref No.1855

Considering the above information, the tariff determined in the FSR finalized in December 2008 by the qualified 3rd party, was sourced from the latest approved tariff of nearby wind farm projects in Hebei province available at that time. Considering the circumstances the tariff employed in the FSR is considered reasonable.

The FSR approval/5/ dated 27/07/2009 (Ji Fa Gai Neng Yuan He Zi [2009] No.137) of Hebei Development and Reform Commission was issued after the publication of the Notice on Perfecting the Feed-in Tariff Policy by NDRC on 20/07/2009 (Code Fa Gai Jia Ge [2009] No. 1906)/33/, which classified four different areas in China according to the wind resources and attributed them different tariffs..

Since the Project is located in Zhangjiakou City, it is classified among Wind Resource Area II and the related applicable tariff is 0.54RMB/kWh (incl. VAT).

Furthermore, BVC has studied the 'Information note on the highest tariffs applied by the executive board in its decisions on registration of projects in the People's Republic of China version 01'/34/ released by Executive Board, and found that the highest applicable wind tariff in Hebei Province is 0.65 RMB/kWh (incl. VAT) and was sourced from the tariff notification Ji Jia Ge [2002] 242 issued by Hebei DRC in Feb 2002 /27/. Even by applying

* Located in Wind Resource Area IV where, as per the Notice on Perfecting the Feed-in Tariff Policy issued by NDRC on 20/07/2009 (Code Fa Gai Jia Ge [2009] No. 1906)/33/ the related applicable tariff is 0.61RMB/kWh (incl. VAT)

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this tariff, the Project (post-tax) IRR is still below the 8% benchmark and the Project would still be considered financially unfeasible.

Therefore, the tariff of 0.54 RMB/kWh (incl. VAT) employed in the FSR and PDD is verified to be appropriate.

✎ The **supplied electricity** of the Project was determined by a qualified third party based on the latest 35 years historical local wind source data (from 1971 to 2006) using professional software, i.e. WAsP, and one year onsite measurement (26/03/2007-25/03/2008) therefore, the value in the FSR and the PDD is deemed reasonable.

- The plant load factor of 24.24% (annual utilization hours of 2,124h) is based on the information of the FSR conducted by a third party and approved by the local DRC. Therefore, BVC confirms that the plant load factor defined in the FSR complies with the requirement of “Guidelines for the Reporting and Validation of Plant Load Factors ver.1” (EB48, annex 11) /Ref-7/.
- BVC has checked all registered CDM wind power projects in Hebei Province connected to North China Grid (see Table 3 above) and found that the annual utilization hours of the Project falls in the range of 1,931hours to 2,500hours. Therefore, BVC confirms the supplied electricity estimated in the FSR is appropriate.

✎ BVC confirms that the **annual O&M cost** is the sum of salary and welfare of employees, materials fee, maintenance fee and miscellaneous account, which was studied based on the “Code on Compiling Feasibility Study Report of Wind Farms” issued by NDRC /35/ and “Economic Evaluation Method and Parameters for Project Construction” (version 3) /36/.

- Each individual item of O&M cost is computed using input values from the approved FSR. BVC has checked the calculations and found them correct.
- BVC has checked all registered CDM wind power projects in Hebei Province connected to North China Grid (see Table 3 above) and found that the average annual O&M costs range between 0.07RMB/kWh and 0.197RMB/kWh. The average annual O&M cost of the Project was calculated as 0.103RMB/kWh falls in this the range.

✎ A post-tax benchmark is applied for the investment analysis of the Project. BVC has checked the IRR calculation sheet and confirms that the interest has been taken into account in the calculation of income tax. Furthermore, BVC has checked the loan signed between the PP and the bank /16/, and has found that the **interest rate** and loan value used in the investment analysis is higher than the one of the loan contracts, resulting in more interest expense, less profit, less income tax, and the higher project IRR. Hence, the investment analysis is deemed to be conservative.

✎ BVC has checked the IRR calculation sheet and confirm that, since a post-tax benchmark has been employed, **depreciation** has been deducted in estimating gross profits on which tax is calculated, and be added back to net profits for the purpose of calculating the financial indicator. BVC confirms that the depreciation calculated complies with “Economic Evaluation Method and Parameters for Project Construction” (version 3).

✎ BVC has also verified values of various **taxes** through crosschecking with the taxation rules conducted by local government and found to be fully consistent.

- As for the VAT

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On 09/12/2008, the Ministry of Finance and the State Administration of Taxation issued the *Notice of Value Added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products* (Cai Shui [2008]156)/38/ which replaced the *Notice of Value added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products* (Cai Shui [2001]198)/39/. In accordance with Cai Shui [2008]156, the VAT of 17%, which is the normal VAT rate in China, is calculated firstly, and 50% of the actual VAT payment for electricity sales will be refunded to the Project.

Subsequently the Ministry of Finance and the State Administration of Taxation issued the *Notice about Implementation of VAT Reform in the Whole Country* (Cai Shui [2008]170) on 19/12/2008, which was effected on 01/01/2009/40/. In accordance with Cai Shui [2008]170, the VAT of newly purchased equipments from the investment allows to be compensated to the wind projects.

The FSR of the Project was completed in December 2008/4/ when the *Notice of Value added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products* (Cai Shui [2001]198)/39/ was still valid and applicable. For this reason the VAT in its IRR analysis had been calculated at 8.5%, i.e. 50% of VAT deduction. However, the Investment decision to proceed with the Project as CDM was made by the PP on 05/08/2009/11/ when the *Notice of Value Added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products* (Cai Shui [2008]156)/38/ and *Notice about Implementation of VAT Reform in the Whole Country* (Cai Shui [2008]170) /40/ were already been issued and effective.

As a consequence in the final version of the PDD/2/ for the Project, VAT of 17% is calculated firstly, after compensation of the VAT of newly purchased equipments, 50% of the actual VAT payment is refunded to the Project annually.

This calculation is fully consistent with the regulations valid at the time of the investment decision and result a higher IRR than the calculation with the VAT at 8.5%, which is conservative.

- The income tax of 25% complies with Enterprise Income Tax Law of China /41/ which is effective from 01/01/2008.

✌ Complying with para.113c/VVM, based on the assessment above, BVC hereby confirms that the underlying assumptions are appropriate and the financial calculations are correct.

Based on the data from the approved FSR and VAT regulations (Cai Shui [2008]156)/38/ and Cai Shui [2008]170)/40/ valid and applicable at the time of making the investment decision, the project IRR of the Project without CDM revenues is 4.52%, much lower than the benchmark, showing that the Project is not financially attractive compared to the benchmark in the absence of CDM benefits.

BVC has reviewed the IRR calculation /42/ and confirms that the IRR processing is consistent with the “*Guidelines on the assessment of investment analysis*” version 3.1 and the data sources as well as the analysis approach are reliable and based on the FSR linking directive to the actual situation of the host country.

Four financial parameters were taken as uncertain factors for sensitive analysis of financial attractiveness:

- Supplied electricity



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- Total Investment
- Tariff (including VAT)
- O&M expenses

According to “Code on compiling feasibility study report of wind power projects” published by NDRC /36/, total static investment, net supplied electricity and tariff should be taken as uncertain factors for sensitivity analysis, and a $\pm 10\%$ variation of above factors shall be considered.

Therefore, BVC confirms that the variables and variations $\pm 10\%$ performed for sensitivity analysis is deemed to be appropriate for the Project. Even considering a $\pm 10\%$ variation of the selected factors the IRR of the Project would still remain below the 8% benchmark.

- With an increase by 27.40% in the **supplied electricity**, the project IRR will reach the benchmark. Considering that the PLF was determined by a qualified third party based on the latest 35 years historical local wind source data (from 1971 to 2006) using professional software, i.e. WASP., and one year onsite measurement data from 26/03/2007 to 25/03/2008, BVC confirms that it is unlikely that the supplied electricity could increase by 27.40% during the whole life of the Project.
- With a decrease in **the total investment** by 21.90%, the Project IRR may reach 8%. However, it has been verified that the total value of verified signed contracts of main equipments and engineering /11/12/25/26/, accounts for approximately 85% of total static investment estimated in approved FSR. As only the main contract of the Project have been verified, some such as land use compensation, and recovering have not been signed yet., other miscellaneous costs are not included in the verified contracts. It is impossible that the total static investment will decrease by 21.90%.
- The **O&M expenses** comprise materials expense, maintenance cost, employee salary and miscellaneous accounts. Even if O&M expenses would decrease to 0(zero) the IRR of the Project would still be below the benchmark.
- With an increase of **tariff (including VAT)** by 27.40%, the Project IRR would reach 8%. This increase would equal to a tariff of circa 0.69 RMB/kWh (incl. VAT), which is even higher than the highest tariff of 0.65RMB/kWh in Hebei Province as per the Information Notes on the highest tariff /34/. However, as per China NDRC the tariff in Zhangjiakou city, where the Project is located, is fixed at 0.54RMB/kWh (incl. VAT) /33/. As a consequence the tariff can not change and it is thus impossible that it would increase to make the IRR reach the 8% benchmark.

Considering the CERs' sales revenues (calculated with 17 EUR/tCO₂e), the Project IRR increases to 8.96%.

BVC can conclude that both of the variation range and relevant assumptions stated in the PDD are robust and the investment of the Project is deemed to be financially unattractive, thus the Project is additional.

✌ Complying with para.114/VVM, BVC hereby confirms that the underlying assumptions are appropriate and the financial calculations are correct.

3.7.4 BARRIER ANALYSIS (118)

The **Step 3** Barrier analysis was not applied for the Project.

3.7.5 COMMON PRACTICE ANALYSIS (121)

The Common practice analysis was addressed as per **Step 4** of “Tool-Additionality” and



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latest rules issued by EB.

The Project is a newly built 49.5MW wind power project in the area of Yu County, Zhangjiakou City, Hebei Province, P.R.China. Wind power projects located in the same province have similar wind resources, grid structure, geological and transportation conditions and economic development. Hence, Hebei Province is considered as the geographic boundary to identify similar projects.

China power industry started the reform to separate the grid and power plants from state owned companies since 2002. Hence, wind power projects with commission date after 2002 faces comparable regulatory framework for common practice analysis.

Overall the criteria utilized for identifying similar projects are: non-CDM projects, located in Hebei Province with an installed capacity of more than 15MW and commissioned after 2002. Following these criteria, BVC has verified the wind power projects as identified in the PDD by crosschecking the public statistics i.e. “*Statistics of wind power installed capacity in China (2007)*” and “*Statistics of wind power installed capacity in China (2008)*” written by Mr. Shi Pengfei, the authoritative Expert in the wind power sector and the “*2009 wind power statistics*” published by Chinese Wind Energy Association /43//44//45/.

As per the reference above, only two wind power projects, Chengde Hongsong Wind Farm and Shangyi Manjing Wind Farm were identified.

However, Chengde Hongsong Wind Farm /46/ and Shangyi Manjing Wind Farm /47/ both applied for carbon funding by selling VER through the VCS in order to alleviate the serious barriers faced. Therefore, both projects have essential difference with the Project.

- ✎ Complying with para.121/VVM, BVC has verified the description in the PDD and found that it is consistent with the sectoral statistics and therefore confirms that the Project is not common practice in the region.
- ✎ Based on above demonstration that in accordance with “*Tool-Additionality*” and supported by reliable data sources, it is the opinion of BVC that the Project is thus additional.

3.8 MONITORING PLAN (124)

BVC hereby confirms that the monitoring plan complies with the requirements of the methodology.

The steps taken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the project design are described below.

The Project uses the approved consolidated monitoring methodology ACM0002 version 12.1.0 for grid connected electricity generation from renewable sources.

Applicability of this methodology is justified in PDD as it involves grid connected renewable power generation using wind energy. Refer discussions on the validity of the methodology at Section 3.6.1 above. BVC hereby confirms that the monitoring plan complies with the requirements of the methodology.

The ex-ante combined margin emission factor is determined based on the most recent information available. Electricity will be supplied to the grid by 35kV/110kV transmission lines. According to the monitoring plan, the quantity of net electricity generation supplied by the Project to the grid in year y $EG_{facility,y}$ will be obtained through onsite continuous measurement with the employment of one bi-directional meter. The data will be monthly recorded.



Electricity sales receipt(s) is used to crosscheck $EG_{facility,y}$. If exists difference between the monitoring data and the data on receipt(s), the conservative values will be used to estimate emission reductions. The meters are expected to be calibrated annually and checked by a qualified third party according to industry standards (DL/T 448-2000) and with an accuracy of 0.2s.

BVC is of the opinion that the monitoring plan complies with the requirements of the methodology.

Operational management for the project activity is comprehensively detailed in PDD and it includes description of the responsibility, procedure reference, calibration frequency, maintenance needs, QA/QC procedure and data management system.

By reviewing the described monitoring plan and through on-site interview with the PP, BVC confirms that the monitoring arrangements described in the monitoring plan are feasible within the project design, and the means of implementation of the monitoring plan are sufficient to ensure the emission reductions achieved by the Project can be reported ex post and verified.

✌ Complying with para.123/VVM, BVC hereby confirms that the monitoring arrangements described in the monitoring plan are feasible within the project design and the project participants are able to implement the monitoring plan.

3.9 SUSTAINABLE DEVELOPMENT (127)

The host Party's DNA confirmed the contribution of the project to the sustainable development of the host Party.

✌ Complying with para. 127/VVM, BVC recognizes that the Project is helpful to fulfill the host country's goals of promoting sustainable development. The Project is expected to be in line with host-country specific CDM requirements because:

- It will reduce greenhouse gas emissions compared to a business-as-usual scenario;
- It will diversify power sources and mitigate the demand and supply contradiction;
- It will help to stimulate the growth of the wind power industry and encourage and promote the technology progress and commercial popularization of grid-connected renewable power generation projects in China;
- It will reduce the emission of other pollutants resulting from the power generation industry in China, compared to a business-as-usual scenario;
- It will create 10 employment opportunities for local community during the operation period of the Project and creating several employment opportunities for local community during the construction period of the Project.

3.10 LOCAL STAKEHOLDER CONSULTATION (130)

Prior to the publication of the PDD on the UNFCCC website, in November 2009, the project owner carried out a public survey in order to collect further opinions on the Project situation. The survey was conducted on people living nearby the Project site with different ages, gender and occupations. A total of 50 questionnaires/48/ were distributed and all of them were answered and returned.

According to the questionnaire/48/, the interested stakeholders have a very good understanding of the Project, believe that the Project can increase the economic



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development of the area and support the construction of the Project. The returned questionnaires are maintained by the PP and were presented to BVC for assessment during the site visit of the validation activity /48/.

Their views were endorsed by the local stakeholders interviewed during the site visit of the validation activity.

Overall, interview with stakeholders and review of returned questionnaires demonstrate that the summary of the comments received has been completely provided in the PDD and due account of the comments has been described in the PDD. BVC hereby confirms that the process of local stakeholder consultation is observed to be adequate.

✌ Complying with para.130/VVM, BVC hereby confirms that the local stakeholder consultation was performed and the process of local stakeholder consultation is observed to be adequate. The Project will be beneficial to the local sustainable development without negative affect on the local stakeholders.

