



VALIDATION REPORT

BEIJING INTERNATIONAL NEW
ENERGY CO., LTD.

VALIDATION OF THE

INNER MONGOLIA JINGNENG
SAIHAN WIND FARM PHASE II
PROJECT

REPORT No. CHINA-VAL/0210/2009

REVISION No. 01

BUREAU VERITAS CERTIFICATION

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VALIDATION REPORT

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Client: Beijing International New Energy Co., Ltd.	Client ref.: Ms. Qu Zhan

Summary:

Bureau Veritas Certification has made the validation of the Inner Mongolia Jingneng Saihan Wind Farm Phase II Project owned by Beijing International New Energy Co., Ltd. located in Suniteyouqi, Xilinguole League, Inner Mongolia Autonomous Region, P. R. China 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 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/0210/2009	Subject Group: CDM	
Project title: Inner Mongolia Jingneng Saihan Wind Farm Phase II Project		
Work carried out by: Ms. Li Yiting (Team Leader) Mr. Pin Tian (Team Member)		
Internal Technical Review carried out by: Ms. Jasmine Tang Xuemei		
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Flavio Gomes 

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1 INTRODUCTION

Beijing International New Energy Co., Ltd. (hereafter called “**the PP**”) has commissioned Bureau Veritas Certification (hereafter called “**BVC**”) to validate its CDM project Inner Mongolia Jingneng Saihan Wind Farm Phase II Project (hereafter called “**the Project**”) in Suniteyouqi, Xilinguole League, Inner Mongolia Autonomous Region, 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. The validation 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

The validation team consists of the following personnel:

FUNCTION	NAME	CODE HOLDER*	TASK PERFORMED
Team Leader	Ms. Li Yiting	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Team Member	Mr. Pin Tian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input type="checkbox"/> RI
Technical Specialist	N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI
Financial Specialist	N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI
Internal Technical Reviewer (ITR)	Ms. Jasmine Tang Xuemei	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI
Specialist supporting ITR	N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI

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

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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 the Executive Board at its 55th meeting on 30/07/2010. 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 Easy Carbon Consultancy Co., Ltd. (the consultant) 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 Easy Carbon Consultancy Co., Ltd. revised the PDD and resubmitted it on 01/04/2011 and the validation conclusion presented in this report relate to the project as described in the PDD version 2 /2/.

2.2 Follow-up Interviews

On 10/09/2009, 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.



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Table 1 Interview topics

Interviewed organization	Interview topics
Beijing International New Energy Co., Ltd. (The PP)	<ul style="list-style-type: none"> ↺ 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	<ul style="list-style-type: none"> ↺ Project background in details ↺ Stakeholder comments ↺ Social and environmental impact of the project
Easy Carbon Consultancy Co., Ltd. (CDM Consultant)	<ul style="list-style-type: none"> ↺ 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 Requests (CAR) are 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.

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



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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 11 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 (LoA) has been received and the following support documentation has been verified by BVC:

✍ The DNA of China has issued a Letter of Approval in July 2009 (No. 2126), authorizing Beijing International New Energy Co., Ltd. as the Project Participant and confirms the Inner Mongolia Jingneng Saihan Wind Farm Phase II Project contributes to China's Sustainable development /3/.

The Project is a unilateral project. The LoA indicates that China is a Party of the Kyoto Protocol and moreover the participation in Inner Mongolia Jingneng Saihan Wind Farm Phase II Project is voluntary.

BVC received this letter from the PP and does not doubt the letter's 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 letters of approval are in accordance with para. **45 - 48 /VVM**.

There are also evidences in various approvals issued by the local government of host country China, which are summarized as below,

- ✍ Environment Impact Assessment (EIA) approved by Inner Mongolia Autonomous Regional Environmental Protection Bureau on 10/07/2008 (Code: Nei Huan Shen [2008]164). /5/
- ✍ Feasibility Study Report (FSR) approved by Development and Reform Commission of Inner Mongolia Autonomous Region on 19/01/2009 (Code: Nei Fa Gai Neng Yuan Zi [2009]113) /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. /25/

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 change was observed in the Project as compared to details mentioned in webhosted PDD.

The major differences between these two versions of PDD are listed as bellow.

Items	PDD version 1 (Webhosted)	PDD version 2 (Final)	Validation Opinion
1, Annual net electricity supplied to the grid of the Project, total static investment	Annual net electricity supplied to the grid was 118,000MWh; Total static investment is 47,688 million RMB.	According to the FSR, annual net electricity supplied to the grid is 118,560MWh and the total static investment should be 46,635 million RMB.	BVC has checked the FSR of the Project and found the correct values of annual net electricity supplied to the grid and total static investment for the Project have been correctly described in the final PDD, which are fully consistent with the approved FSR. For details, please refer CAR-6.



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2, CM, and average annual emission reductions of the Project	The CM is 0.89355 tCO ₂ e/MWh (0.5 of OM and 0.5 of BM), and annual emission reductions are 105,438CO ₂ e	The CM is 0.9502 tCO ₂ /MWh (0.75 of OM and 0.25 of BM), and annual emission reductions are 112,655CO ₂ e	Wrong default weights for the proposed project are applied (0.5 of OM and 0.5 of BM) in GSP PDD, which should be 0.75 of OM and 0.25 of BM. For details, please refer CAR-4.
3, Education surtax and city construction surtax rate	<i>Education surtax</i> was 2% and <i>City construction surtax</i> was 4%.	According to the FSR, the <i>Education surtax</i> should be 3% and the <i>City construction surtax</i> should be 5%.	Both tax rates are correctly applied and are in accordance with the "The State Council's decision to revise 'provisional rules for charging education surtax'" effective on 01/10/2005 and "provisional rules for city construction surtax" effective since 1985. For details, please refer CAR-7.
4, The common practice analysis	The criteria of identifying the similar projects are not clear, and reference was not up to date. Two similar projects were identified.	The criteria of identifying the similar projects are clarified. Latest reference was used and four similar projects were identified.	The revised common practice analysis is considered complete in accordance with the criteria and latest data source. For details, please refer to CL-9, CL-10.
5, Date of the board decision	23/11/2008	22/12/2008 (documented evidence)	The date of board decision has been corrected in the PDD as 22/12/2008. For details, please refer to CAR-2.
6, Power connection system and monitoring system	The Project delivers electricity to 220kV substation that connected to NCPG. A main meter and backup meter are installed to monitor net electricity supplied by the Project.	Electricity supplied to the grid by the proposed project ($EG_{output,y}$) will be monitored by meters (MA1, MA2, MA3 and MA4) at the connection point between the proposed project and the 35kV/220kV substation. Power supplied to the grid will be cross checked according to	The monitoring plan has been revised and BVC has assessed the formula and the monitoring system and considered the monitoring system in line with ACM0002 Version 12.1.0 and is conservative.