3.11 ENVIRONMENTAL IMPACTS (133)

The PP has undertaken an analysis of environmental impacts and BVC confirms that the Environmental Impact Assessment was carried out by Hebei Institute of Geography on 18/02/2009 and approved on 31/03/2009 by Environmental Protection Bureau of Hebei Province./6//7/

The environmental impact caused by the Project has been identified and analyzed in the PDD. By checking the EIA report, BVC is able to ensure that the environmental impacts occur mainly in the construction period due to electromagnetism, waste water, dust, noise pollution, solid waste, and ecological deterioration. All above impacts would be within an acceptable limit by implementing corresponding mitigation measures as per the statement of the EIA.

✌ Complying with para.133/VVM, BVC hereby confirms that the Project will not have any significant impacts on the environment by means of measures of pollution avoidance and control as well as ecological recovery.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

✌ Complying with para.173/VVM, the PDD was webhosted on the UNFCCC for global stakeholders comments as per CDM requirements. The project was webhosted from 22/07/2010 to 20/08/2010.

No comments were received during this period.



5 VALIDATION OPINION

Bureau Veritas Certification has performed a validation of the Yuxian Baiyantuo 49.3 MW Wind Power Project in P. R. China. The validation was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The validation consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up onsite visit and interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final validation report and opinion.

Project participants used the latest Tool for demonstration and assessment of additionality (version 05.2), VVM version 01.2 and Guidelines on the demonstration and assessment of prior consideration of the CDM (version 03.1) to demonstrate the additionality of the Project. In line with these tools, the PDD provides analysis of investment to determine that the project activity itself is not the baseline scenario. The latest Tool to calculate the emission factor for an electricity system (version 02.1.0) is also applied to determine the emission factor of North China Grid (NCG).

By synthetic description of the project, the Project is likely to result in reductions of GHG emissions partially. An analysis of the investment demonstrates that the proposed project activity is not a plausible baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is expected to achieve the average annual emission reductions of 99,501tCO₂e over the chosen 7-year renewable crediting period.

The review of the project design documentation (version 03) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification thus requests registration of Yuxian Baiyantuo 49.3 MW Wind Power Project as CDM project activity.



6 REFERENCES

Category 1 Documents:

Documents provided by Additional Consulting and Engineering (the consultant) that relates directly to the GHG components of the Project.

/1/	PDD version 01 dated 11/06/2010 submitted by Additional Consulting and Engineering http://cdm.unfccc.int/Projects/Validation/DB/2Y27MZYAUUEWI6UU6G3CP5O8VJPF5MW/view.html
/2/	PDD version 03 dated 16/05/2011 submitted by Additional Consulting and Engineering
/3/	LoA from DNA of China issued in November 2010 (code 2723)
/4/	Feasibility Study Report (FSR) of the Project completed by Hebei Electric Power Design & Research Institute in December 2008
/5/	Feasibility Study Report (FSR) approval issued by Hebei Development and Reform Commission on July 27, 2009 (Code: Ji Fa Gai Neng Yuan He Zi [2009] No.137)
/6/	Environment Impact Assessment (EIA) completed by Hebei Institute of Geography on 18/02/2009.
/7/	Environment Impact Assessment (EIA) approval issued by Environmental Protection Bureau of Hebei Province on 31/03/2009
/8/	National Renewable Energy Law issued by NDRC of China effective from 01/01/2006. http://www.windpower.org.cn/news/links/fl_2005_0510_02.htm
/9/	Announcement to Publish 2009 Baseline Emission Factors for Regional Power Grids in China (China's DNA) issued on 02/07/2009 http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File2333.pdf
/10/	Investment Decision Meeting made on 05/08/2009 which, on the basis of the FSR, concluded to invest in the Project by applying to the CDM.
/11/	The wind turbine Supply Contract signed on 19/11/2009
/12/	The Civil Engineering Contract signed on 25/11/2009
/13/	Notification of starting of construction of the Project on 22/12/2009
/14/	Notification to inform the NDRC (DNA of China) of the commence of the project and intention to seek CDM status submitted on 25/03/2010 and approved by NDRC on 19/04/2010
/15/	Notification to inform the UNFCCC secretariat of the commence of the project and intention to seek CDM status on 12/04/2010 http://cdm.unfccc.int/Projects/PriorCDM/notifications/index_html
/16/	The loan contract signed on 20/08/2010
/17/	Notice on Strictly Prohibiting the Installation of Thermal Generators with the Capacity of 135MW or below issued by the General Office of the State Council, Decree No. 2002 6. http://www.gov.cn/gongbao/content/2002/content_61480.htm
/18/	Http://www.ce.cn/xwzx/gnsz/gdxw/200910/12/t20091012_20177105.shtml



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/19/	Http://cn.made-in-china.com/info/article-ZQnJWEtOTxIP.html .
/20/	Http://www.in-en.com/newenergy/html/newenergy-2026202657765306.html Http://www.hebei.gov.cn.A.rtitle/20080906/1054087.htm , http://www.hebei.gov.cn.A.rtitle/20091110/1319924.htm
/21/	Http://www.hbsw.net/news/shuiwenjishu/2009320/0932014I16265F7FF210BJ6G0AK.html http://www.hbsw.net/news/shuiwenjishu/2009320/09320149HJCF472A52KDF4BF97E.html
/22/	Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects issued in 2002
/23/	Hebei Electric Power Design & Research Institute certification as a top class design institute in the power industry issued by the government of China
/24/	Enterprise Income Tax Law Implementation Regulations of People's Republic of China issued by The People's Republic of China State Council, document code: Order No. 512
/25/	Towers contract signed on 19/01/2010
/26/	Box Transformer and other turbines electric equipments contract signed on 03/02/2010 and 19/07/2010 respectively
/27/	Document Ji Jia Ge [2002] 242 issued by Hebei DRC in Feb 2002
/28/	<i>Tentative Management Measures for Price and Sharing of Expenses for Electricity Generation from Renewable Energy</i> (Document Fa Gai Jia Ge [2006] No.7) issued by China's government on 04/01/2006. http://www.gov.cn/ztl/2006-01/20/content_165910.htm
/29/	Document Ji Jia Guan Zi[2006] No. 57 issued on 29/06/2006 by the Price Bureau of Hebei Province
/30/	Document Fa Gai Jia Ge [2007] No.1260 issued on 09/06/2007 by China NDRC
/31/	Document Fa Gai Jia Ge [2007] No.3303 issued on 03/12/2007 by China NDRC
/32/	Document Fa Gai Jia Ge [2008] No.1876 issued on 23/07/2008 by China NDRC
/33/	Notice on Perfecting the Feed-in Tariff Policy issued by NDRC on 20/07/2009 (Code Fa Gai Jia Ge [2009] No. 1906
/34/	Information note on the highest tariffs applied by the executive board in its decisions on registration of projects in the People's Republic of China version 01
/35/	The Codes on Compiling Feasibility Study Report of Wind Farms issued by National Development Reform Committee (NDRC).
/36/	"Economic Evaluation Method and Parameters for Project Construction" (version 3)
/37/	http://www.boc.cn/finadata/liiv/fd32/201010/t20101020_1170161.html
/38/	Notice of Value added Tax Policy Regarding Products Using Certain Synthesized Resources ([2008]156) released by State Administration of Taxation on Dec 9th, 2008
/39/	Notice of Value added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products (Cai Shui [2001]198)



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/40/	Issues regarding National Value-added Tax Reform and Transition ([2008]170) released by State Administration of Taxation in Dec. 2008 http://www.chinatax.gov.cn/n8136506/n8136593/n8137537/n8138502/8745403.html
/41/	Income Tax Law of China
/42/	IRR spreadsheet of the Project
/43/	"Statistics of wind power installed capacity in China" Version 2007 dated 28/02/2008: http://www.gsec.gov.cn/ClassNews.asp?newsID=664
/44/	Statistics of wind power installed capacity in China (2008)
/45/	http://www.cwea.org.cn/upload/201006102.pdf
/46/	https://vcsregistry1.apx.com/mymodule/ProjectDoc/EditProjectDoc.asp?id1=61
/47/	https://vcsprojectdatabase1.apx.com/myModule/rpt/myrpt.asp?r=112
/48/	Evidence of 50 questionnaires of the stakeholder survey
/49/	PDD version 02 dated 20/04/2011 submitted by Additional Consulting and Engineering
/50/	Modalities of Communication Form (MOC) of the Project signed between the Department of Climate Change, National Development and Reform Commission and Hebei construction Investment Yuzhou Wind Energy Co., Ltd. submitted on 10/02/2011

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents.

/Ref-1/	Validation and Verification Manual Version 01.2 dated 30/07/2010
/Ref-2/	ACM0002 version 12.1.0 dated 26/11/2010
/Ref-3/	Tool to calculate the emission factor for an electricity system Version 02.1.0 dated 15/04/2011
/Ref-4/	Tool for demonstration and assessment of additionality Version 05.2 dated 26/08/2008
/Ref-5/	Guidelines on the demonstration and assessment of prior consideration of the CDM Version 03 (Annex 22, EB49)
/Ref-6/	Glossary of CDM terms Version 05
/Ref-7/	Guidelines for the Reporting and Validation of Plant Load Factors version 01 (EB48, Annex11)
/Ref-8/	Guidelines on the assessment of investment analysis version 03.1 (EB51 Annex58)
/Ref-9/	Guidelines for Completing the Project Design Document (CDM-PDD) version 07 dated 02/08/2008, EB41 Annex 12

**Persons interviewed:**

List persons interviewed during the validation or persons that contributed with other information that are not included in the documents listed above.

1	Mr. Huang Hai CDM Manger of Hebei Construction Investment Yuzhou Wind Energy Co., Ltd.
2	Mr. Zhao Yongchao CDM Manager of Hebei Construction Investment Yuzhou Wind Energy Co., Ltd.
3	Mr. Du Guang CDM officer of Hebei Construction Investment Yuzhou Wind Energy Co., Ltd.
4	Mr. Zhang Ting Liang Project Manager of Hebei Construction Investment Yuzhou Wind Energy Co., Ltd.
5	Ms. Pan Tao CDM consultant of Additional Consulting and Engineering
6	Ms. Li Qin CDM consultant of Additional Consulting and Engineering
7	Mr. Xiang Pang Yu Local stakeholder



7 CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Mr. Li Xingtong	BVC, China	Team Leader, Climate Change Lead Verifier He holds a Master Degree in Landscape Ecology and Bachelor Degree in Environmental Engineering. Before joining BV in 2009, he gained one year of CDM technical experience in P.R China. He obtained the certificate of CDM Lead Verifier, Lead Auditor for ISO 14001 and completed the course assessment for the ISO 14064:2006.
Mr. Limonta Gabriele	BVC, China	Team Member, Climate Change Verifier (Trainee) He holds a Master Degree in International Business and Management from Manchester Business School where He graduated with a thesis on the effects of carbon prices on technology transfer through CDM projects in China and India. Before joining BV in January 2010, He gained working experience in the financial industry. He has obtained the certificates of CDM Verifier and ISO 14064:2006 Lead Auditor.
Ms. Jasmine Tang	BVC, China	Internal Reviewer, Climate Change Lead Verifier She holds a Master Degree in Environmental Engineering. Before joining BV in 2008, she gained two years of CDM technical working experience in P.R China. She obtained the certificate of CDM Lead Verifier, Lead Auditor for ISO 14001 and completed the course assessment for the ISO 14064:2006.



APPENDIX A: CDM PROJECT VALIDATION PROTOCOL

Table 1 Validation requirements based on the Clean Development Mechanism Validation and Verification Manual (Version 01.2) and methodology ACM0002 version 12.1.0 - Consolidated baseline methodology for grid-connected electricity generation from renewable sources

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
1. Approval	VVM	44-50	COUNTRY A (China)	COUNTRY B (-)		
a. Has the DNA of each Party indicated as being involved in the proposed CDM project activity in section A.3 of the PDD provided a written letter of approval? (If yes, provide the reference of the letter of approval, any supporting documentation, and specify if the letter was received from the project participant or directly from the DNA)	VVM	45	Project participant from host party is: Hebei Construction Investment Yuzhou Wind Energy Co., Ltd. (Host) ~~CAR-1~~ The original Letter of Approval from the China's DNA has not been presented yet. The LoA has been provided and verified and deemed authentic. Hence CAR 1 was	It is a unilateral Project. At the stage of registration the LoA of an Annex I country is not mandatory.	GAR-1	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
			closed.			
b. Does the letter of approval from DNA of each Party confirm that : - The Party is a Party of the Kyoto Protocol - The participation is voluntary - In the case of the host Party, the proposed CDM project activity contributes to the sustainable development of the country - Refers to the precise proposed CDM project activity title in the PDD being submitted for registration	VVM	45	~~Pending on CAR 1~~ Yes. The letter of approval confirm that: 1. The Party is a Party of the Kyoto Protocol 2. The participation is voluntary 3. the proposed CDM project activity contributes to the sustainable development of the country 4. Refers to the precise proposed CDM project activity title in the PDD being submitted for registration	N.A.	Pending	OK
c. Is(are) the letter(s) of approval unconditional with respect to (b) above?	VVM	46	~~Pending on CAR 1~~ It is unconditional with respect to (1.2) above.	N.A.	Pending	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
d. Has(ve) the letter(s) of approval been issued by the respective Party's designated national authority (DNA) and is valid for the CDM project activity under validation?	VVM	47	~~Pending on CAR 1~~ Yes. By China's DNA is NDRC.	N.A.	Pending	OK
e. Is there doubt with respect to the authenticity of the letter of approval?	VVM	48	~~Pending on CAR 1~~ No Relevant information is available on DNA's website.	N.A.	Pending	OK
f. If yes, was verified with the DNA that the letter of approval is authentic?	VVM	48	~~Pending on CAR 1~~ N.A.	N.A.	Pending	OK
2. Participation	VVM	51-54	<i>PP from Host Party (Hebei Construction Investment Yuzhou Wind Energy Co., Ltd.)</i>	<i>PP2 from Annex I (-)</i>		
a. Are the project participants listed in tabular form in section A.3 of the PDD?	VVM	52	~~Pending on CAR 1~~ Yes.	N.A.	Pending	OK
b. Does the DOE have a contractual relationship with the project participants?	EB50	Ann 48	Yes.	N.A.	OK	OK
c. Is the information in section A.3 consistent with the contact details provided in annex 1 of the	VVM	52	Yes.	N.A.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
PDD?						
d. Has the participation of each of the project participants been approved by at least one Party involved, either in a letter of approval or in a separate letter specifically to approve participation? (Provide reference of the approval document for each of the project participants)	VVM	52	~~Pending on CAR 1~~ Yes. The Letter of Approval from China's DNA has been provided.	N.A.	Pending	OK
e. Are any entities other than those approved as project participants included in these sections of the PDD?	VVM	52	~~Pending on CAR 1~~ No entities other than those approved as project participants are included in the PDD, which is confirmed by the LoA.		Pending	OK
f. Has the approval of participation issued from the relevant DNA?	VVM	53	~~Pending on CAR 1~~ Yes, issued by NDRC	N.A.	Pending	OK
g. Is there doubt with respect to (f) above?	VVM	53	~~Pending on CAR 1~~ No.	N.A.	Pending	OK
h. If yes, was verified with the DNA that the approval of participation is valid for the proposed CDM project participant?	VVM	53	~~Pending on CAR 1~~ N.A.	N.A.	Pending	OK
3. Project design document	VVM	55-57				
a. Is the PDD in accordance with the applicable CDM requirements for completing the PDD?	VVM	56	Yes. The PDD used the latest template version 03.2, and the "Guidelines for Completing CDM-PDD, CDM-NMB and CDM-NMM" – version 07 – 02/08/2008		OK	OK
b. In CDM-PDD section A.1 are the following	EB 41	Ann				



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
provided?		12			
i. Title of project	EB 41	Ann 12	Yes. Yuxian Baiyantuo 49.3 MW Wind Power Project	OK	OK
ii. Current version number and date of document	EB 41	Ann 12	- GSP Version number: 01 Date of the document: 11/06/2010 - PDD version 03 dated 16/05/2011	OK	OK
c. In CDM-PDD section A.2 are following provided?	EB 41	Ann 12			
i. A brief description of the project activity covering purpose which includes the scenario existing prior to the start of project, present scenario and baseline scenario	EB 41	Ann 12	Yes. The Project is a newly – built large scale wind farm project. The baseline scenario is the same with the scenario existing prior to the start of the project, i.e. generation of electricity by grid connected power plants. The project is meant to utilize wind power turbines with a total installed capacity of 49.3MW to generate clean electricity to be sold to the North China Grid and to achieve emission reductions. GL-4 The turbine models should be specified in the PDD The information concerning the turbine models	GL-4	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			has been verified against evidence and found correct. Revised information in the PDD concerning has been provided. Hence CL 1 was closed.		
ii. Explanation on how the GHG emission reductions are effected	EB 41	Ann 12	Yes. The Project will deliver to North China Grid clean renewable energy thus displacing the power from fossil fuel power plants. As a consequence the project will help to reduce GHG emissions versus the high-growth, coal dominated business-as-usual scenario.	OK	OK
iii. The PP's views on the contribution of project activity to sustainable development	EB 41	Ann 12	The contribution of the Project to sustainable development summarized in section A.2 of the PDD has been checked against the FSR of the Project. The Project is expected to be in line with host-country specific CDM requirements because: - It will reduce greenhouse gas emissions compared to a business-as-usual scenario; - It will diversify power sources and mitigate the demand and supply contradiction; - It will help to stimulate the growth of the wind power industry and encourage and promote the technology progress and commercial	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			popularization of grid-connected renewable power generation projects in China; - It will reduce the emission of other pollutants resulting from the power generation industry in China, compared to a business-as-usual scenario; - It will create 10 employment opportunities for local community during the operation		
iv. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	~~Pending on CL 1~~ The models wind turbines employed in the Project has been added.	Pending	OK
d. In CDM-PDD section A.3 are following provided in the tabular format?	EB 41	Ann 12			
i. List of project participants and parties	EB 41	Ann 12	The private entities involved in the Project are listed in section A.3 of the PDD. Host Party (China): Hebei Construction Investment Yuzhou Wind Energy Co., Ltd.	OK	OK
ii. Identification of Host Party	EB 41	Ann 12	P.R. China is the Host Party.	OK	OK
iii. Indication whether the Party wishes to be considered as project participant	EB 41	Ann 12	The Party, China, wishes to be considered as project participant. And the contact information of Department of Climate Change, National Development and Reform Commission has been provided in annex	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			1 of PDD.		
e. In CDM-PDD section A.4.1 are following provided?	EB 41	Ann 12			
i. Technical description, location, host party(ies) and address as required	EB 41	Ann 12	Yes. The project is located in Yu County, Zhangjiakou City, Hebei Province, China.	OK	OK
ii. Detailed physical location with unique identification of the project activity (eg. Longitude/latitude)	EB 41	Ann 12	Yes. Latitude 39°40'32" north, longitude 114°33'06" east.	OK	OK
iii. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	No.	OK	OK
f. In CDM-PDD section A.4.2 is the list of categories of project activities provided?	EB 41	Ann 12	Scope 1: Energy Industries (renewable sources)	OK	OK
g. In CDM-PDD section A.4.3 are following provided?	EB 41	Ann 12			
i. A description of how environmentally safe and sound technology, and know-how, is transferred to the Host Party(ies)	EB 41	Ann 12	The Project employs 58 wind turbines with an installed capacity of 850kW each for a total of 49.3MW. No technology from abroad is transferred for the CDM project facility".	OK	OK
ii. Explanation of purpose of project activity with scenario existing prior to the start of project, scope or present activities and the baseline scenario	EB 41	Ann 12	In the absence of the Project, equivalent amount of annual power output to the Project will be generated and supplied by North China Grid which the Project is connected to. This is the same with the baseline scenario of the Project. It is expected that the Project as a renewable energy source will reduce GHG emissions by	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			avoiding CO ₂ emissions from the same amount of electricity generation from North China Grid, which is mainly composed of traditional thermal power plants.		
iii. List and arrangement of the main manufacturing/production technologies, systems and equipments involved	EB 41	Ann 12	~~Pending on CL 1~~ The proposed project involves the installation of 58 sets of GAMESA 850kW wind (35 sets of G52-850 kW and 23 sets of G58-850 kW) for a total installed capacity of 49.3 MW. The annual operation hours for the proposed project are about 2124 hours which equals to approximately to 0.2424.	Pending	OK
iv. The emissions sources and GHGs involved	EB 41	Ann 12	Only CO ₂ emissions	OK	OK
v. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	~~Pending on CL 1~~ The models wind turbines employed in the Project has been added.	Pending	OK
h. In CDM-PDD section A.4.4 is the estimation of emission reductions provided as requested in a tabular format?	EB 41	Ann 12	Yes, a renewable crediting period has been chosen; the estimation of emission reductions has been provided in a tabular format.	OK	OK
i. In CDM-PDD section A.4.5 is Information regarding Public funding provided?	EB 41	Ann 12	Yes. No public funding from Annex I Parties is involved in the Project	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
j. In CDM-PDD section B.1 are following provided?	EB 41	Ann 12			
i. The approved methodology and version number	EB 41	Ann 12	~~CAR 2~~ The applied ACM0002 methodology does not comply with the latest applicable version. The methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources and monitoring methodology” has been correctly updated to version 12.1.0. Hence CAR 2 was closed.	~~CAR 2~~	OK
ii. Any methodologies or tools which the above approved methodology draws upon and their version number	EB 41	Ann 12	Yes. - Tool to Calculate the Emission Factor for an Electricity System (version 02.1.0). - Tool for the Demonstration and Assessment of Additionality (version 05.2).	OK	OK
k. In CDM-PDD section B.2 are following provided?	EB 41	Ann 12			
i. Justification to the choice of methodology that the project activity meets each of the applicability conditions	EB 41	Ann 12	Yes. - The Project is a grid-connected renewable wind power project that installs a new power plant at a site where no renewable power plant was	OK	OK



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			operated prior to the implementation of the Project (green-field plant); - The Project does not involve switching from fossil fuels to renewable energy at the site of the Project.		
ii. Documentations with references that had been used. This can be provided in Annex 3 instead	EB 41	Ann 12	Yes.	OK	OK
I. In CDM-PDD section B.3 are following provided?	EB 41	Ann 12			
i. Description of all sources and gases included in the project boundary in the table	EB 41	Ann 12	Only emission of CO ₂ is considered in baseline emission.	OK	OK
ii. A flow diagram of the project boundary physically delineating the project activity	EB 41	Ann 12	The flow diagram has been presented	OK	OK
iii. The flow diagram with all equipments, systems and flows of mass and energy etc	EB 41	Ann 12	The flow diagram has been presented CL-2 The flow diagram does not represent clearly the meters location. The electricity delivered by the Project to the grid and the electricity imported from the grid to the Project will be measured continuously by one bi-directional meter installed at the Project Site.	CL-2	OK



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			The monitoring variable is represented correctly within the flow diagram and PDD is updated accordingly. Hence CL 2 is closed.		
m. In CDM-PDD section B.4 are following provided?	EB 41	Ann 12			
i. Explanation how the most plausible baseline scenario is identified in accordance with the selected baseline methodology	EB 41	Ann 12	N.A., as methodology ACM0002 prescribes the baseline scenario and no further analysis is required.	OK	OK
ii. Justification of key assumptions and rationales	EB 41	Ann 12	Methodology ACM0002 prescribes the baseline scenario and there is no need to take steps to identify the baseline scenarios.	OK	OK
iii. Transparent illustration of all data used to determine the baseline scenario (variables, parameters, data sources, etc.)	EB 41	Ann 12	N.A..	OK	OK
iv. A transparent and detailed description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed project activity	EB 41	Ann 12	Yes. It is identified in the PDD B.4 that: the baseline scenario, according to methodology ACM0002, is "electricity delivered to the grid by the proposed project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources within the North China Grid, as reflected in the combined margin (CM) calculations described in Tool to calculate the emission factor for an electricity system.".	OK	OK



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v. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	No.	OK	OK
n. In CDM-PDD section B.5 are following provided?	EB 41	Ann 12			
i. Explanation of how and why this project activity is additional and therefore not the baseline scenario in accordance with the selected baseline methodology	EB 41	Ann 12	~~Pending on closing out all findings~~ Yes.	Pending	OK
ii. Justification of key assumptions and rationales	EB 41	Ann 12	~~Pending on closing out all findings~~ Yes.	Pending	OK
iii. Transparent illustration of all data used to determine the baseline scenario (variables, parameters, data sources etc)	EB 41	Ann 12	N.A., as methodology ACM0002 prescribes the baseline scenario and no further analysis is required.	OK	OK
iv. Evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity, if the starting date of the project activity is before the date of validation	EB 41	Ann 12	The PP has informed China DNA on 25/03/2010 and EB on 12/04/2010 using the standardized form F-CDM-Prior Consideration; the notifications have been checked by BVC. They have both been sent within the required 6 months period from the Project starting date individuated being 19/11/2009. CAR 3	CAR-3	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			A timeline table comprehending the main facts of the Project is missing. Evidence in support should be provided. The timeline of the Project implementation added in the PDD has been verified and found consistent against the relative evidence provided. Hence CAR 3 was closed		
o. In CDM-PDD section B.6.1 are following provided?	EB 41	Ann 12			
i. Explanation as to how the procedures, in the approved methodology to calculate project emissions, baseline emissions, leakage emissions and emission reductions are applied to the proposed project activity	EB 41	Ann 12	Yes. Complying with ACM0002, the “Tool to calculate the emission factor for an electricity system” version 02.1.0 is applied.	OK	OK
ii. Equations used in calculating emission reductions	EB 41	Ann 12	~~CAR 4~~ The formula used to calculate the emission reduction does not comply with the latest ACM0002 methodology. The formula used to calculate the emission reduction is updated according to the latest version of methodology ACM0002 (version 12.1.0) and PDD is updated accordingly.	~~CAR 4~~	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Hence CAR 4 was closed		
iii. Explanation and justification for all relevant methodological choices, including different scenarios or cases, options and default values	EB 41	Ann 12	~~Pending on CAR 4~~ ~~CL 3~~ According to the Announcement to Publish 2009 Baseline Emission Factors for Regional Power Grids in China, for net electricity imports from CCPG and NECPG, the Option C-simple OM should be applied instead of Option B. Relevant revision is made in Section B.6 of the PDD. Option C-simple OM has been applied. Hence CL 3 was closed	CL 3 Pending	OK
p. In CDM-PDD section B.6.2 are following provided?	EB 41	Ann 12			
i. A compilation of information on the data and parameters that are not monitored throughout the crediting period but that are determined only once and thus remains fixed throughout the crediting period and that are available when validation is undertaken	EB 41	Ann 12	Yes.	OK	OK
ii. The actual value applied	EB 41	Ann 12	No. The values used are in Annex 3.	OK	OK
iii. Explanation and justification for the choice of the source of data	EB 41	Ann 12	The official data i.e. Notification of China Grid EF were based on the data of China Energy	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Statistical Yearbook and China Power Yearbook, and authorities' expertise.		
iv. Clear and transparent references or additional documentation in Annex 3	EB 41	Ann 12	Clear and transparent references/additional documentations have been listed in Annex 3 of the PDD.	OK	OK
v. Where values have been measured, a description of the measurement methods and procedures (e.g. which standards have been used), indicated the responsible person/entity having undertaken the measurement, the date of measurement(s) and the measurement results	EB 41	Ann 12	N.A. since all the values have not been measured but have been extrapolated from reliable sources such as China Energy Statistical Yearbook from 2006 to 2008, 2006 IPCC Guideline for National Greenhouse Gas Inventories, Announcement to Publish 2009 Baseline Emission Factors for Regional Power Grids in China.	OK	OK
q. In CDM-PDD section B.6.3 are following provided?	EB 41	Ann 12			
i. A transparent <i>ex ante</i> calculation of project emissions, baseline emissions (or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the approved methodology	EB 41	Ann 12	Yes. $BE_y = 99,501 \text{ tCO}_2$ $PE_y = 0 \text{ tCO}_2$ $L_y = 0 \text{ tCO}_2$	OK	OK
ii. Documentation how each equation is applied, in a manner that enables the reader to reproduce the calculation	EB 41	Ann 12	Yes.	OK	OK
iii. Additional background information and or data in Annex 3, including relevant electronic files	EB 41	Ann 12	Yes.	OK	OK



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(i.e. spreadsheets)			In Annex 3 are reported data information and background information.		
r. In CDM-PDD section B.6.4 are the results of the <i>ex ante</i> estimation of emission reductions for all years of the crediting period, provided in a tabular format?	EB 41	Ann 12	Yes.	OK	OK
s. In CDM-PDD section B.7.1 are following provided?	EB 41	Ann 12			
i. Specific information on how the data and parameters that need to be monitored would actually be collected during monitoring for the project activity	EB 41	Ann 12	~~CAR 5~~ EG_{facility,y} has to be monitored as per approved methodology As per revised PDD and verified monitoring plan, EG_{facility,y} will be continuously measured by one bi-directional meter installed on the 35 kV transmission line at the Project Site and monthly recorded Hence CAR 5 was closed	~~CAR 5~~	OK
ii. For each parameter the following below information, using the table provided:	EB 41	Ann 12			
a. The source(s) of data that will be actually used for the proposed project activity (e.g. which exact national statistics). Where	EB 41	Ann 12	~~Pending on CAR 5~~ Actual data will be obtained through onsite	Pending	OK



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several sources may be used, explain and justify which data sources should be preferred.			measurement. EG _{facility,y} will be continuously measured by one bi-directional meter installed on the 35 kV transmission line at the Project Site and monthly recorded		
b. Where data or parameters are supposed to be measured, specify the measurement methods and procedures, including a specification which accepted industry standards or national or international standards will be applied, which measurement equipment is used, how the measurement is undertaken, which calibration procedures are applied, what is the accuracy of the measurement method, who is the responsible person/entity that should undertake the measurements and what is the measurement interval; (i) A description of the QA/QC procedures (if any) that should be applied; (ii) Where relevant: any further comment. Provide any relevant further background documentation in Annex 4.	EB 41	Ann 12	~~Pending on CAR-5~~ ~~CAR-6~~ The parameters monitored must be continuously measured. EG_{facility,y} will be continuously measured by one bi-directional meter installed on the 35 kV transmission line at the Project Site and monthly recorded. The meter of the Project will be equipped in line with Technical Administrative Code of Electric Energy Metering (DL/T 448-2000) and will be calibrated according to national standards with precision of 0.2s. Hence CAR 6 was closed ~~CL-4~~ The section of QA/QC procedure does not stress which procedure would be implemented in case the meters would encounter technical malfunctioning. In section of QA/QC procedure, in case the main meter is out of order, it shall be inspected,	Pending ~~CAR-6~~ ~~CL-4~~	OK