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		<p>electricity sales receipts using a formula, and the more conservative data will be adopted.</p> <p>Total electricity imported from the grid by the proposed project and Project B ($EG_{import,y}$) will be monitored by the main meter (M1) at the connection point between the proposed project and the Grid.</p>	<p>For details, please refer to CAR-5.</p>
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3.5 Project description (64)

The Project is located in Suniteyouqi, Xilinguole League, Inner Mongolia Autonomous Region, P. R. China, People’s Republic of China with central geographical coordinates E 112°51’00” (112.85°) and N 42°37’00” (42.62°) .

The total installed capacity of the Project is 48MW, consisting of 24 wind turbines, supplied by Beijing Beizhong Steam Turbine Generator Co., Ltd., each one with a unit capacity of 2,000kW. The estimated annual electricity supplied, which is about 118,560MWh, will be sold to the North China Power Grid (NCPG). As the NCPG is dominated by thermal power generation, the establishment of the Project is expected to produce annual emission reductions of 112,655 tCO₂e during the first seven years of its renewable crediting period.

The plant load factor (PLF) is 0.28 calculated from the annual utilization hours of 2,470h, which was scientifically determined in the FSR developed by a qualified third party (Inner Mongolia Power Exploration & Design Institute.). The FSR of the Project has been evaluated and approved by Development and Reform Committee of Inner Mongolia Autonomous Region /7/.


In accordance with the above information, BVC can confirm that the PLF in the PDD was determined by a third qualified party contracted with the PP and complies with EB48, Annex11 “Guidelines for the Reporting and Validation of Plant Load Factors”.

In the absence of the Project, equivalent amount of annual power output of the Project will be generated and supplied by North China Power Grid (NCPG), which is dominated by the thermal power generation; this is the 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 (Suniteyouqi, Xilinguole League, Inner Mongolia Autonomous Region, 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 is accurate and complete in all respects.



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3.6 Baseline and monitoring methodology

3.6.1 General Requirement (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*” valid from 17/09/2010 /Ref-1/. The steps taken to assess the relevant information contained in the PDD against each applicability condition are described below.

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 activity (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 activity, 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 Project and all other power plants connected physically to the NCPG 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 and the sources and gases selected is in line with the delineation of grid boundaries as provided in the latest version of “*Notification on Determining Baseline Emission Factor of China’s Grid*” published by NDRC (China’s DNA) on 02/07/2009 (hereafter called “*Notification of China-Grid EF*”) /8/. 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:



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The Project is the installation of a newly built and grid-connected renewable power plant that delivers the generated electricity to the NCPG, hence, according to methodology ACM0002 Version 12.1.0, 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 (hereafter called “*Tool-Grid EF*”). /Ref-3/

In order to validate the above information, BVC review the documents related to the project, the applied methodology, and the “Notification of China-Grid EF”.

According to the *Notification of China-Grid EF*, the delineation of grid boundary of the Project is the NCPG. 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)

According to the baseline methodology ACM0002 Version 12.1.0 and *Tool-Grid EF* version 02.1, /Ref-3/ the baseline emission factor was calculated as following seven steps. In addition, the calculation in the PDD refers to the latest *Notification of China-Grid EF* published by China’s DNA on 02/07/2009 /8/ which is most recent information available at the time of CDM-PDD submission to BVC for validation.

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

Step 1.-Identify the relevant electricity systems.

NCPG is selected as the electric system of the Project as per *Notification of China-Grid EF* issued by China’s DNA at the time of commencing this validation. Northeast China Power Grid (NEPG) and Central China Power Grid (CCPG) are the connected electricity systems since there are net electricity imports from NEPG and CCPG to NCPG during 2005 to 2007. Option c, the simple operation margin rate is applied to calculate the emission factors for net electricity imports from NEPG and CCPG.

✌ BVC was able to confirm that the identified electric power system of the Project is consistent with *Notification of China-Grid EF*.



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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) is chosen to calculate the operating margin and build margin emission factor.

Step 3.- Select a method to determine the operating margin (OM).

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 2005-2007 from China Electric Power Yearbook 2006-2008, 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.

The data on electricity generation and auxiliary electricity consumption 2005-2007 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 2006-2008.

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."

✌ 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 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.



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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 Version 12.1.0 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 $EG_{PJ,y}$ (MWh). For installation of a new grid connected renewable power plant such as the Project, $EG_{PJ,y} = EG_{facility,y}$: Quantity of net electricity generation supplied by the project plant/unit to the grid in year y
- 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:

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

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

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

$$EF_{grid,CM,y} = 1.0069 \times 0.75 + 0.7802 \times 0.25 = 0.9502 \text{ tCO}_2\text{e/MWh}$$

According to the estimated annual electricity delivered to the grid 118,560 MWh, the estimated annual emission reductions of the Project is 112,655 tCO₂e during the first crediting period represents a reasonable estimation using the assumptions given by the Project.

☝ Complying with para.92 and 93/VVM, 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 Version 12.1.0 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:



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“*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 May, 2008. 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 22/12/2008.

From section 3.7.1.1 of this report, BVC was able to verify that the **start date** of the Project is 06/02/2009, the signed date of Wind Turbine Purchase Contract /11/ which is determined as 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 terms version 05. /Ref-9/.

According to **Para 100-103/VVM**, the Project is a **new project** activity with a start date after 02/08/2008. The PDD has been published for global stakeholder consultation on 13/08/2009, which is later than the start date of the Project. In line with the “*Guidance on the Demonstration and Assessment of Prior Consideration of the CDM*” version 01 (hereinafter called “*Guidance-Prior Consideration*”) effective from 02/08/2008 /Ref-5/, the **notification** was sent to China’s DNA on 15/07/2009 to inform the commencement of the Project and the intention to seek CDM status within six months of the start date of the Project. BVC has received and verified the notification sent to the China’s DNA by the PP /17/ which is within six months after the Project start date hence is regarded a valid demonstration of CDM prior consideration.