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			repaired, or replaced immediately by the professional staff and quantity of net electricity generation supplied by the Project to the grid shall be jointly determined by the Project Owner and the power grid company. A conservative and reasonable estimate of the readings shall be determined and conservative values shall be used to estimate emission reductions. Hence CL 4 was closed		
t. In CDM-PDD section B.7.2 are following provided?	EB 41	Ann 12			
i. A detailed description of the monitoring plan	EB 41	Ann 12	Yes. The description of the monitoring plan includes a Project manager, QA/QC staff and data handling and reporting employees	OK	OK
ii. The operational and management structure that the project operator will implement in order to monitor emission reductions and any leakage effects generated by the project activity	EB 41	Ann 12	Yes.	OK	OK
iii. The responsibilities for and institutional arrangements for data collection and archiving	EB 41	Ann 12	Yes.	OK	OK
iv. Indication that the monitoring plan reflect good monitoring practice appropriate to the type of project activity	EB 41	Ann 12	Yes.	OK	OK
v. Relevant further background information in	EB 41	Ann	Yes.	OK	OK



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Annex 4		12			
u. In CDM-PDD section B.8 are following provided?	EB 41	Ann 12			
i. Date of completion of the application of the methodology to the project activity study in DD/MM/YYYY	EB 41	Ann 12	Yes Date of completion of the PDD version 01 is 11/06/2010. Date of completion of the PDD version 03 is 16/05/2011.	OK	OK
ii. Contact information of the person(s)/entity(ies) responsible for the application of the baseline and monitoring methodology to the project activity	EB 41	Ann 12	Yes. The relevant contact information is provided: Pan Tao Additional Consulting and Engineering	OK	OK
iii. Indication if the person/entity is also a project participant listed in Annex 1	EB 41	Ann 12	Yes. The person/entity is not project participant.	OK	OK
v. In CDM-PDD section C.1.1, Is the project's starting date clearly defined and evidenced?	EB 41	Ann 12	Yes, on 19/11/2009 when the Wind Turbine Supply Contract was signed.	OK	OK
w. In CDM-PDD section C.1.2 is the expected operational lifetime of the project activity in years and months provided?	EB 41	Ann 12	Yes.	OK	OK
x. In CDM-PDD section C.2, is the assumed crediting time clearly defined and reasonable	EB 41	Ann 12	Yes. A renewable crediting period of max. 3 x 7 has	OK	OK



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(renewable crediting period of max. three x 7 years or fixed crediting period of max. 10 years)?			been chosen.		
y. In CDM-PDD section D, are the conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the Host Party, if environmental impacts are considered significant by the project participants or the Host, provided?	EB 41	Ann 12	Yes. Both EIA and its approval confirm that the Project environmental impacts are not significant and can be avoided with the implementation of environmental management procedures.	OK	OK
z. In CDM-PDD section E.1 are the following provided?	EB 41	Ann 12			
i. The process by which comments by local stakeholders have been invited and compiled. An invitation for comments by local stakeholders shall be made in an open and transparent manner, in a way that facilitates comments to be received from local stakeholders and allows for a reasonable time for comments to be submitted.	EB 41	Ann 12	Yes, as per verified questionnaires, stakeholder survey was conducted in November 2009.	OK	OK
ii. The project activity is described in a manner, which allows the local stakeholders to understand the project activity, taking into account confidentiality provisions of the CDM modalities and procedures.	EB 41	Ann 12	Yes.	OK	OK
iii. The local stakeholder process has been completed before submitting the proposed	EB 41	Ann 12	Yes.	OK	OK



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project activity to the DOE for validation.					
aa. In CDM-PDD section E.2 are following provided?	EB 41	Ann 12			
i. Identification of local stakeholders that have made comments	EB 41	Ann 12	Yes. Residents living nearby the proposed project.	OK	OK
ii. A summary of this comments.	EB 41	Ann 12	Yes. See PDD Section E.2	OK	OK
bb. In CDM-PDD section E.3 is the explanation of how due account have been taken of comments received from local stakeholders provided?	EB 41	Ann 12	Yes. The stakeholders are all supportive of the Project. This has been confirmed by checking the questionnaires. In addition procedures to protect the surrounding environment will be appropriately implemented. Overall, there is no need to modify the Project design, construction or operation	OK	OK
cc. In CDM-PDD Annex 1 are the following provided?	EB 41	Ann 12			
i. Contact information of project participants	EB 41	Ann 12	Yes. Contact information of Hebei Construction Investment Yuzhou Wind Energy Co., Ltd. and Department of Climate Change, National Development and Reform Commission had been provided.	OK	OK
ii. For each organisation listed in section A.3 the following mandatory fields: Organization, Name	EB 41	Ann 12	Yes.	OK	OK



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of contact person, Street, City, Postfix/ZIP, Country, Telephone and Fax or e-mail					
dd. In CDM-PDD Annex 2 is information from Parties included in Annex I on sources of public funding for the project activity which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties provided?	EB 41	Ann 12	Yes. No public funding from Annex I Parties was granted for the proposed project. This has been confirmed by checking the FSR and its approval.	OK	OK
ee. In CDM-PDD Annex 3 is the background information used in the application of the baseline methodology provided?	EB 41	Ann 12	Yes.	OK	OK
ff. In CDM-PDD Annex 4 is the background information used in the application of the monitoring methodology provided?	EB 41	Ann 12	Yes.	OK	OK
4. Project description	VVM	58-64			
a. Is the description of the proposed CDM project activity as contained in the PDD:	VVM	59			
i. sufficiently covering all relevant elements?	VVM	59	~~Pending on CL 1~~ Yes.	Pending	OK
ii. accurate?	VVM	59	~~Pending on CL 1~~ Yes.	Pending	OK
iii. providing the reader with a clear understanding of the nature of the proposed CDM project	VVM	59	~~Pending on CL 1~~ Yes.	Pending	OK



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activity?					
iv. Are there any changes/modifications compared to the webhosted PDD?	VVM	59	~~Pending on CL 1~~ The models wind turbines employed in the Project has been added.	Pending	OK
b. Is the proposed CDM project activity in existing facilities or or utilizing existing equipments?	VVM	60	No. The project installs a new 49.3 MW grid connected wind power plant at a site where no renewable power plant was operated before.	OK	OK
c. Is the CDM project activity one of the following types:	VVM	60			
i. Large scale?	VVM	60	Yes.	OK	OK
ii. Non-bundled small scale projects with emission reductions exceeding 15,000 tonnes per year?	VVM	60	No.	OK	OK
iii. Bundled small scale projects, each with emission reductions not exceeding 15,000 tonnes?	VVM	60	No.	OK	OK
d. If yes to (b) or (c) above, was a physical site inspection conducted to confirm that the description in the PDD reflects the proposed CDM project activity, unless other means are specified in the methodology?	VVM	60	Yes. Li Xingtong and Limonta Gabriele, respectively Climate change lead verifier and climate change verifier (trainee) of BVC, performed an onsite visit on 08/09/2010 to assess the Project, the personal interviewed as listed below: Mr. Zhao Yongchao Manager of Hebei Construction Investment Yuzhou Wind Energy	OK	OK



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			Co., Ltd. Mr. Huang Hai CDM Manger of Hebei Construction Investment Yuzhou Wind Energy Co., Ltd. Mr. Du Guang CDM officer of Hebei Construction Investment Yuzhou Wind Energy Co., Ltd. Mr. Zhang Ting Liang Project Manager of Hebei Construction Investment Yuzhou Wind Energy Co., Ltd. Mr. Xiang Pang Yu Local stakeholder Ms. Pan Tao and Li Qin CDM consultants of Additional Consulting and Engineering		
e. If yes to (c.iii) above, was the number of physical site visits base on samping?	VVM	60	N.A.	OK	OK
f. If yes is the sampling size appropriately justified through statistical analysis?	VVM	60	N.A.	OK	OK
g. For other individual proposed small scale CDM project activities with emission reductions not exceeding 15,000 tonnes per year, was a physical site inspection conducted?	VVM	61	N.A.	OK	OK
h. For all other proposed CDM project activities not referred to in VVM paragraphs 59 – 61, was a physical site inspection conducted?	VVM	62	N.A.	OK	OK



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i. If no, was it appropriately justified?	VVM	62	N.A.	OK	OK
j. Does the proposed CDM project activity involve the alteration of an existing installation or process?	VVM	63	No.	OK	OK
k. If yes, does the project description clearly state the differences resulting from the project activity compared to the pre-project situation?	VVM	63	N.A.	OK	OK
5. Baseline and monitoring methodology					
a. General requirement	VVM	65-			
a. Do the the baseline and monitoring methodologies selected by the project participants comply with the methodologies previously approved by the CDM Executive Board?	VVM	65	~~Pending on CAR-2~~ Yes.	Pending	OK
b. Is the selected methodology applicable to the project activity?	VVM	66	Refer to (5.b.a) below	OK	OK
c. Had the PP correctly applied the selected methodology?	VVM	66	Refer to (5.b.d) below	OK	OK
d. Had the selected methodology been correctly applied with respect to project boundary?	VVM	67	Refer to (5.c) below	OK	OK
e. Had the selected methodology been correctly applied with respect to baseline identification?	VVM	67	Refer to (5.d) below	OK	OK
f. Had the selected methodology been correctly applied with respect to Algorithms and/or	VVM	67	Refer to (5.e) below	OK	OK



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formulae used to determine emission reductions?					
g. Had the selected methodology been correctly applied with respect to additionality?	VVM	67	~~Pending on CAR 2~~ Yes.	Pending	OK
h. Had the selected methodology been correctly applied with respect to monitoring methodology?	VVM	67	Yes.	OK	OK
<i>b. Applicability of the selected methodology to the project activity</i>	VVM	68-77			
a. Is the methodology correctly quoted?	VVM	70	~~Pending on CAR 2~~ Yes.	Pending	OK
b. Are the applicability conditions of the methodology met?	VVM	71	Yes.	OK	OK
i. This methodology is applicable to grid-connected renewable power generation project activities that (a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plants); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).	ACM	0002	Yes. The project installs a new 49.3 MW grid connected wind power plant at a site where no renewable power plant was operated before.	OK	OK
ii. The project activity is the installation, capacity addition, retrofit or replacement of a power plant/unit of one of the following types: hydro power plant/unit (either with a run-of-river	ACM	0002	Yes. The project is the installation of a new 49.3MW grid connected wind power plant generating electricity from wind sources at a site where no	OK	OK



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reservoir or an accumulation reservoir), wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit			renewable power plant was operated prior to the implementation of the project activity (greenfield plant) and will be connected to North China Grid.		
iii. In the case of capacity additions, retrofits or replacements (except for wind, solar, wave or tidal power capacity addition projects which use Option 2: on page 10 to calculate the parameter $EGPJ,y$): the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	ACM	0002	N.A.	OK	OK
iv. In case of hydro power plants, one of the following conditions must apply: - The project activity is implemented in an existing reservoir, with no change in the volume of reservoir; or - The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per	ACM	0002	N.A.	OK	OK



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definitions given in the Project Emissions section, is greater than 4 W/m²; - or The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, is greater than 4 W/m².					
v. The methodology is not applicable to the following conditions. Please confirm - Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity - Biomass fired power plants; - Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the power plant is less than 4 W/m².	ACM	0002	Yes. The project does not involve switching from fossil fuels to renewable energy source at the site of the project activities and it is neither a biomass fired power plant nor a hydro power plant.	OK	OK
c. Is the project activity expected to result in emissions other than those allowed by the methodology?	VVM	71	No.	OK	OK
d. Is the choice of the methodology justified?	VVM	71	Yes.	OK	OK
e. Have the project participants shown that the project activity meets each of the applicability conditions of the approved methodology?	VVM	71	Refer to (5.b.d) above	OK	OK
f. Have the project participants shown that the	VVM	71	Yes.	OK	OK



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project activity meets each of the applicability conditions of any tool or other methodology component referred to the methodology?					
g. Is the DOE, based on local and sectoral knowledge, aware that comparable information is available from sources other than that used in the PDD?	VVM	71	Yes.	OK	OK
h. If yes, was the PDD cross checked against the other sources to confirm that the project activity meets the applicability conditions of the methodology? (provide the reference to these choices)	VVM	71	Yes. BVC reviewed the FSR, EIA and their approvals, equipment purchase contracts and conducted an on-site visit to the project to confirm that the project activity meets the applicability conditions of the methodology.	OK	OK
i. Can a determination regarding the applicability of the selected methodology to the proposed CDM project activity be made?	VVM	72	~~Pending on CAR-2~~ Methodology ACM0002 version 12.1.0 is correctly applied.	~~Pending~~	OK
j. If no, clarification of the methodology was requested, in accordance with the guidance provided by the CDM Executive Board?	VVM	72	N.A..	OK	OK
k. If answer to (5.b.b) above is “no”, revision or deviation from the methodology was requested, in accordance with the guidance provided by the CDM Executive Board?	VVM	73	N.A..	OK	OK
l. If yes to (5.b.j) and (5.b.k) above, a request for registration was submitted before the CDM	VVM	74	N.A..	OK	OK



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Executive Board has approved the proposed deviation or revision?					
c. Project boundary	VVM	78-80			
a. Is the delineation in the PDD of the project boundary correct and include identification of all locations, processes and equipment including secondary equipment and associated processes such as logistics etc.?	VVM	79	Yes. The spatial extent of the project boundary includes the Project Power Plant and all power plants connected physically to the North China Grid that the Project power plant is connected to. The defined project boundary is in line with ACM0002 ver. 12.1.0 and all emission sources and GHGs have been included in the project boundary. Please, for reference look at: http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File2333.pdf	OK	OK
b. Does the delineation in the PDD of the project boundary meet the requirements of the selected baseline?	VVM	79	Yes.	OK	OK
c. Have changes been made to the project boundary in comparison to the webhosted PDD? If yes please comment on the reason for the changes.	VVM	79	No.	OK	OK
d. Have all sources and GHGs required by the methodology been included within the project boundary?	VVM	79	Yes. CO ₂ emissions by fossil fuel fired power plants for electricity generation that are displaced due to the Project is taken into account.	OK	OK
e. Does the methodology allow project participant to choose whether a source or gas is to be included	VVM	79	No.	OK	OK