The requirement of sending notification to UNFCCC has become compulsory since “*Guidance-Prior Consideration*” version 02 /Ref-6/ on 17/07/2009. For the Project, a letter replied to the PP by UNFCCC on 09/09/2009 /18/ indicates that only if the notification was sent to DNA before EB48 on 17/07/2009, then notification to the UNFCCC is not mandatory. Therefore, BVC is able to confirm the prior consideration of the Project was appropriate in accordance with the required EB’s guidance and the “*Guidance-Prior Consideration*” version 01, and not in conflict with the “*Guidance-Prior Consideration*” version 02 and 03.

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 Activities

Date	Actions	Reasons or Impacts	Evidences verified
22/05/2008	Environmental Impact Assessment (EIA) report developed	Environmental impact of the Project has been assessed.	/4/
May, 2008	Feasibility Study Report (FSR) developed	FSR has taken into account of CDM revenue to overcome the financial difficulties as in the FSR. CDM revenue is necessarily considered.	/6/



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Date	Actions	Reasons or Impacts	Evidences verified
10/07/2008	EIA approval	EIA report was approved by Inner Mongolia Autonomous Regional Environmental Protection Bureau	/5/
22/12/2008	Boarding meeting	Decision made to seek CDM support to make the Project financially feasible	/9/
06/01/2009	CDM consultancy contract signed	To secure CDM status for the Project in parallel with its implementation	/10/
06/02/2009	Wind turbine purchasing contract signed (<u>Project start date</u>)	Expenditures committed related to the implementation of the Project, considered as the start date of the Project.	/11/
18/06/2009	Construction contract	Expenditures committed related to the implementation or related to the construction of the Project.	/12/
20/06/2009	Construction commencement permit	Start of Construction. Events related to the implementation or related to the construction of the Project.	/16/
15/07/2009	Loan agreement	Loan agreement signed with Agricultural Bank of China	/13/
15/07/2009	The notification for the prior consideration of the CDM sent to China DNA	To secure CDM status for the Project in parallel with its implementation	/17/
July 2009	Letter of Approval issued by China DNA	Secure the progress of the CDM development in parallel with the implementation of the Project.	/3/
13/08/2009	GSP of the Project on UNFCCC EB website	Applying CDM in parallel with the implementation of the Project.	/1/

BVC has checked all reliable evidences from the PP, and is able to verify that all documents are substantial and authentic and has been properly described above.

✎ According to the latest Glossary of CDM terms Ver. 05 and “Guidance on the Demonstration and Assessment of Prior Consideration of the CDM “Guidance-Prior Consideration” version 01, 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. BVC confirms that 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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- Alternative 1): The proposed project not undertaken as CDM project;
- Alternative 2): Construction of a fossil fuel power plant with equivalent amount of annual electricity output;
- Alternative 3): Construction of a power plant using other source of renewable energy with equivalent amount of annual electricity output;
- Alternative 4): Supply of equivalent annual power output by the Grid to which the proposed project is connected.

BVC confirms the listed alternatives are credible and complete.

Alternative 2) was correctly excluded through an examination of the current practice 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 /19/, construction of coal-fired power plants less than 135MW are prohibited in the areas covered by the large grid such as provincial grids in China. Moreover, installation of fossil fuel-fired power units with less than 100MW capacity is also strictly restricted /20/.

Alternative 3) was correctly excluded by analyzing the availability and also feasibility of developing local renewable energy resources including solar PV, geothermal, biomass and hydropower. Limited by the technology development status and the high cost of power generation, solar PV with equivalent output is unfeasible in China /21/ /22/. Moreover, there is an evidenced lack of geothermal resources, exploitable biomass or hydro resources in the project area. /23/

☝ Complying with para.107/VVM, BVC has verified that the alternatives identified to the Project are credible and complete, and found **Step 1** of *Tool-Additionality* was applied appropriately.

3.7.3 Investment analysis (114)

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

[Benchmark suitability] **Para. 112/VVM**

A Project-IRR of 8% (post-tax) was employed by the Project as a benchmark, according to the “Interim Rules on Economic Assessment of Electric Power Engineering Retrofit Projects” /24/ issued by State Power Corporation of China in 2002. BVC has assessed the suitability of the benchmark and found that it is widely applied in China’s power generation industries; therefore, BVC concludes that the benchmark is suitable for the Project.

[Input Values] **Para. 113/VVM** /Ref-8/

In compliance with **Para. 113(a)/VVM**, BVC has checked the approved FSR which was finalized in May, 2008 by Inner Mongolia Power Exploration & Design Institute., a qualified third party design institute in the power industry /6/. The FSR showed that the Project would not have been realized without CDM financial support. On the basis of the FSR, the PP decided to implement the Project with CDM support on 22/12/2008 /9/.

In addition, given the short period of time between the 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 report **Para. (a) 113/VVM**.

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In accordance with **Para. (b) 113/VVM**, BVC has compared the input values of IRR calculation in financial analysis in the PDD version 2 and the FSR, and confirms that all input parameters used in the financial analysis are consistent with the FSR.

With regard to **Para. (c) 113/VVM**, BVC has reviewed the PDD and IRR calculation sheet and assessed the following parameters:

- ✎ The **tariff** applied in the investment analysis is 0.51RMB/kWh (incl. VAT) sourced from the FSR which was completed after the implementation of two important policies: Renewable Energy Law effective on 01/01/2006 (Presidential Decree [33] /25/), which encourages development and use of renewable energy in China and Tentative Measures for Tariff and Sharing Expenses for Electricity Generation from Renewable Energy on 04/01/2006 (FaGaiJiaGe [2006]7, /26/), which stipulates tariff of most wind power projects shall be determined by either government approval or guiding tariff determined by tendering process. The prevailing tariff in Western Inner Mongolia shown in the following Table 3 is to further demonstrate the appropriateness of the tariff applied in the FSR.

Table 3 Tariff notifications before compilation of the FSR of the Project in May, 2008

Date	Relevant tariff notices	Impact	Code	Ref.
Jun. 2004	Tariff notification for wind power projects in China	Tariff for Huitengxile Wind farm Project. 0.55RMB/kWh	Fa Gai Jia Ge [2004] No. 1093	/27/
22/12/2006	Tariff notification for wind power projects in China	Tariff for 3 wind power projects located in Western Inner Mongolia was approved. 0.579RMB/kWh (<i>Inner-Mongolia Ximeng Abag 49.5MW Wind Power Project</i>), 0.5497RMB/kWh, 0.548RMB/kWh	Fagaijiage [2006] No.2908	/28/
09/06 /2007	Tariff notification for wind power projects in China	Tariff for wind power projects in same area are approved as the same tariff, and the tariff for 1 wind power project located in Western Inner Mongolia was approved as 0.51RMB/kWh(incl. VAT)	Fa Gai Jia Ge [2007] No.1260	/29/
03/12 /2007	Tariff notification for wind power projects in China	Tariff of 28 wind power projects located in Western Inner Mongolia was approved as 0.51RMB/kWh(incl. VAT)	Fa Gai Jia Ge [2007] No.3303	/30/

It is shown in the Table 3 all available tariff notifications for projects located in Western Inner Mongolia before the completion of the FSR of the Project. It can be found that the FSR applies the tariff of 0.51RMB/kWh (incl. VAT) based on latest tariff notifications listed above which had been officially published at that time for wind power projects in Western Inner Mongolia. It has also been noticed that these tariff notifications also stipulated that the approved tariff was only for the first 30,000 operation hours, and tariff after 30,000 operation hours is the average electricity tariff of all power plants in West Inner Mongolia Region which is regulated by government /28/.



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Based on these facts, BVC considers the tariff of 0.51RMB/kWh (incl. VAT) is appropriately chosen in the FSR and is creditable for the PP for the investment decision.

Therefore, BVC concludes that the FSR tariff of 0.51RMB/kWh employed in PDD is appropriate.

Furthermore, even if applying the regional historical **highest tariff** of 0.54 RMB/kWh (VAT included) in Inner Mongolia Autonomous Region as per 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” published by the EB /38/, the Project IRR is 7.27% still lower than the benchmark.

According to the Inner-Mongolia Ximeng Abag 49.5MW Wind Power Project (UNFCCC Ref. 2135), the tariff is 0.579 Yuan/kWh (including VAT) for the first 30,000 operation hours as per the tariff notification /28/, and 0.40 Yuan/kWh (including VAT) with annual appreciation of 3% after 30,000 operation hours. Based on the analysis of electricity tariff of the coal fired generating units in West Inner Mongolia Grid since 2002 /32/, which reveals an average of 2% increase from 0.245 Yuan/kWh and would arrive at 0.34 Yuan/kWh after 30,000 operation hours, BVC is able to confirm that the tariff of 0.40 Yuan/kWh (including VAT) with annual appreciation of 3% after 30,000 operation hours is conservative.

With the application of 0.579 Yuan/kWh (including VAT) for the first 30,000 operation hours, and 0.40 (including VAT, Yuan/kWh) with annual appreciation of 3% after 30,000 operation hours (as per Project 2135) to the Project, the Project IRR is 7.273%, still below the benchmark.

↩ The **annual power supplied** to the grid was determined through:

- the meteorological data of the latest years available in the region and 1-year onsite measured wind data sourced from the FSR /6/;
- The plant load factor (PLF) is 0.28 (annual equivalent generation hours of 2,470 h) which was determined in the FSR developed by a third authorized party contracted with the PP, which complies with the “Guidelines for the Reporting and Validation of Plant Load Factors version 01” paragraph 3 (b) of EB48th Annex 11 /Ref-10/. BVC also checked PLF value among the registered projects in UNFCCC in Western Inner Mongolia in Table 4 and found the range is 22.94% ~ 31.32% hence the PLF of the Project is within the range.

In order to assess the appropriateness of input values of the Project, such as total static investment and annual O&M cost, BVC made analysis of the registered wind power projects in Western Inner Mongolia available on UNFCCC in Table 4.

Table 4 Registered wind power projects in Western Inner Mongolia on UNFCCC

Project Name	UN Ref	PLF	Investment (RMB/kW)	O & M costs (RMB/MWh)	Miscellaneous Cost (RMB/kW)	Material fee (RMB/kW)
Huitengxile Windfarm Project	0064	26.19%	N/A	N/A	N/A	N/A
Inner Mongolia Huitengliang 49.5MW Wind Power Project	0589	27.65%	11058.79	N/A	N/A	N/A
Inner-Mongolia Ximeng Abag 49.5MW Wind Power Project	2135	27.17%	11503.23	98.97	8.00	6.00
Inner Mongolia Datang Zhuozi Wind Farm	1327	28.05%	9604.00	99.69	-	-
Inner Mongolia Bayannaer Chuanjingsumu 49.3MW Wind Power Project	1621	26.11%	9875.46	109.44	40.00	-



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Project Name	UN Ref	PLF	Investment (RMB/kW)	O & M costs (RMB/MWh)	Miscellaneous Cost (RMB/kW)	Material fee (RMB/kW)
Expansion Project of Huadian Inner Mongolia Huitengxile Wind Farm	1992	31.32%	8407.53	71.36	40.00	5.00
Guohua Inner Mongolia Huitengliang West Wind Farm Project	2047	28.12%	9205.05	80.04	27.07	14.75
Goldwind Damao Wind Farm Project	2051	27.71%	8416.36	71.92	12.73	-
Fuhui Inner Mongolia Tugurige Wind Farm Project	2038	27.53%	7822.63	83.00	13.13	-
Fuhui Inner Mongolia Narenbaolige Wind Farm Project	2072	26.70%	8203.43	86.11	13.13	-
Inner Mongolia Bayinhanggai 49.5MW Wind Farm Project	2027	24.68%	10361.62	64.21	12.93	4.24
Guohua Inner Mongolia Huitengliang Wind Farm Project	1261	28.92%	10299.49	84.70	27.49	14.97
Inner Mongolia North Longyuan Huitengxile Wind Farm Project	2078	29.40%	10370.37	48.03	10.12	7.90
Xilinguole Huitengliang Wind Power Project Guotai Phase I	2450	27.50%	9811.31	104.09	-	-
Inner Mongolia North Longyuan Zhurihe Wind Farm Project	1990	27.06%	9163.03	54.62	10.10	5.05
Inner Mongolia Bayin'aobao 49.5MW Wind Farm Project (Phase I)	1823	26.61%	10393.54	89.02	18.64	13.98
Inner Mongolia Duolun Daxishan 30.6MW Wind Power Project	1833	27.28%	9908.17	84.24	19.28	-
Inner Mongolia Huitengliang Phase II Wind Power Project	1815	27.63%	9187.68	122.63	26.67	14.55
Inner Mongolia Erlianhaote Phase I Wind Farm Project	1662	26.31%	10747.77	95.25	26.50	5.50
IMAR Debaotu Wind Farm Phase I 49.5MW Project	2732	28.77%	10803.03	82.25	15.12	15.12
Inner Mongolia Wuliji Wind Farm Project	2483	26.86%	10809.6	68.3151	18.76	14.07
Inner Mongolia Ximeng Zheligentu Wind Farm Phase I Project	2566	22.94%	9008.8	104.5436	20.04	-
Inner Mongolia Jingneng Saihan Wind Farm Phase I Project	2567	28.71%	10406.9	85.8655	8	15
Inner Mongolia Keyouqianqi Wind Farm Project	2593	28.50%	9769.1	109.3290	17.97	17.97
Guohua Wulate Zhongqi Phase I 49.5 MW Wind farm Project	2597	28.67%	10154.5	90.3290	22.8	5
Inner Mongolia Chifeng Saihanba Tashanzi Wind Power Project	2615	27.99%	9264.0	87.7395	25.05	20.91
Inner Mongolia Chifeng Saihanba Qingmachang Wind Power Project	2617	28.23%	9389.5	87.7924	25.27	-
IMAR Debaotu Wind Farm Phase I 49.5MW Project	2732	28.77%	10803.2	82.3	15.12	15.12
Huade Daditaihong 49.5MW Wind Power Project	2853	25.17%	9503.4	82.2511	25	5
Huaneng Damao Maoming Phase I Wind Farm Project	2911	28.10%	10659.4	83.9252	8	15
Inner Mongolia Taipusi Gongbaolage Wind Farm Project	2912	22.94%	8422.2	80.0151	80.37	30.14