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within the project boundary					
f. If yes, have the project participants justified that choice?	VVM	79	N.A..	OK	OK
g. If yes, is the justification provided reasonable? (provide reference to the supporting documented evidence provided by the project participants)	VVM	79	N.A..	OK	OK
d. Baseline identification	VVM	81-88			
a. Does the methodology require several alternative scenarios to be considered in the identification of the most reasonable baseline scenario?	VVM	83	Not applicable, as methodology ACM0002 prescribes the baseline scenario and no further analysis required, therefore, there is no need to take steps to identify the baseline scenarios.	OK	OK
b. If yes, are all scenarios that are considered by the project participants and are supplementary to those required by the methodology reasonable in the context of the proposed CDM project activity?	VVM	83	N.A.	OK	OK
c. Has any reasonable alternative scenario been excluded?	VVM	83	N.A.	OK	OK
d. Is the baseline scenario identified reasonably supported by:	VVM	84			
i. Assumptions?	VVM	84	N.A.	OK	OK
ii. Calculations?	VVM	84	N.A.	OK	OK
iii. Rationales?	VVM	84	N.A.	OK	OK
e. Are the documents and sources referred to in the	VVM	84	N.A.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
PDD correctly quoted and interpreted?					
f. Was the information provided in the PDD cross checked with other verifiable and credible sources, such as local expert opinion, if available? (identify the sources)	VVM	84	Crosschecked against the Announcement to Publish 2009 Baseline Emission Factors for Regional Power Grids in China (China's DNA) issued on 02/07/2009 http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File2333.pdf	OK	OK
g. Have all applicable CDM requirements been taken into account in the identification of the baseline scenario for the proposed CDM project activity?	VVM	85	Yes.	OK	OK
h. Have all relevant policies and circumstances been identified and correctly considered in the PDD, in accordance with the guidance by the CDM Executive Board?	VVM	85	Yes.	OK	OK
i. Does the PDD provide a verifiable description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed CDM project activity?	VVM	86	Yes.	OK	OK
e. Algorithms and/or formulae used to determine emission reductions	VVM	89-93			
a. Have the equations and parameters in the PDD been correctly applied with respect those in the select approved methodology?	VVM	90	~~Pending on CAP 4~~ Yes.	Pending	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Do the steps taken and equations applied to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected baseline and monitoring methodology?	VVM	89	Yes. Complying with ACM0002, the “Tool to calculate the emission factor for an electricity system” version 02.1.0 is correctly applied.	OK	OK
ii. Are the Project emissions appropriately calculated?	ACM	0002	Yes, as per methodology, for wind power project, project emissions are equal to zero.	OK	OK
iii. Are the Baseline emissions appropriately calculated specifically for (a) greenfield plants or (b) retrofit and replacements or (c) capacity additions?	ACM	0002	Yes. The baseline emissions are correctly calculated for a greenfield plant, i.e. $EG_{PJ,y} = EG_{facility,y}$	OK	OK
iv. Are the Leakage appropriately calculated?	ACM	0002	Yes, as per methodology, no leakage emissions are considered.	OK	OK
v. Are the Emission reductions appropriately calculated?	ACM	0002	~~Pending on CAR 4~~ The formula used to calculate the emission reduction is updated according to the latest version of methodology ACM0002 (version 12.1.0) and PDD is updated accordingly.	CAR 4	OK
b. Does the methodology provide for selection between different options for equations or parameters?	VVM	90	Options in Tool-Grid EF are used to determine the emission factor of North China Grid.	OK	OK
c. If yes, has adequate justification been provided (based on the choice of the baseline scenario, context of the proposed CDM project activity and	VVM	90	~~Pending on CAR 4~~ Yes.	Pending	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
other evidence provided)?					
d. If yes, have correct equations and parameters been used, in accordance with the methodology selected?	VVM	90	Refer to (5.e.b) above	OK	OK
e. Will data and parameters be monitored throughout the crediting period of the proposed CDM project activity?	VVM	91	No. The emission factor is determined ex ante for the Project.	OK	OK
f. If no, and these data and parameters will remain fixed throughout the crediting period, are all data sources and assumptions:	VVM	91	Yes. The equations and parameters are consistent with the official calculation of baseline emission factor issued on 02/07/2009 by China's DNA.	OK	OK
i. Appropriate and correct?	VVM	91	Yes.	OK	OK
ii. Applicable to the proposed CDM project activity?	VVM	91	Yes.	OK	OK
iii. Resulting in a conservative estimate of the emission reductions?	VVM	91	Yes.	OK	OK
g. Will data and parameters be monitored on implementation and hence become available only after validation of the project activity?	VVM	91	No.	OK	OK
h. If yes, are the estimates provided in the PDD for these data and parameters reasonable?	VVM	91	N.A..	OK	OK
6. Additionality of a project activity	VVM	94-97			
a. Does the CDM-PDD state the latest version of the	VVM	95	Yes.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
additionality tool being used?			The approved "Tool for the Demonstration and Assessment of Additionality" version 05.2 is used in the PDD.		
b. Were the following steps of the tool to assess additionality used:	EB 39	Ann 10			
i. Identification of alternatives to the project activity?	EB 39	Ann 10	Yes.	OK	OK
ii. Investment analysis to determine that the proposed project activity is either: 1) not the most economically or financially attractive, or 2) not economically or financially feasible?	EB 39	Ann 10	Yes.	OK	OK
iii. Barriers analysis?	EB 39	Ann 10	No.	OK	OK
iv. Common practice analysis?	EB 39	Ann 10	Yes.	OK	OK
c. In step 1 (i) have all the sub-steps as below been followed?	EB 39	Ann 10			
i. Sub-step 1a: Define alternatives to the project activity	EB 39	Ann 10	Yes.	OK	OK
ii. Sub-step 1b: Consistency with mandatory laws and regulations	EB 39	Ann 10	Yes.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
d. Have the following alternatives been included while defining alternatives as per sub-step 1a?	EB 39	Ann 10			
i. (a) The proposed project activity undertaken without being registered as a CDM project activity;	EB 39	Ann 10	Yes. Baseline Alternative II: the Project undertaken without being registered as a CDM project activity	OK	OK
ii. (b) Other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality, properties and application areas, taking into account, where relevant, examples of scenarios identified in the underlying methodology;	EB 39	Ann 10	Yes. Baseline Alternative I: Construction of a thermal power plant with an equivalent amount of annual electricity generation. Baseline Alternative III: Construction of a power plant using other sources of renewable energy with equivalent amount of annual electricity generation.	OK	OK
iii. (c) If applicable, continuation of the current situation (no project activity or other alternatives undertaken).	EB 39	Ann 10	Yes. Baseline Alternative IV: Provision of an equivalent amount of annual power output by North China Grid which the Project is connected to.	OK	OK
e. Has the project participant included the technologies or practices that provide outputs or services with comparable quality, properties and application areas as the proposed CDM project activity and that have been implemented previously or are currently being introduced in the relevant country/region?	EB 39	Ann 10	Yes.	OK	OK
f. Has the outcome of Step 1a: Identified realistic and credible alternative scenario(s) to the project	EB 39	Ann 10	Yes. However Baseline Alternative III - construction of	OK	OK



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activity done correctly? Please briefly mention the outcome.			a power plant using other sources of renewable energy with equivalent amount of annual electricity generation - is not a realistic alternative as per local geographical and/or economical environment. The supporting documents have been checked and found consistent. The realistic and credible alternatives to the Project are Baseline Alternative I, II and IV.		
g. Is the alternative(s) in compliance with all mandatory applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g. to mitigate local air pollution.?	EB 39	Ann 10	According to Chinese power regulations, the construction of a thermal power plant with the installed capacity of less than 135MW is prohibited in the areas covered by large grids (Notice issued by the General Office of the State Council, Decree No. 2002-6). Consequently Baseline Alternative I - a thermal power plant with the same annual electricity output as the proposed project - is not a realistic and credible alternative. Baseline Alternative II- the Project undertaken without being registered as a CDM project activity – and Baseline Alternative IV -Provision of an equivalent amount of annual power output by North China Grid which the Project is connected to – are left	OK	OK
h. If an alternative does not comply with all mandatory applicable legislation and regulations,	EB 39	Ann	No.	OK	OK



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has it been shown that, based on an examination of current practice in the country or region in which the law or regulation applies, those applicable legal or regulatory requirements are systematically not enforced and that noncompliance with those requirements is widespread in the country?		10	The regulation regarding thermal power plant with comparable capacity or electricity generation is enforced in the country and, generally, noncompliance with the national regulation does not occur.		
i. Has the outcome of Step 1b: Identified realistic and credible alternative scenario(s) to the project activity that are in compliance with mandatory legislation and regulations taking into account the enforcement in the region or country and EB decisions on national and/or sectoral policies and regulations done correctly? Please state the outcome.	EB 39	Ann 10	Yes. Baseline Alternative II- the Project undertaken without being registered as a CDM project activity – and Baseline Alternative IV -Provision of an equivalent amount of annual power output by North China Grid which the Project is connected to.	OK	OK
j. Has PP selected Step 2 (Investment analysis) or Step 3 (Barrier analysis) or both Steps 2 and 3?	EB 39	Ann 10	Only step 2 was selected.	OK	OK
k. In step 2, have all the sub-steps as below been followed?	EB 39	Ann 10	Yes.	OK	OK
i. Sub-step 2a: Determine appropriate analysis method;	EB 39	Ann 10	Yes.	OK	OK
ii. Sub-step 2b: Determine whether to apply simple cost analysis (Option I), investment comparison analysis (Option II) or benchmark analysis (Option III)	EB 39	Ann 10	The Project uses the benchmark analysis since the benchmark IRR of the power sector is available. Simple cost analysis was excluded because the	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Project will earn revenues from the CERs and the electricity sale		
iii. Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III);	EB 39	Ann 10	Yes.	OK	OK
iv. Sub-step 2d: Sensitivity analysis (only applicable to Options II and III).	EB 39	Ann 10	Yes.	OK	OK
I. In sub-step 2a has the determination of appropriate method of analysis done as per the guidance as below?	EB 39	Ann 10	Yes.	OK	OK
i. Simple cost analysis if the CDM project activity and the alternatives identified in Step 1 generate no financial or economic benefits other than CDM related income (Option I).	EB 39	Ann 10	N.A. since the Project will earn revenues from the CERs and the electricity sale.	OK	OK
ii. Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis (Option III). Specify option used with justification.	EB 39	Ann 10	The Project uses the benchmark analysis since the benchmark IRR of the power sector is available.	OK	OK
m. Has the below guideline followed for sub-step 2b Option I. Apply simple cost analysis? Document the costs associated with the CDM project activity and the alternatives identified in Step 1 and demonstrate that there is at least one alternative which is less costly than the project activity.	EB 39	Ann 10	N.A.	OK	OK
n. Has the below guideline followed for sub-step 2b	EB 39	Ann	N.A.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Option II. Apply investment comparison analysis? Identify the financial indicator, such as IRR, NPV, cost benefit ratio, or unit cost of service most suitable for the project type and decision-making context. Please specify		10			
o. Has the below guideline followed for Sub-step 2b: Option III. Apply benchmark analysis?	EB 39	Ann 10	Yes.	OK	OK
i. Identify the financial/economic indicator, such as IRR, most suitable for the project type and decision context.	EB 39	Ann 10	Yes. The benchmark analysis method based on project IRR has been chosen. ~~CL-5~~ It has not been specified whether a pre- or post tax benchmark has been used. A post-tax benchmark has been used. Hence CL 5 was closed.	~~CL-5~~	OK
ii. When applying Option II or Option III, the financial/economic analysis shall be based on parameters that are standard in the market, considering the specific characteristics of the project type, but not linked to the subjective profitability expectation or risk profile of a particular project developer. Only in the particular case where the project activity can be implemented by the project participant, the specific financial/economic situation of the	EB 39	Ann 10	Based on the values of the approved FSR finalized by a third party contracted by the PP.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
company undertaking the project activity can be considered.					
iii. Discount rates and benchmarks shall be derived from: (a) Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial) expert or documented by official publicly available financial data; (b) Estimates of the cost of financing and required return on capital (e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned), based on bankers views and private equity investors/funds' required return on comparable projects; (c) A company internal benchmark (weighted average capital cost of the company), only in the particular case referred to above in 2. The project developers shall demonstrate that this benchmark has been consistently used in the past, i.e. that project activities under similar conditions developed by the same company used the same benchmark; (d) Government/official approved benchmark where such benchmarks are used for investment decisions; (e) Any other indicators, if the project participants can demonstrate that the above Options are not applicable and their indicator is appropriately justified. Please specify benchmark and justify.	EB 39	Ann 10	According to <i>Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects</i> issued by former State Power Corporation of China in 2002, the financial benchmark of Chinese electric power industry is 8% on project IRR (post tax), which has been used widely in feasibility studies of new power plants, including wind power projects in China.	OK	OK



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p. Has the below guideline followed for Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III)?	EB 39	Ann 10			
i. Calculate the suitable financial indicator for the proposed CDM project activity and, in the case of Option II above, for the other alternatives. Include all relevant costs (including, for example, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but possibly including inter alia subsidies/fiscal incentives, ODA, etc, where applicable), and, as appropriate, non-market cost and benefits in the case of public investors if this is standard practice for the selection of public investments in the host country.	EB 39	Ann 10	~~CAR 7~~ Calculation for VAT is not correct. As a matter of fact the Investment decision to proceed with the Project as CDM was made by the PP on 05/08/2009 when the <i>Notice of Value Added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products</i> (Cai Shui [2008]156) and <i>Notice about Implementation of VAT Reform in the Whole Country</i> (Cai Shui [2008]170) were already been issued and known. The calculation for VAT is revised in the IRR spreadsheet accordingly to the above mentioned regulations The new IRRs without and with CER revenues are 4.52% and 8.96%, Hence CAR 7 was closed.	CAR-7	OK
ii. Present the investment analysis in a transparent manner and provide all the relevant assumptions, preferably in the CDM-PDD, or in separate annexes to the CDM-PDD.	EB 39	Ann 10	~~Pending on CAR 7~~ Yes. IRR calculation spread sheet has been provided.	Pending	OK
iii. Justify and/or cite assumptions.	EB 39	Ann	~~Pending on CAR 7~~	Pending	OK



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		10	Yes.		
iv. In calculating the financial/economic indicator, the project's risks can be included through the cash flow pattern, subject to project-specific expectations and assumptions.	EB 39	Ann 10	~~Pending on CAR 7~~ Yes.	Pending	OK
v. Assumptions and input data for the investment analysis shall not differ across the project activity and its alternatives, unless differences can be well substantiated.	EB 39	Ann 10	Not applicable as Option III is used.	OK	OK
vi. Present in the CDM-PDD a clear comparison of the financial indicator for the proposed CDM activity. Please specify details for above.	EB 39	Ann 10	~~Pending on CAR 7~~ Yes. 4.52% vs 8%	Pending	OK
q. Has the below guideline followed for Sub-step 2d: Sensitivity analysis (only applicable to Options II and III)? Include a sensitivity analysis that shows whether the conclusion regarding the financial/economic attractiveness is robust to reasonable variations in the critical assumptions.	EB 39	Ann 10	Four main variable factors are identified for sensitivity analysis of the project, including total investment, tariff, annual electricity supplied, annual operation and maintenance (O&M) cost with a variation range from -10% to 10% and the IRR remains lower than the benchmark of 10%. ~~Pending on CAR 7~~ ~~CL-6~~ The sensitivity analysis of the abovementioned indicators should be further discussed examining under which conditions the IRR will cross the benchmark and elaborating on their likelihood to	Pending CL-6	OK