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Project Name	UN Ref	PLF	Investment (RMB/kW)	O & M costs (RMB/MWh)	Miscellaneous Cost (RMB/kW)	Material fee (RMB/kW)
Inner Mongolia Bayannaer Chuanjingsumu (IV) Wind Power Project	2951	29.14%	8325.4	102.2480	-	-
Baiyun'ebo 45MW Wind Farm Project	3088	24.87%	10718.0	89.3056	13.07	4.36
Inner Mongolia Chayouhouqi Hongmu 48MW Wind Power Project	3092	27.95%	10517.7	91.0936	19.59	4.90
Inner Mongolia Chifeng Daguangdingzishan Wind Power Project	3116	29.52%	10063.9	87.6297	20.30	20.30
CGN Inner Mongolia Huitengliang Phase I Wind Farm Project	3303	28.98%	10626.6	-	18.28	17.77

↪ The **total static investment** in the approved FSR is 9,715RMB/kW (about 971.5 €/kW).

- According to China Wind Power Report 2008 (/34/) published by China Environmental Science Press in Oct. 2008, the unit cost of wind power projects varies from 800€/kW to 1150€/kW, and the cost of the Project (9,715 RMB/kW, 971.5€/kW) falls in this range and verified appropriate. BVC found the investment of the Project falls in the range from 7,822.63RMB/kW to 11,503RMB/kW according to statistics in Table 4.
- BVC has crosschecked the total static investment in the FSR with the already signed contracts of key equipments and engineering, and verified that total value in the main contracts as shown below is 427.384 million RMB, which amounts to 91.64% of total static investment. The actual cost verified is majority of the total investment and is very close to the FSR estimate. As of now, the investment of the Project has completed and some spending on minor items has not been included in the comparison. Considering these facts, BVC concludes that the assumption for the total static investment is credible.

↪ BVC assessed the **annual O&M cost**:

- Annual O&M cost mainly include the repair cost, salary & social welfare, materials fee, miscellaneous cost and the insurance fee, according to "Code on Compiling Feasibility Study Report of Wind Farms" (Code: DL/T5067-1996) issued by NDRC /35/ and "Economic Evaluation Method and Parameters for Project Construction" 3rd edition /36/. Using the above reference, the parameters for calculating O&M cost of the Project has been crosschecked and found appropriate.
 - The salary is calculated as the number of employees (4) multiplied with the average annual salary (40,000RMB per person) and the welfare fee (41% of salary) is calculated in line with relevant policy in social insurance, pension insurance, medical insurance and unemployment insurance in China.
 - Materials fee of the Project is 15 RMB/kW which falls in the range from 4.24 RMB/kW to 30.14 RMB/kW in the Table 4.
 - Miscellaneous cost of the Project is 20 RMB/kW, which falls in the range from 8 RMB/kW to 80 RMB/kW according to statistics in Table 4.
 - The insurance fee is 0.07% of the project asset, which is in accordance with "Code on Compiling Feasibility Study Report of Wind Farms" issued by NDRC /35/ and "Economic Evaluation Method and Parameters for Project Construction" 3rd edition



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/36/

- Furthermore, BVC had made a statistic of the wind power projects in West Inner Mongolia on available on UNFCCC website and found that the range of O&M is from 48.03 to 122.63 RMB/MWh shown in Table 4. The Project's O&M cost is 99.41 RMB/MWh calculated from the investment analysis of the Project which falls within the range.

Therefore, BVC is able to confirm that the O&M cost in the IRR calculation is appropriate and in compliance with the regulations as the above analyzed.

- ↺ A post-tax benchmark is applied for the investment analysis of the Project. BVC has checked the IRR calculation sheet and found that the interest has been taken into account in the calculation of income tax.
- The **interest rate** applied in the investment analysis (sourced from the FSR) is the same as prevailing commercial interest rates in China /40/. After comparing with actual interest rate in the loan contract, BVC found the interest rate applied in the investment analysis is higher, which result in higher interest and less income tax, hence higher IRR, which is more conservative.
- The **debt-equity ratio** estimated in the FSR was approved by local DRC, and is found consistent with actual capital situation in the loan contract. Therefore, BVC confirms that the interest payable in the calculation of income tax is appropriate.
- ↺ The **depreciation** period is 15 years and recovery value is 5% of assets, hence Depreciation rate is $(1-5\%)/15 = 6.33\%$. BVC has checked the IRR calculation sheet and confirmed that 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" 3rd edition.
- ↺ BVC has also verified values of various **taxes** through crosschecking with the taxation rules conducted by local government and found to be fully consistent.
 - The VAT of 8.5% is half of the normal VAT rate of 17%, as it refers to and complies with the contemporary policy "Notice of Value added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products" issued by the Ministry of Finance and the State Administration of Taxation [2001]198 in Dec. 2001 and effective from 01/01/2002 /41/. Therefore the VAT in the FSR is credible.
 - The income tax of 25% complies with Enterprise Income Tax Law of China effective from 01/01/2008. /42/
 - Education surtax of 3% and city construction surtax of 5% are correctly applied in the investment analysis and are in accordance with the "The State Council's decision to revise 'provisional rules for charging education surtax'" effective on 01/10/2005 and "provisional rules for city construction surtax" effective since 1985.
- ↺ 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 "Guidance on the Assessment of Investment Analysis" version. 03.1, i.e. a minimum period of 10 years and a maximum of 20 years will be appropriate".
- ↺ The **recovery value** rate of 5% was selected reasonably following relevant regulation in China, i.e. Notice of Clarifying Enforcement Time of Adjustment of Residual Value Ratio of Enterprise Fixed Assets issued by State Administration of Taxation of China /43/.



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In summary, based on the above analysis with reliable data sources, BVC confirms that the input values from the FSR are valid and applicable at the time of making the investment decision. The investment analysis is in accordance with **Para. (c) 113/VVM**.

Applying the verified values from the FSR, the project IRR is only 6.43% and is below the benchmark, hence the Project is not financially attractive without CERs revenue. Considering CERs revenue, the project IRR can reach 9.60% and can pass the benchmark. BVC has reviewed the compliance of the IRR calculation, i.e. the data sources and the calculation processes according to “*Guidance on the assessment of investment analysis*” version 3.1 and is able to confirm the calculation is compliant and reflecting reliably the actual situation of the host country.

A sensitivity analysis was performed, by taking into account $\pm 10\%$ variations in following four financial indicators:

- Total static investment
- Annual O&M cost
- Annual power supplied to the grid
- Tariff

According to “Code on compiling feasibility study report of wind power projects” published by NDRC /35/, total static investment, net supplied electricity and tariff should be taken as uncertain factors in sensitivity analysis, and $\pm 10\%$ variation of above factors was applied in the sensitivity analysis of which the result shows the Project IRR will not exceed 8% under the variation. BVC reproduced the calculation on the IRR spreadsheet and worked out the same result in the final PDD.

Furthermore, a critical assessment was presented in the PDD to show to what extent the IRR of the project could reach the benchmark. As a result, in the following scenarios the IRR will reach the benchmark:

- The static total investment decreases by about 11.1%, or
- The annual O&M cost decreases by 52.80%, or
- The tariff for the whole assessment period increases by about 11.30%, or
- The annual power supplied to the grid increase by about 11.30%

However, BVC confirm that these four parameters are not likely to fluctuate over the above ranges for the following reasons:

[Static total investment]: BVC have assessed the actual contracts including WTG Purchase Contract /11/, Construction Contract /12/, Wind Tower Purchase Contract /14/, Transformer Contract /15/ and etc. The total value of those main contracts already amounts to 91.64% of the projected total static investment. Considering the actual investment spent on the Project, BVC can confirm that the investment is not possible to decrease by 11.1%.

[Annual O&M cost]: The annual O&M cost comprise materials expense, maintenance cost, employee salary and welfare and miscellaneous accounts. As the index shows the price of the material, fuel and manpower has been on the rise for the period /46/, /47/, /48/, it is unlikely that the annual O&M cost could decrease by 52.80%.

[Annual supplied power]: The variation of wind resource on yearly basis is not likely to significantly change the estimated annual power output of the Project because the electricity generation by the Project was cited from the FSR developed by a qualified third party based on historical wind data provided by the local meteorological station. The estimated electricity reflects the local wind resource on a long-term average basis. BVC concludes that the annual



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power supplied to the grid is unlikely increased by 11.30% on average over the whole operation period.

[Tariff] used in PDD is 0.51RMB/kWh (Incl. VAT). BVC has verified that since 2007 the tariff of 0.51RMB/kWh (incl. VAT) has been applied by NDRC for wind power projects located in Western Inner Mongolia (see Table 3). According to the “Notice on consolidating the Feed-in Tariff Policy” (Fa Gai Jia Ge [2009] No.1906) issued by NDRC and effective from 01/08/2009 /33/, for wind power projects in Western Inner Mongolia with tariff not yet approved, the approved tariff is 0.51RMB/kWh (incl. VAT). The Project is not a tendering project and is located in Western Inner Mongolia; hence the effective tariff is 0.51RMB/kWh. It is unlikely for the tariff to increase by 11.30%.

Even applying the highest tariff of 0.54 RMB/kWh (incl. VAT) in Inner Mongolia Autonomous Region as per 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” published by the EB /38/, the Project IRR is 7.27% with application of this tariff, which still below the benchmark.

Referring to Inner-Mongolia Ximeng Abag 49.5MW Wind Power Project (UNFCCC Ref. 2135), the tariff of 0.579 RMB/kWh (incl. VAT) for the first 30,000 operation hours, and 0.40 RMB/kWh (incl. VAT) with annual appreciation of 3% after 30,000 operation hours (as per Project 2135 and discussed already) was applied to the Project and the Project IRR is 7.273% still below the benchmark.

Taking into account of the CERs sales revenues (calculated with 12EUR/tCO₂e), the project IRR of the Project is 9.60% and can pass the benchmark.

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 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, 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 latest rules issued by EB.

The common practice analysis starts from April 2002, when China reformed power sector to establish a more commercialized power market. The Project is a new wind power project located in Inner Mongolia Autonomous Region. Project activities in the same province share similar tariff policy, wind resource, grid structure, geological and transportation conditions, economic developing status. Hence wind power project activities are comparable to the Project if they are located in Inner Mongolia Autonomous Region, with similar scale (installed capacity larger than 15MW), implemented in a comparable investment climate and constructed after Apr. 2002 when the Chinese Government launched the power sector reform Program /49/. BVC confirms that delineation of Inner Mongolia Autonomous Region as the border is appropriate.

Following the above analysis, BVC has verified the identified wind farms in the PDD by cross-checking the public statistics i.e. “*Statistics of wind power installed capacity in China*” (2007, 2008 and 2009) issued by Chinese Wind Energy Association /50/.



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As the public information presents, only four wind farms were identified as similar project with the above criteria.

- ✓ Dali Phase Three project. Demonstration Project supported by National Debt Fund /51/
- ✓ Bailingmiao Phase One Wind Power Project. Foreign invested and with revenues from Gold Stand VERs. /52/
- ✓ Bailingmiao Phase Two Wind Power Project. Foreign invested and with revenues from Gold Stand VERs /53/
- ✓ Honiton Xiwu phase one Wind Farm Project with revenues from Gold Stand VERs /54/

The above projects are essentially different from the Project in terms of investment and implementation. Dali Phase Three project was invested by the National Debt Fund and such support is no longer applicable, and thus is not available to the Project. Bailingmiao Phase One and Phase Two wind power projects, Honiton Xiwu phase one Wind Farm Project applied for VER under Golden Standard Voluntary Carbon Standard as the projects were invested by foreign investor in China. BVC has verified the description in the PDD against relevant evidences therefore concludes that the Project is not common practice in the region.