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			occur. The sensitivity analysis of the four indicators is further discussed examining under which conditions the Project IRR would reach the benchmark of 8%, and none of these conditions can be achieved. Hence CL 6 was closed		
r. Has the outcome of Step 2 clearly mentioned with justification?	EB 39	Ann 10	~~Pending on CAP 7~~ Yes. It has been shown that the CER revenues can alleviate the identified barriers, therefore the Project is additional.	Pending	OK
s. In step 3: Barrier analysis have all the sub-steps as below been followed?	EB 39	Ann 10	No, the Project did not use step 3 for demonstrating additionality.	OK	OK
i. Sub-step 3a: Identify barriers that would prevent the implementation of the proposed CDM project activity;	EB 39	Ann 10	N.A.	OK	OK
ii. Sub-step 3b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity).	EB 39	Ann 10	N.A.	OK	OK
t. Has the below guideline followed for Sub-step 3a: Identify barriers that would prevent the	EB 39	Ann	N.A.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
implementation of the proposed CDM project?		10			
i. (a) Investment barriers: For alternatives undertaken and operated by private entities: Similar activities have only been implemented with grants or other non-commercial finance terms. No private capital is available from domestic or international capital markets due to real or perceived risks associated with investment in the country where the proposed CDM project activity is to be implemented, as demonstrated by the credit rating of the country or other country investments reports of reputed origin.	EB 39	Ann 10	N.A.	OK	OK
ii. (b) Technological barriers: Skilled and/or properly trained labour to operate and maintain the technology is not available in the relevant country/region, which leads to an unacceptably high risk of equipment disrepair and malfunctioning or other underperformance; Lack of infrastructure for implementation and logistics for maintenance of the technology, Risk of technological failure: the process/technology failure risk in the local circumstances is significantly greater than for other technologies that provide services or outputs comparable to those of the proposed CDM project activity, as demonstrated by relevant scientific literature or technology manufacturer information, The	EB 39	Ann 10	N.A.	OK	OK



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particular technology used in the proposed project activity is not available in the relevant region.					
iii. (c) Barriers due to prevailing practice: The project activity is the “first of its kind”.	EB 39	Ann 10	N.A.	OK	OK
iv. (d) Other barriers, preferably specified in the underlying methodology as examples.	EB 39	Ann 10	N.A.	OK	OK
u. Has the outcome from Step 3a clearly mentioned in PDD?	EB 39	Ann 10	N.A.	OK	OK
v. Has the below guideline followed for Sub-step 3 b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity)?	EB 39	Ann 10	N.A.	OK	OK
i. If the identified barriers also affect other alternatives, explain how they are affected less strongly than they affect the proposed CDM project activity. In other words, demonstrate that the identified barriers do not prevent the implementation of at least one of the alternatives. Any alternative that would be prevented by the barriers identified in Sub-step 3a is not a viable alternative, and shall be eliminated from consideration.	EB 39	Ann 10	N.A.	OK	OK
ii. Provide transparent and documented evidence,	EB 39	Ann	N.A.	OK	OK



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and offer conservative interpretations of this documented evidence, as to how it demonstrates the existence and significance of the identified barriers and whether alternatives are prevented by these barriers.		10			
iii. The type of evidence to be provided should include at least one of the following: (a) Relevant legislation, regulatory information or industry norms; (b) Relevant (sectoral) studies or surveys (e.g. market surveys, technology studies, etc) undertaken by universities, research institutions, industry associations, companies, bilateral/multilateral institutions, etc; (c) Relevant statistical data from national or international statistics; (d) Documentation of relevant market data (e.g. market prices, tariffs, rules); (e) Written documentation of independent expert judgments from industry, educational institutions (e.g. universities, technical schools, training centres), industry associations and others. Please specify.	EB 39	Ann 10	N.A.	OK	OK
w. Has the outcome from Step 3 clearly mentioned in PDD?	EB 39	Ann 10	N.A.	OK	OK
x. In step 4: Common practise analysis have all the sub-steps as below followed?	EB 39	Ann 10	Yes.	OK	OK
i. Sub-step 4a: Analyze other activities similar to	EB 39	Ann	Yes.	OK	OK



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the proposed project activity;		10			
ii. Sub-step 4b: Discuss any similar Options that are occurring.	EB 39	Ann 10	Yes.	OK	OK
y. Has the below guideline followed for Sub-step 4a: Analyze other activities similar to the proposed project activity? Provide an analysis of any other activities that are operational and that are similar to the proposed project activity. Other CDM project activities are not to be included in this analysis. Provide documented evidence and, where relevant, quantitative information. On the basis of that analysis, describe whether and to which extent similar activities have already diffused in the relevant region.	EB 39	Ann 10	The criteria for identifying similar projects as follow: ➤ Wind power projects ➤ Similar technology and similar regulatory framework(>15MW) ➤ Commission after 2002 ➤ Located in Hebei Province BVC has checked the “Notice of National Council Issued about the Power System of Organization Reform Programme” in 2002 and therefore can confirm that the power projects commission after 2002 are distinguish different from that commission before 2002. Hebei Province is among the largest wind resources regions in China, and BVC considered it large enough for common practice. GL-7	GL-7	OK



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			Please complete the common practice analysis since the statistics of wind power for the years 2008 and 2009 have not been considered. BVC has checked the China Wind Farms Capacity Statistic in 2007, 2008 conducted by Professor Shi Pengfei and 2009 China wind farm statistics issued by CWEA, and can confirm that the statistic is the latest version of public information available in China. With regard to the criteria above two similar projects were identified: Chengde Hongsong Wind Farm and Shangyi Manjing wind farm. Hence CL 7 was closed		
z. Has the below guideline followed for Sub-step 4b: Discuss any similar Options that are occurring? If similar activities are identified, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially/economically unattractive or subject to barriers. This can be done by comparing the proposed project activity to the other similar activities, and pointing out and explaining essential distinctions between them that explain	EB 39	Ann 10	~~Pending on CL 7~~ Yes, the essential distinctions between the Project and the identified similar projects were discussed in the Sub-step 4b. In fact Chengde Hongsong Wind Farm and Shangyi Manjing wind farm had both applied for carbon funding by selling VER through VCS to alleviate financial barriers.	Pending	OK



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why the similar activities enjoyed certain benefits that rendered it financially/economically attractive (e.g., subsidies or other financial flows) and which the proposed project activity cannot use or did not face the barriers to which the proposed project activity is subject. In case similar projects are not accessible, the PDD should include justification about non-accessibility of data/information.					
aa. Has the outcome from Step 4 clearly mentioned in PDD?	EB 39	Ann 10	~~Pending on CL 7~~ Yes. The Project is not common practice.	Pending	OK
bb. Has it been proved that the porject is additional?	EB 39	Ann 10	~~Pending on CL 7~~ Yes. The Project is not common practice.	Pending	OK
a. Prior consideration of the clean development mechanism	VVM	98-104			
a. Is the project ativity start date prior to the date of publication of the PDD for stakeholder comments?	VVM	98	Yes, The Project starting date has been individuated being 19/11/2009 while the date of publication for stakeholders' comments is 22 Jul 2010.	OK	OK
b. If yes, were the CDM benefits considered necessary in the decision to undertake the project as a proposed CDM project activity?	VVM	98	Yes. The FSR of the Project was completed in December 2008 by Hebei Electric Power Design & Research Institute and then approved by Hebei	OK	OK



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			Development and Reform Commission (Code: Ji Fa Gai Neng Yuan He Zi [2009] No.137) on 27/07/2009. The FSR showed that the Project would not have been realized without CDM financial support. Based on the conclusion of the FSR, the PP decided to implement the Project with CDM support on 05/08/2009. On 19/11/2009, the wind turbines purchase contract was signed. This is the earliest of the dates at which the implementation or construction or real action of the Project began and has been identified as the project start date. As per verified evidence The PP has informed China DNA on 25/03/2010 and EB on 12/04/2010 using the standardized form F-CDM-Prior Consideration; the notifications have been checked by BVC. They have both been sent within the required 6 months period from the Project starting date individuated being 19/11/2009. Hence it has been demonstrated that the CDM benefits were considered necessary in the decision to undertake the project as a proposed CDM project activity		



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c. Is the start date of the project activity, reported in the PDD, in accordance with the "Glossary of CDM terms", which states that "The starting date of a CDM project activity is the earliest date at which either the implementation or construction or real action of a project activity begins."?	VVM	99	Yes.	OK	OK
d. Does the project activity require construction, retrofit or other modifications?	VVM	99	Yes, the project activity requires construction.	OK	OK
e. If yes, is it ensured that the date of commissioning cannot be considered as the project activity start date?	VVM	99	Yes. The Project starting date is when the wind turbine purchasing contract was signed.	OK	OK
f. Is it a new project activity (a project activity with a start date on or after 02 August 2008) or an existing project activity (a project activity with a start date before 02 August 2008)?	VVM EB 49	100 Ann 22	New Project activity.	OK	OK
g. For a new project, for which PDD has not been published for global stakeholder consultation or a new methodology proposed to the CDM Executive Board before the project activity start date, had PPs informed the host Party DNA and the UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status? (Provide reference to such confirmation from host Party DNA and UNFCCC secretariat).	VVM EB 49	101 Ann 22	The PP has informed both the China DNA and UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status. The notification was sent to China DNA 25/03/2010 and confirmed by China DNA on 19/04/2010. The notification form has been provided to BVC and checked. The notification form submitted to EB on 12/04/2010 can be found in the following website:	OK	OK



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			http://cdm.unfccc.int/Projects/PriorCDM/notifications/index_html		
h. For an existing project activity, for which the start date is prior to the date of publication of the PDD for global stakeholder consultation, are the following evidences provided:	VVM	102			
i. evidence that must indicate that awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project, including, inter alia:	VVM	102	N.A.	OK	OK
a) minutes and/or notes related to the consideration of the decision by the Board of Directors, or equivalent, of the project participant, to undertake the project as a proposed CDM project activity?	VVM	102	N.A.	OK	OK
ii. reliable evidence from project participants that must indicate that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation, including, inter alia:	VVM	102	N.A.	OK	OK
a) contract with consultants for CDM/PDD/methodology services?	VVM	102	N.A.	OK	OK
b) Emission Reduction Purchase Agreements or other documentation related to the sale	VVM	102	N.A.	OK	OK



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of the potential CERs (including correspondence with multilateral financial institutions or carbon funds)?					
c) evidence of agreements or negotiations with a DOE for validation services?	VVM	102	N.A.	OK	OK
d) submission of a new methodology to the CDM Executive Board?	VVM	102	N.A.	OK	OK
e) publication in newspaper?	VVM	102	N.A.	OK	OK
f) interviews with DNA?	VVM	102	N.A.	OK	OK
g) earlier correspondence on the project with the DNA or the UNFCCC secretariat?	VVM	102	N.A.	OK	OK
h) Has the chronology of events including time lines been appropriately captured and explained/detailed in the PDD?	VVM	102	N.A.	OK	OK
<i>b. Identification of alternatives</i>	VVM	105-107			
a. Does the approved methodology that is selected by the proposed CDM project activity prescribe the baseline scenario and hence no further analysis is required?	VVM	105	Yes.	OK	OK
b. If no, does the PDD identify credible alternatives to the project activity in order to determine the most realistic baseline scenario?	VVM	105	N.A.	OK	OK
c. Does the list of alternatives given in the PDD	VVM	106	N.A.	OK	OK



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ensure that:					
i. the list of alternatives includes as one of the options that the project activity is undertaken without being registered as a proposed CDM project activity?	VVM	106	N.A.	OK	OK
ii. the list contains all plausible alternatives that the DOE, on the basis of its local and sectoral knowledge, considers to be viable means of supplying the outputs or services that are to be supplied by the proposed CDM project activity?	VVM	106	N.A.	OK	OK
iii. the alternatives comply with all applicable and enforced legislation?	VVM	106	N.A.	OK	OK
c. Investment analysis	VVM	108-14			
a. Has investment analysis been used to demonstrate the additionality of the proposed CDM project activity?	VVM	108	Yes. Tool for demonstration and assessment of additionality Version 05.2 dated 26/08/2008 and Guidelines on the assessment of investment analysis version 03.1 (EB51 Annex58) have been used.	OK	OK
b. If yes, does the PDD provide evidence that the proposed CDM project activity would not be:	VVM	108			
i. the most economically or financially attractive alternative?	VVM	108	No.	OK	OK
ii. economically or financially feasible, without	VVM	108	Pending on CAR 7	Pending	OK



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the revenue from the sale of certified emission reductions (CERs)?			Yes.		
c. Was this shown by one of the following approaches?	VVM	109			
i. The proposed CDM project activity would produce no financial or economic benefits other than CDM-related income. Document the costs associated with the proposed CDM project activity and the alternatives identified and demonstrate that there is at least one alternative which is less costly than the proposed CDM project activity.	VVM	109	N.A.	OK	OK
ii. The proposed CDM project activity is less economically or financially attractive than at least one other credible and realistic alternative.	VVM	109	N.A.	OK	OK
iii. The financial returns of the proposed CDM project activity would be insufficient to justify the required investment.	VVM	109	~~Pending on CAP 7~~ Yes.	Pending	OK
d. Is the period of assessment limited to the proposed crediting period of the CDM project activity?	EB 51	Ann 58	No. The period of assessment is 21 years including one year for construction.	OK	OK
e. Does the project IRR and equity IRR calculations reflect the period of expected operation of the underlying project activity (technical lifetime), or -	EB 51	Ann 58	1 year for construction period and 20 years for operation period per the FSR. The fair value of the Project assets was recovered	OK	OK



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if a shorter period is chosen - include the fair value of the project activity assets at the end of the assessment period?			at the end of the assessment.		
f. Does the IRR calculation include the cost of major maintenance and/or rehabilitation if these are expected to be incurred during the period of assessment?	EB 51	Ann 58	Yes. The cost of major maintenance accounts for 1.5% per year of original value of fixed assets.	OK	OK
g. Do the project participants justify the appropriateness of the period of assessment in the context of the underlying project activity, without reference to the proposed CDM crediting period?	EB 51	Ann 58	Yes. The 21 years including construction period for assessment used in the PDD is reasonable according to Interim Rules on Economic Assessment of Electric Engineering Retrofit Projects issued by government authority.	OK	OK
h. Does the cash flow in the final year include a fair value of the project activity assets at the end of the assessment period?	EB 51	Ann 58	Yes.	OK	OK
i. Has the fair value been calculated in accordance with local accounting regulations where available, or international best practice?	EB 51	Ann 58	Yes.	OK	OK
j. Does the fair value calculations include both the book value of the asset and the reasonable expectation of the potential profit or loss on the realization of the assets?	EB 51	Ann 58	Yes.	OK	OK
k. Was depreciation, and other non-cash items related to the project activity, which have been	EB 51	Ann 58	Yes, the depreciation, which has been deducted in estimating gross profits on which tax is	OK	OK



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deducted in estimating gross profits on which tax is calculated, added back to net profits for the purpose of calculating the financial indicator (e.g. IRR, NPV)?			calculated, is added back to net profits for the purpose of calculating the IRR.		
l. Has taxation been included as an expense in the IRR/NPV calculation in cases where the benchmark or other comparator is intended for post-tax comparisons?	EB 51	Ann 58	Yes.	OK	OK
m. Are the input values used in all investment analysis valid and applicable at the time of the investment decision taken by the project participant?	EB 51	Ann 58	~~Pending on CAR 7~~ Yes.	Pending	OK
n. Is the timing of the investment decision consistent and appropriate with the input values?	EB 51	Ann 58	~~Pending on CAR 7~~ Yes.	Pending	OK
o. Are all the listed input values been consistently applied in all calculations?	EB 51	Ann 58	Yes.	OK	OK
p. Does the investment analysis reflect the economic decision making context at point of the decision to recommence the project in the case of project activities for which implementation ceases after the commencement and where implementation is recommenced due to consideration of the CDM?	EB 51	Ann 58	N.A.	OK	OK
q. Have project participants supplied the spreadsheet versions of all investment analysis?	EB 51	Ann 58	Yes.	OK	OK