✌ Complying with para.121/VVM, 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 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 the PDD as the project involves grid connected renewable power generation using wind energy. Refer to the discussions on the applicability of the methodology at Section 3.6.1 above. BVC hereby confirms that the monitoring plan complies with the requirements of the methodology.

The combined margin emission factor is determined ex-ante based on the most recent information available. Accordingly, net electricity generation supplied by the project to the Grid ($EG_{\text{facility},y}$) is included in the monitoring plan. The Project is implemented to share the transformer, substation and transmission lines with Inner Mongolia Jingneng Saihan Wind Farm Phase I Project (CDM ref 2567, hereafter referred to as Project B). To monitor $EG_{\text{output},y}$, four meters ‘MA1’, ‘MA2’, ‘MA3’ and ‘MA4’ are installed on respective 35kV line of the Project to monitor electricity supplied by the four groups of wind power generators of the Project on the line ‘A-i’.

The total of electricity generation supplied by the Project and Project B to the grid can be monitored by two gateway meters (one main meter and one backup meter) installed at the high voltage side of the 35kV/220kV transformer. Similarly, electricity supplied by the Project B is also monitored by four auxiliary meters on respective 35kV line. The electricity supplied by the project ($EG_{\text{output},y}$) can also be crosschecked using a formula devised to calculate the Project’s share of the total electricity delivered through the gateway meter. Total electricity purchased ($EG_{\text{import},y}$) from the grid by both the Project and Project B will be deducted for conservativeness. BVC has checked the formula and is able to confirm the crosscheck calculation of the net electricity supplied by the Project is appropriate and conservative.



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Detailed monitoring procedures will be established in line with the Power Purchase Agreement. Accuracy of all meters is not lower than 0.5s. All meters will be calibrated and calibrated by a qualified third party annually.

Operational management for the Project is comprehensively detailed in PDD and the description of responsibility, training, procedure reference, equipment details, calibration frequency and maintenance needs are clearly mentioned. Achievement of the records was indicated and BVC believes that the retrievability of relevant CDM project activity records is pro-actively considered.

The data will be continuously measured and recorded on a monthly basis and will be double checked with electricity sales' receipts.

By reviewing the provided training plan and 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.124/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 China's sustainable development because of:

➤ GHG emission reduction

The project will help reduce the greenhouse gas GHG emissions versus the high-growth, coal-dominated business-as-usual scenario in the North China Power Grid by reducing the electricity generation from the fossil-fuel fired power plants, particularly the emission of SO_x, NO_x and dust.

➤ Employment opportunities

The conducting of the proposed project will create employment opportunities during the construction phase and operational period.

➤ Economic Improvement

The construction of the wind farm will promote local economy by contributing to local government with more tax revenues through selling power generation.

3.10 Local stakeholder consultation (130)

On 21/03/2009, the PP introduced a survey of the Project to local stakeholders and invited comments from the local stakeholders prior to the publication of the PDD on the UNFCCC website. The survey was conducted through holding stakeholders meeting and distributing 50 copies of questionnaires /55/. The local stakeholders consulted include local residents, government representatives.

During the on-site visit, BVC has conducted an interview with local stakeholders (in References the persons interviewed are listed) and confirms that the stakeholders impacted had been invited in a transparent manner. The interview with stakeholders and review of



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returned questionnaires shows 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 properly 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 effects on the local stakeholders.

3.11 Environmental impacts (133)

The Environmental Impact Assessment of the Project was carried out by Inner Mongolia Power Exploration & Design Institute in 22/05/2008, and approved by the Inner Mongolia Autonomous Regional Environmental Protection Bureau on 10/07/2008 (Code: Nei Huan Shen [2008]164). (14/)

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 environment impact occurs from aspects of dust, solid waste, and waste water during construction, noise, and electromagnetic effect during operation. 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 in accordance with the EIA, 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 using methodology ACM0002 was webhosted on the UNFCCC for global stakeholders comments as per CDM requirements. The project was webhosted from 13/08/2009 to 11/09/2009

No comments were received during this period.

5 VALIDATION OPINION

Bureau Veritas Certification has performed a validation of Inner Mongolia Jingneng Saihan Wind Farm Phase II 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 on-site visit and interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final validation report and opinion.

Project participant/s used the latest “Tool for demonstration and assessment of additionality” (version 05.2), Paragraph 113 of VVM (version 01.2), the “Guidance-Prior consideration” - Guidance on the demonstration and assessment of prior consideration of the CDM (version 01) and the “Guidelines on the Assessment of Investment Analysis” version 03.1 (EB51, Annex58) to demonstrate the additionality of the Project. In line with these tools, the PDD provides analysis of investment barriers 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) is also applied to determine the emission factor of North China Power Grid.

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



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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 the average annual emission reductions of 112,655 tCO₂e over the chosen 7-year renewable crediting period.

The review of the project design documentation (version 2) 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 Inner Mongolia Jingneng Saihan Wind Farm Phase II Project as CDM project activity.



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6 REFERENCES

Category 1 Documents:

Documents that relates directly to the GHG components of the project.

/1/	PDD version 1 dated 10/08/2009 GSP period 13/08/2009 ~ 11/09/2009
/2/	PDD version 2 dated 01/04/2011
/3/	Letter of Approval from DNA of China (Host country) dated July 2009, No. 2126
/4/	EIA report conducted by Inner Mongolia Power Exploration & Design Institute on 22/05/2008 Code: 15-P0082K
/5/	EIA Approval issued by Inner Mongolia Autonomous Regional Environmental Protection Bureau on 10/07/2008, Code: Nei Huan Shen [2008]164
/6/	Feasibility Study Report (FSR) developed by Inner Mongolia Power Exploration & Design Institute. in May, 2008
/7/	FSR approved by Development and Reform Commission of Inner Mongolia Autonomous Region on 19/01/2009 (Code: Nei Fa Gai Neng Yuan Zi [2009]113)
/8/	Notification on Determining Baseline Emission Factor of China's Grid dated 02/07/2009. http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File2333.pdf
/9/	PP's Board Meeting minutes dated 22/12/2008
/10/	CDM Consultant Contract signed with Easy Carbon Consultancy Co., Ltd. on 06/01/2009
/11/	WTG Purchase Contract signed with Beijing Beizhong Steam Turbine Generator Co., Ltd. dated 06/02/2009
/12/	Construction contract, dated on 18/06/2009
/13/	Bank Loan agreement on 15/07/2009
/14/	Wind tower purchase contract, dated on 08/04/2009
/15/	Transformer purchase contract, dated in 13/05/2009
/16/	Start construction permit dated 20/06/2009
/17/	The notification for the prior consideration of the CDM sent to China DNA, dated 15/07/2009
/18/	Letter of confirmation from UNFCCC regarding the requirement of notification for new projects with starting date before EB48, dated 09/09/2009
/19/	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
/20/	Notice on Strictly Controlling the Manufacturing and Construction of Small-scale Fuel-fired Generators, Ref. No.[Jijiqing (1995) 2372] http://www.people.com.cn/item/flfgk/gwyfg/1997/220010199708.html
/21/	Page 54, China Solar PV Report 2007, China Environment Science Press. The cost of solar PV is USD 0.5/kWh, which is around RMB 3.7/kWh.