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r. Are all formulas used in this analysis readable and all relevant cells be viewable and unprotected?	EB 51	Ann 58	Yes.	OK	OK
s. In cases where the project participant does not wish to make such a spreadsheet available to the public has the PP provided an exact read-only or PDF copy for general publication?	EB 51	Ann 58	N.A.	OK	OK
t. In case the PP wishes to black-out certain elements of the publicly available version, is it justifiable?	EB 51	Ann 58	N.A.	OK	OK
u. Was the cost of financing expenditures (i.e. loan repayments and interest) included in the calculation of project IRR?	EB 51	Ann 58	Yes.	OK	OK
v. In the calculation of equity IRR, has only the portion of investment costs which is financed by equity been considered as the net cash outflow?	EB 51	Ann 58	N.A.	OK	OK
w. Has the portion of the investment costs which is financed by debt been considered a cash outflow in the calculation of equity IRR? (this is not allowed)	EB 51	Ann 58	N.A.	OK	OK
x. Was a pre-tax benchmark be applied?	EB 51	Ann 58	No.	OK	OK
y. In cases where a post-tax benchmark is applied, is actual interest payable taken into account in the	EB 51	Ann 58	The actual interest payable has been taken into account in the calculation of income tax.	OK	OK



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calculation of income tax?			Furthermore BVC has checked the loan signed between the PP and the bank, and has found that the interest rate and loan value used in the investment analysis is higher than the one of the loan contracts, resulting in more interest expense, less profit, less income tax, and the higher project IRR. Hence, the investment analysis is deemed to be conservative.		
z. In such situations, was interest calculated according to the prevailing commercial interest rates in the region, preferably by assessing the cost of other debt recently acquired by the project developer and by applying a debt-equity ratio used by the project developer for investments taken in the previous three years?	EB 51	Ann 58	Yes. Refer to above.	OK	OK
aa. In cases where a benchmark approach is used is the applied benchmark appropriate to the type of IRR calculated?	EB 51	Ann 58	Yes.	OK	OK
bb. Has local commercial lending rates or weighted average costs of capital (WACC) selected as appropriate benchmarks for a project IRR?	EB 51	Ann 58	No.	OK	OK
cc. Has required/expected returns on equity selected as appropriate benchmark for an equity IRR?	EB 51	Ann 58	N.A.	OK	OK
dd. In case benchmarks supplied by relevant national authorities selected is it applicable to the project activity and the type of IRR calculation	EB 51	Ann 58	Yes.	OK	OK



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presented?					
ee. In the cases of projects which could be developed by an entity other than the project participant is the benchmark applied based on publicly available data sources which can be clearly validated?	EB 51	Ann 58	Yes, the benchmark applied is based on the "Interim Rules on Economic Assessment of Electric Power Engineering Retrofit Projects" issued by State Power Corporation of China in 2002.	OK	OK
ff. Have internal company benchmarks/expected returns (including those used as the expected return on equity in the calculation of a weighted average cost of capital - WACC) been applied in cases where there is only one possible project developer?	EB 51	Ann 58	N.A.	OK	OK
gg. In such cases, have these values been used for similar projects with similar risks, developed by the same company or, if the company is brand new, would have been used for similar projects in the same sector in the country/region?	EB 51	Ann 58	N.A.	OK	OK
hh. Has a minimum clear evidence of the resolution by the company's Board and/or shareholders been provided to the effect as above?	EB 51	Ann 58	N.A.	OK	OK
ii. Has a thorough assessment of the financial statements of the project developer - including the proposed WACC - to assess the past financial behavior of the entity during at least the last 3 years in relation to similar projects been conducted?	EB 51	Ann 58	N.A.	OK	OK



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jj. Does the risk premiums applied in the determination of required returns on equity reflect the risk profile of the project activity being assessed, established according to national/international accounting principles? (It is not considered reasonable to apply the rate general stock market returns as a risk premium for project activities that face a different risk profile than an investment in such indices.)	EB 51	Ann 58	Yes.	OK	OK
kk. Has an investment comparison analysis and not a benchmark analysis used when the proposed baseline scenario leaves the project participant no other choice than to make an investment to supply the same (or substitute) products or services?	EB 51	Ann 58	No.	OK	OK
ll. Have variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues been subjected to reasonable variation (positive and negative) and the results of this variation been presented in the PDD and be reproducible in the associated spreadsheets?	EB 51	Ann 58	Yes.	OK	OK
mm. Have a corrective action been raised for a variable to be included in the sensitivity analysis which constitute less than 20% and have a material impact on the analysis ?	EB 51	Ann 58	No.	OK	OK
nn. Is the range of variations selected is reasonable	EB 51	Ann	Yes.	OK	OK



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in the project context?		58			
oo. Does the variations in the sensitivity analysis at least cover a range of +10% and -10%, unless this is not deemed appropriate in the context of the specific project circumstances?	EB 51	Ann 58	Yes.	OK	OK
pp. In cases where a scenario will result in the project activity passing the benchmark or becoming the most financially attractive alternative, is an assessment done of the probability of the occurrence of this scenario in comparison to the likelihood of the assumptions in the presented investment analysis, taking into consideration correlations between the variables as well as the specific socio-economic and policy context of the project activity?	EB 51	Ann 58	~~Pending on CAR 7 and CL 6~~ No, the scenarios which would result in the project activity passing the benchmark are not likely to occur	Pending	OK
qq. Was the plant load factor defined ex-ante in the CDM-PDD according to one of the following options:	EB 48	Ann 11			
i. The plant load factor provided to banks and/or equity financiers while applying the project activity for project financing, or to the government while applying the project activity for implementation approval?	EB 48	Ann 11	Yes. The PLF provided to the government while applying the project activity for implementation approval	OK	OK
ii. The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company)?	EB 48	Ann 11	Yes.	OK	OK



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rr. Was a thorough assessment of all parameters and assumptions used in calculating the relevant financial indicator, and determine the accuracy and suitability of these parameters using the available evidence and expertise in relevant accounting practices conducted?	VVM	111	During the onsite visit, BVC checked the documented evidences including the FSR, the approval of FSR issued by government, investment decision, the contracts and other available information, and therefore can confirm that: 1. The FSR has been the basis of the decision to proceed with the investment in the project. The FSR was finished in Dec. 2008, and the investment decision was made on 05/08/2009. The PP waited before the Project approval occurred on 27/07/2009 before deciding to invest in it. In addition, considering that the period of time between the finalization of the FSR and the investment decision is considerably short, it is unlikely in the context of the underlying project activity that the input values would have materially changed; 2. The values used in the PDD and associated annexes are, apart from the VAT at 17% considering equipment purchase deduction and 50% repayment of actual VAT on electricity sales, fully consistent with the FSR. BVC checked the FSR, the PDD and the financial spreadsheet and found that all input values are fully consistent with the FSR.	CL-8 Pending	OK



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			3. The input values from the FSR are valid and applicable at the time of the investment decision ➤ Total investment: ~~CL-8~~ The main equipment purchasing contracts Necessary to verify the validity of the estimated total investment cost in the FSR have not been provided yet The main equipment purchasing contracts of the Project are provided and the total value of already signed main equipment and construction contracts of the Project accounts for 85% of the total static investment estimated in the FSR. Hence, the Total Investment estimated in the FSR is deemed reliable. Hence CL 8 was closed. 4. Tariff: The FSR of the Project was finalized on Dec. 2008 when the following documents were public available: - 03/12/2007, China NDRC issued the		



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			document Fa Gai Jia Ge [2007] No.3303, and the tariff of wind power projects located in Hebei Province was approved as 0.54RMB/kWh (incl. VAT) in the document - 23/07/2008, China NDRC issued the document Fa Gai Jia Ge [2008] No.1876, and the tariff of wind power projects located in Hebei Province was approved as 0.54RMB/kWh (incl. VAT) in the document. In addition, the Tariff in Hebei Province for wind Project has remained fixed to 0.54 RMB/kWh since 2007 and the latest NDRC notification on 20/07/2009 (Fa Gai Jia Ge [2009]1906) confirms this value. As a consequence BVC considers the tariff of the FSR appropriate for the Project. 5. O&M cost, include interest, depreciation, fair value, taxes, miscellaneous costs, maintenance cost, and labor cost. BVC has checked all registered CDM wind power projects in Hebei Province to NCG and found that the average annual O&M costs range between 0.07RMB/kWh and 0.197RMB/kWh. The average annual O&M cost of the Project was calculated as 0.103RMB/kWh falls in this the range.		



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			BVC has also verified values of various taxes including VAT, VAT offset, income tax, etc. by cross checking with the taxation rules conducted by government and found VAT tax calculation not correct Pending on CAR 7 VAT tax calculation has been properly modified accordingly to the laws enforced in China at the time of the investment decision. The depreciation has been deducted in estimating gross profits on which tax is calculated, and be added back to net profits for the purpose of calculating the financial indicator. The fair value rate of 5% is compliance with current policy; The miscellaneous costs, maintenance costs and labor cost are in line with regulation. 6. Annual electricity supplied: The PLF of the Project was determined by a qualified third party based on the latest 35		



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			years historical local wind source data (from 1971 to 2006) and one year onsite measurement data from 26/03/2007-25/03/2008 using professional software i.e. WAsP, therefore, the value in the FSR and the PDD is reasonable. 7. Assessment period: The assessment period is in line with national regulation.		
B. Were the parameters cross-checked against third-party or publicly available sources, such as invoices or price indices?	VVM	111	Yes. Refer to above.	OK	OK
ss. Were feasibility reports, public announcements and annual financial reports related to the proposed CDM project activity and the project participants reviewed?	VVM	111	Yes.	OK	OK
tt. Was the correctness of computations carried out and documented by the project participants assessed?	VVM	111	Yes.	OK	OK
uu. Was the sensitivity analysis by the project participants to determine under what conditions variations in the result would occur, and the likelihood of these conditions assessed?	VVM	111	~~Pending on CL-6~~ Yes.	~~Pending~~	OK
vv. Is the type of benchmark applied suitable for the	VVM	112	Yes.	OK	OK



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type of financial indicator presented?					
ww. Do any risk premiums applied determining the benchmark reflect the risks associated with the project type or activity?	VVM	112	No.	OK	OK
xx. To determine this, was it assessed whether it is reasonable to assume that no investment would be made at a rate of return lower than the benchmark by:	VVM	112			
i. assessing previous investment decisions by the project participants involved?	VVM	112	N.A.	OK	OK
ii. determining whether the same benchmark has been applied?	VVM	112	N.A.	OK	OK
iii. determining if there are verifiable circumstances that have led to a change in the benchmark?	VVM	112	N.A.	OK	OK
yy. Did the project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed CDM project activities?	VVM	113	~~Pending on CAP 7~~ Yes.	Pending	OK
aaa. If yes:	VVM	113			
i. has the FSR been the basis of the decision to proceed with the investment in the project, i.e. that the period of time between the finalization of the FSR and the investment decision is sufficiently short for	VVM	113	Yes As per the relevant evidence provided BVC confirms that the PP's final decision to proceed with the investment in the Project has been made	OK	OK



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the DOE to confirm that it is unlikely in the context of the underlying project activity that the input values would have materially changed?			based on the FSR finalized in Dec.2008 and approved by Hebei Development and Reform Commission (Code: Ji Fa Gai Neng Yuan He Zi [2009] No.137) on 27/07/2009.. The FSR showed that the Project would not have been realized without CDM financial support. Based on the conclusion of the FSR, the PP decided to implement the Project with CDM support on 05/08/2009 Considering that the period of time between the finalization of the FSR and the investment decision is relatively short, BVC to confirm that it is unlikely in the context of the underlying project activity that the input values would have materially changed		
ii. Are the values used in the PDD and associated annexes fully consistent with the FSR?	VVM	113	~~Pending on CAR 7~~ All values, apart from the VAT calculated at 17% considering equipment purchase deduction and 50% repayment of actual VAT on electricity sales results, from the FSR were used in the financial assessment.	Pending	OK
iii. If not, was the appropriateness of the values validated?	VVM	113	Yes. The FSR of the Project was completed in December 2008 when the <i>Notice of Value added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products</i> (Cai Shui [2001]198) was still valid and applicable. For	OK	OK



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			this reason the VAT in its IRR analysis had been calculated at 8.5%, i.e. half of 17% However, as per verified evidence, according to tax regulations Cai Shui [2008]156) and Cai Shui [2008]170) enforced since 01/01/2009 VAT of 17% is calculated firstly and, after compensation of the VAT of newly purchased equipments, 50% of the actual VAT payment is refunded to the Project annually. Since the Investment decision has been taken on 05/08/2009, VAT in the updated PDD and IRR of the Project have been calculated according per Cai Shui [2008]156)/38/ and Cai Shui [2008]170) This method has been deemed appropriate and in line with the laws enforced in China at the time of the investment decision.		
iv. On the basis of its specific local and sectoral expertise, is confirmation provided, by cross-checking or other appropriate manner, that the input values from the FSR are valid and applicable at the time of the investment decision?	VVM	113	Yes. Refer to 6.c.rr	OK	OK
d. Barrier analysis	VVM	115-18			
a. Has barrier analysis been used to demonstrated the additionality of the proposed CDM project activity?	VVM	115	N.A.	OK	OK



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b. If yes, does the PDD demonstrate that the proposed CDM project activity faces barriers that:	VVM	115	N.A.	OK	OK
i. prevent the implementation of this type of proposed CMD project activity?	VVM	115	N.A.	OK	OK
ii. do not prevent the implementation of at least one of the alternatives?	VVM	115	N.A.	OK	OK
c. Are there any issues that have a clear direct impact on the financial returns of the project activity, other than: risk related barriers, for example risk of technical failure, that could have negative effects on the financial performance; or barriers related to the unavailability of sources of finance for the project activity? {If yes, these issues cannot be considered barriers and shall be assessed by investment analysis. [Refer to (6.c) above]}	VVM	116	N.A.	OK	OK
d. Were the barriers determined as real by:	VVM	117	N.A.	OK	OK
i. assssing the available evidence and/or undertaking interviews with relevant individuals (including members of industry associations, government officials or local experts if necessary) to determine whether the barriers listed in the PDD exist?	VVM	117	N.A.	OK	OK
ii. ensuring that existence of barriers is substantiated by independent sources of	VVM	117	N.A.	OK	OK



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data such as relevant national legislation, surveys of local conditions and national or international statistics?					
iii. Is existence of a barrier substantiated only by the opinions of the project participants? (If yes, this barrier cannot be considered as adequately substantiated)	VVM	117	N.A.	OK	OK
e. Were the barriers determined as preventing the implementation of the project activity but not the implementation of at least one of the possible alternatives by applying local and sectoral expertise to judge whether a barrier or set of barriers would prevent the implementation of the proposed CDM project activity and would not equally prevent implementation of <i>at least one of</i> the possible alternatives, in particular the identified baseline scenario?	VVM	117	N.A.	OK	OK
e. Common practice analysis	VVM	119-1 21			
a. Is this a proposed large-scale, or first-of-its kind small-scale project activity?	VVM	119	It is a large-scale project activity, but not first-of-its-kind.	OK	OK
b. If yes, was common practice analysis carried out as a credibility check of the other available evidence used by the project participants to demonstrate additionality?	VVM	119	Yes.	OK	OK
c. Was it assessed whether the geographical	VVM	120	Yes.	OK	OK



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scope (e.g. defined region) of the common practice analysis is appropriate for the assessment of common practice related to the project activity's technology or industry type? (For certain technologies the relevant region for assessment will be local and for others it may be transnational/global.			The geographical region for the common practice analysis of wind power projects is Hebei Province.		
d. Was a region other than the entire host country chosen?	VVM	120	Province. Hebei Province was considered for the common practice analysis.	OK	OK
e. If yes, was the explanation why this region is more appropriate assessed?	VVM	120	Yes. In China, the regulatory framework and investment climate for wind farm project are usually similar and comparable in the same Province/Autonomous region.	OK	OK
f. Using official sources and local and industry expertise, was it determined to what extent similar and operational projects (e.g., using similar technology or practice), other than CDM project activities, have been undertaken in the defined region?	VVM	120	~~Pending on CL 7~~ Chengde Hongsong Wind Farm and Shangyi Manjing wind farm had both applied for carbon funding by selling VER through VCS to alleviate financial barriers.	~~Pending~~	OK
g. Are similar and operational projects, other than CDM project activities, already "widely observed and commonly carried out" in the defined region?	VVM	120	~~Pending on CL 7~~ No	~~Pending~~	OK
h. If yes, was it assessed whether there are essential distinctions between the proposed CDM project activity and the other similar activities?	VVM	120	~~Pending on CL 7~~ N.A.	~~Pending~~	OK



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7. Monitoring plan	VVM	122-1 24			
a. Does the PDD include a monitoring plan?	VVM	122	Yes.	OK	OK
b. Is this monitoring plan based on the approved monitoring methodology applied to the proposed CDM project activity?	VVM	122	Yes.	OK	OK
c. Were the list of parameters required by the the selected methodology identified?	VVM	123	Yes.	OK	OK
d. Does the monitoring plan contains all necessary parameters?	VVM	123	~~Pending on CAR 2,~~ Yes.	Pending	OK
e. Are the parameters clearly described?	VVM	123	~~Pending on CAR 2~~ Yes.	Pending	OK
f. Does the means of monitoring described in the plan comply with the requirements of the methodology?	VVM	123	~~Pending on CAR 2, CAR 6 and CL 4~~ Yes.	Pending	OK
g. Are the monitoring arrangements described in the monitoring plan feasibl within the project design?	VVM	123	~~Pending on CAR 2, CAR 6 and CL 4~~ Yes.	Pending	OK
h. Are the following means of implementation of the monitoring plan sufficient to ensure that the emission reductions achieved by/resulting from the proposed CDM project activity can be reported ex post and verified:	VVM	123			
i. data management procedures?	VVM	123	~~Pending on CAR 2, CAR 6 and CL 4~~	Pending	OK



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			Yes.		
ii. quality assurance procedures?	VVM	123	~~Pending on CAR 2, CAR 6 and CL 4~~ Yes.	Pending	OK
iii. quality control procedures?	VVM	123	~~Pending on CAR 2, CAR 6 and CL 4~~ Yes.	Pending	OK
8. Sustainable development	VVM	125-1 27			
a. Does the CDM project activity assists Parties not included in Annex I to the Convention in achieving sustainable development?	VVM	125	~~Pending on CAR 1~~ Yes.	Pending	OK
b. Does the letter of approval by the DNA of the host Party confirm the contribution of the proposed CDM project activity to the sustainable development of the host Party?	VVM	126	~~Pending on CAR 1~~ Yes.	Pending	OK
9. Local stakeholder consultation	VVM	128-1 30			
a. Were local stakeholders (public, including individuals, groups or communities affected, of likely to be affected, by the proposed CDM project activity or actions leading to the implementation of such an activity) invited by the PPs to comment on the proposed CDM project activity prior to the publication of the PDD on the UNFCCC website?	VVM	128	Yes, as per findings, in November 2009 thus prior to the publication of the PDD on the UNFCCC website, a survey was carried out by distributing questionnaires to 50 households living near the Project area.	OK	OK
b. Have comments by local stakeholders that can	VVM	128	Yes.	OK	OK



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reasonably be considered relevant for the proposed CDM project activity been invited?			The stakeholders are all supportive of the Project.		
c. Is the summary of the comments received as provided in the PDD complete?	VVM	128	Yes.	OK	OK
d. Have the project participants taken due account of any comments received and described this process in the PDD?	VVM	129	Yes. In PDD section E.3 is stated that the villagers are all supportive of the proposed project and to date there has been no need to modify the project design according to the comments received.	OK	OK
10. Environmental impacts	VVM	131-133			
a. Have the project participants submitted documentation on the analysis of the environmental impacts of the project activity?	VVM	131	Yes.	OK	OK
b. Have the project participants undertaken an analysis of environmental impacts?	VVM	132	Yes, conducted by the authorized Hebei Province geographical and science research institute on 18/02/2009	OK	OK
c. Does the host Party require an environmental impact assessment?	VVM	132	Yes.	OK	OK
d. If yes, have the project participants undertaken an environmental impact assessment?	VVM	132	Yes. Approved on 31/03/2009 by Environmental Protection Bureau of Hebei Province.	OK	OK



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Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team Conclusions																
CAR 1 The original Letter of Approval from China’s DNA has not been provided.	1.a	The LOA of the Project has been provided to DOE.	The LoA has been verified and deemed authentic. CAR 1 is closed																
CAR 2 The applied ACM0002 methodology does not comply with the latest applicable version.	3.j.i	Version 12.1.0 of the methodology ACM0002 has been applied in the Project. This is the latest version of the methodology applicable.	The methodology ACM0002 has been correctly updated to version 12.1.0 CAR 2 is closed.																
CAR 3 A timeline table comprehending the main facts of the Project is missing. Evidence in support should be provided.	3.n.iv	An overview of milestones of the Project is presented in Table 3 of the PDD. And evidences in support are provided. The milestones of the Project are described briefly as follows: <table><tr><th>Time</th><th>Milestone</th></tr><tr><td>12/2008</td><td>The FSR was finished.</td></tr><tr><td>18/02/2009</td><td>The EIA Form was finished.</td></tr><tr><td>31/03/2009</td><td>The EIA Form was approved.</td></tr><tr><td>27/07/2009</td><td>The FSR was approved.</td></tr><tr><td>05/08/2009</td><td>The Project Owner decided to go through the CDM process.</td></tr><tr><td>19/11/2009</td><td>Wind turbine Supply Contract was signed.</td></tr><tr><td>25/11/2009</td><td>Civil Engineering Contract was</td></tr></table>	Time	Milestone	12/2008	The FSR was finished.	18/02/2009	The EIA Form was finished.	31/03/2009	The EIA Form was approved.	27/07/2009	The FSR was approved.	05/08/2009	The Project Owner decided to go through the CDM process.	19/11/2009	Wind turbine Supply Contract was signed.	25/11/2009	Civil Engineering Contract was	The timeline of the Project implementation added in the PDD has been verified and found consistent against the relative evidence provided. CAR 3 is closed
Time	Milestone																		
12/2008	The FSR was finished.																		
18/02/2009	The EIA Form was finished.																		
31/03/2009	The EIA Form was approved.																		
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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response		Validation team Conclusions
			signed.	
		22/12/2009	Construction of the Project was started.	
		12/04/2010	UNFCCC secretariat was informed of the intention to implement CDM development.	
		01/2011	The Project is expected to be put into operation.	
CAR 4 The formula used to calculate the emission reduction does not comply with the latest version of ACM0002 methodology.	3.o.ii	The formula used to calculate the emission reduction is updated according to the latest version of methodology ACM0002 (version 12.1.0) and PDD is updated accordingly.		BVC confirms that the formula has been revised according to methodology ACM0002 (version 12.1.0) CAR 4 is closed.
CAR 5 EG _{facility,y} has to be monitored as per approved methodology	3.s.ii.a	As per revised PDD and verified monitoring plan, EG _{facility,y} will be continuously measured by one bi-directional meter installed on the 35 kV transmission line at the Project Site and monthly recorded The meter of the Project will be equipped in line with Technical Administrative Code of Electric Energy Metering (DL/T 448-2000) and will be calibrated according to national standards with precision of 0.2s. Electricity sales receipt(s) will be used for crosscheck.		BVC confirms that the monitoring of the parameter EG _{facility,y} is in compliance with the applicable methodology ACM0002 version 12.1.0. CAR 5 is closed.



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CAR 6 As per the methodology, the parameters monitored must be continuously measured.	3.s.ii.b	Revision is made in Section B.7 to revise "hourly" to "continuously".	The revision in the PDD has been verified. Measuring continuously the parameters would ensure a higher degree of reliability. CAR 6 is closed.
CAR 7 Calculation for VAT is not appropriate. As a matter of facts the Investment decision to proceed with the Project as CDM was made by the PP on 05/08/2009 when the <i>Notice of Value Added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products</i> (Cai Shui [2008]156) and <i>Notice about Implementation of VAT Reform in the Whole Country</i> (Cai Shui [2008]170) were already been issued. In the IRR spreadsheet please correct the calculations in order to comply with the above mentioned regulations.	6.p.i	The FSR of the Project was completed in December 2008 when the <i>Notice of Value added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products</i> (Cai Shui [2001]198) was still valid and applicable. For this reason the VAT in its IRR analysis had been calculated at 8.5%, i.e. half of 17% However, according to tax regulation Cai Shui [2008]156, the policy that 50% of the value added tax is refundable when it is imposed is applicable to the Project. Moreover, according to tax regulation Cai Shui [2008]170, the input VAT from purchase of equipments can be used to deduct the output VAT from sales revenues. The calculation for VAT is revised in the IRR spreadsheet according to the <i>Notice of Value Added Tax Policy Regarding Products Using</i>	The updated calculations for VAT are correct and in accordance with <i>Notice of Value Added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products</i> (Cai Shui [2008]156) and <i>Notice about Implementation of VAT Reform in the Whole Country</i> (Cai Shui [2008]170). BVC confirm that the new IRRs without and with CER revenues are 4.52% and 8.96%. The Project has been proved to still be additional.



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team Conclusions
		<i>Certain Synthesized Resources and Other Products</i> (Cai Shui [2008]156) and <i>Notice about Implementation of VAT Reform in the Whole Country</i> (Cai Shui [2008]170). Complying with the regulations VAT of 17% is calculated firstly and, after compensation of the VAT of newly purchased equipments, 50% of the actual VAT payment is refunded to the Project annually. The new IRRs without and with CER revenues are 4.52% and 8.96%	CAR 7 is closed.
CL 1 The turbine models have not been specified in the PDD.	3.c.i	As designed in the FSR, the Project will employ 35 sets of G52-850 kW (Low Temperature) and 23 sets of G58-850 kW (Low Temperature). Technical report and contract of the turbines of the Project is provided to DOE for evidence.	The wind turbine contract and the technical specifications of the turbines have been verified and the information added in the updated PDD. BVC confirm that the Project employs 35 sets of G52-850kW (low temperature) and 23 sets of G58-850kW (low temperature) as per the approved FSR. CL 1 is closed
CL 2 The flow diagram does not represent clearly the	3.l.iii	The electricity delivered by the Project to the grid and the electricity imported from the grid	The Information added in the PDD has been verified and



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team Conclusions
meters location.		to the Project will be measured continuously by one bi-directional meter installed at the Project Site. The monitoring variable is represented correctly within the flow diagram and PDD is updated accordingly.	BVC can confirm that the electricity imported from the grid to the Project will be measured continuously by one bi-directional meters installed at the Project Site. CL 2 is closed.
CL 3 The selected option for net electricity imports from CCPG and NECPG is inconsistent with the Announcement to Publish 2009 Baseline Emission Factors for Regional Power Grids in China.	3.o.iii	Complying with the Announcement to Publish 2009 Baseline Emission Factors for Regional Power Grids in China relevant revision is made in Section B.6 of the PDD. Option C-simple OM has been applied.	Information has been correctly revised complying with the Announcement to Publish 2009 Baseline Emission Factors for Regional Power Grids in China CL 3 is closed.
CL 4 Please explain which procedure would be implemented in case the meters would encounter technical malfunctioning, in section of QA/QC procedure of the monitoring plan.	3.s.ii.b	In case the main meter is out of order, it shall be inspected, repaired, or replaced immediately by the professional staff and quantity of net electricity generation supplied by the Project to the grid shall be jointly determined by the Project Owner and the power grid company. A conservative and reasonable estimate of the readings shall be determined and conservative values shall be used to estimate emission reductions.	The Information added in the PDD has been verified and BVC can confirm that the QA/QC added in the PDD and to be implemented in case the meters would encounter technical malfunctioning strengthen the monitoring system and procedures ensuring an accurate and safe ER calculation.



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			CL 4 is closed
CL 5 Please clarify whether the investment analysis uses a pre-tax or post-tax benchmark.	6.o.i	The 8% benchmark is post-tax as per <i>Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects Electrical Engineering Retrofit Projects</i> issued by former State Power Corporation of China in 2002. This benchmark is widely used in the power sector in China.	As per verified evidence BVC confirms that the 8% benchmark is post tax. CL 5 is closed.
CL 6 The sensitivity analysis of the mentioned indicators should be further discussed examining under which conditions the IRR will cross the benchmark and elaborating on their likelihood to occur.	6.q	The sensitivity analysis of the four indicators is further discussed examining under which conditions the Project IRR would reach the benchmark of 8%, and none of these conditions can be achieved. Reasons are presented in Section B.5 of the PDD.	The sensitivity analysis of the four indicators has been verified and deemed correct as per the explanation added in the PDD and the evidence provided in support. CL 6 is closed.
CL 7 The common practice analysis has to be completed since the statistics of wind power for the years 2008 and 2009 have not been considered.	6.y	The common practice analysis has been updated based on the statistics of wind power for the years 2008 and 2009. According to the analysis, apart from Chengde Hongsong Wind Farm and Shangyi Manjing wind farm., there are no other projects that can be included in the common practice analysis. However, as per evidence provided, Chengde Hongsong Wind Farm_and Shangyi Manjing	BVC controlled and verified the evidence and it is of the opinion that the Project is not common practice. CL 7 is closed



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		Wind Farm both applied for carbon funding by selling VER through the VCS in order to alleviate the serious barriers faced	
CL 8 The main equipment purchasing contracts have not been provided.	6.c.rr	The main equipment purchasing contracts have been provided and their total value accounts for approximately 85% of the total investment estimated in the FSR. The actual investment process of the Project demonstrates the appropriateness of the total investment estimated in the FSR. Second, as per the statistics of the registered CDM projects in Hebei Province, the unit total static investment is in the range of 7,639.8 RMB/kW to 12,700RMB/kW, the parameter of the Project is in this range. Therefore, it can be concluded that unit total static investment of the Project estimated in the FSR is reasonable.	The main contracts of the project (turbine, tower, box transformer, construction and management) have been verified and BVC can confirm that these account for 461.8736 million RMB which equals to circa than 85% of the total project costs in the FSR. In addition, taking into account also that: - The unit total static investment for CDM wind projects in Hebei province spans from a maximum of 12,700 to a minimum of 7,639.8. The Project RMB/kW cost is 11,080, in this range. - Some contracts such as land use and conservation, and additional small contracts have not been signed yet



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			BVC consider the total static investment estimation of the FSR reliable and appropriate. CL 8 is closed.