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/22/	Evidences of high Cost on Solar Generation http://www.hngyg.gov.cn/news1.aspx?hyid=20315&id=05
/23/	http://www.soa.gov.cn/cms/cms/infopub/infopre.jsp?pubtype=D&pubpath=hyjww&infoid=1192161644236364&templetid=1181456489411937&channelcode=A024710&userid=10002
/24/	Benchmark in “Interim Rules on Economic Assessment of Electric Power Engineering Retrofit Projects”
/25/	National Renewable Energy Law, effective from 01/01/2006. http://www.mep.gov.cn/law/law/200802/t20080202_117982.htm
/26/	Tentative Measures for Tariff and Sharing Expenses for Electricity Generation from Renewable Energy issued by NDRC on 04/01/2006 http://www.gov.cn/govtest/content_264712.htm
/27/	Tariff notification for wind power projects in China published by NDRC on Jun. 2004 (Document No. Fa Gai Jia Ge [2004] No.1093)
/28/	Tariff notification for wind power projects in China published by NDRC on 22/12/2006 (Document No. Fa Gai Jia Ge [2006] No.2908)
/29/	Tariff notification for wind power projects in China published by NDRC on 09/06/2007 (Document No. Fa Gai Jia Ge [2007] No.1260)
/30/	Tariff notification for wind power projects in China published by NDRC on 03/12/2007 (Document No. Fa Gai Jia Ge [2007] No.3303)
/31/	Tariff notification for wind power projects in China published by NDRC on 21/07/2008 (Document No. Fa Gai Jia Ge [2008] No.1876)
/32/	Electricity tariff of the coal fired generating units with FDG in West Inner Mongolia Grid since 2002 http://www.dqzc.gov.cn/nshowmain.asp?tid=10095
/33/	Notice on consolidating the Feed-in Tariff Policy issued by NDRC on 20/07/2009 (Code: Fa Gai Jia Ge [2009] No.1906)
/34/	China Wind Power Report 2008, Li Junfeng, published by China Environmental Science Press in Oct. 2008
/35/	Codes on Compiling Feasibility Study Report of Wind Farms issued by NDRC on 25/05/2005, Code: DL/T5067-1996. http://www.windpower.org.cn/news/links/js_2005_0508.htm
/36/	Economic Evaluation Method and Parameters for Project Construction 3 rd edition, issued by NDRC and Ministry of Construction of P.R. China on 03/07/2006
/37/	The Economics of Wind Power, Part III of Wind Energy - The Facts http://www.wind-energy-the-facts.org/en/home--about-the-project.html
/38/	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 http://cdm.unfccc.int/Reference/Notes/reg_note07.pdf
/39/	Exchange rate, http://www.xe.com
/40/	Benchmark lending rate published by The People’s Bank of China: http://www.pbc.gov.cn/detail.asp?col=462&ID=2480



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/41/	<i>"Notice of Value added Tax Policy Regarding Products Using Certain Synthesized Resources and Other Products"</i> issued by the Ministry of Finance and the State Administration of Taxation [2001]198 on Dec. 2001 and effective from 01/01/2002
/42/	Enterprise Income Tax Law of China effective from 01/01/2008
/43/	Notice of Clarifying Enforcement Time of Adjustment of Residual Value Ratio of Enterprise Fixed Assets issued by State Administration of Taxation of China
/44/	IRR calculation spreadsheet of the Project
/45/	http://www.nmpi.gov.cn/jgzz/jgzz_040804.htm
/46/	Building Materials Price Keep Rising, Ministry of Industry and Information Technology of China http://www.miit.gov.cn/n11293472/n11295125/n11299425/12164560.html
/47/	Price and Cost in 2008, National bureau of Statistics of China http://www.stats.gov.cn/tjgb/ndtjgb/qgndtjgb/t20090226_402540710.htm
/48/	http://www.stats.gov.cn/tjsj/ndsjsj/2009/indexch.htm
/49/	The Chinese Government launched the power sector reform Program in 2002
/50/	"Statistics of wind power installed capacity in China" conducted by Professor Shi Pengfei version 2007 and version 2008 issued by Chinese Wind Energy Association http://www.gsec.gov.cn/ClassNews.asp?newsID=664
/51/	http://www.chifeng.gov.cn/html/2008-11/3130.shtml
/52/	http://www.honitonenergy.com/chinese/honiton/investor.php http://www.sgsqualitynetwork.com/tradeassurance/ccp/projects/project.php?id=423
/53/	https://gs1.apx.com/mymodule/ProjectDoc/EditProjectDoc.asp?id1=505
/54/	https://gs1.apx.com/mymodule/ProjectDoc/EditProjectDoc.asp?id1=620
/55/	Evidence of 50 pieces of stakeholder survey questionnaires
/56/	Emission Factor calculation spreadsheet
/57/	Modalities of Communication Form (MOC) of the Project signed between Beijing International New Energy Co., Ltd. and NDRC of China on 27/05/2010

Category 2 Documents:

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

/Ref-1/ ACM0002 Version 12.1.0 valid from 17/09/2010
/Ref-2/ Validation and Verification Manual version 01.2 dated 30/07/2010, EB55 Annex 1
/Ref-3/ Tool to calculate the emission factor for an electricity system version 02.1 dated 16/10/2009
/Ref-4/ Tool for demonstration and assessment of additionality version 05.2 (EB39, Annex10) dated 26/08/2008
/Ref-5/ Guidance on the Demonstration and Assessment of Prior Consideration of the CDM version 01 (EB41, Annex 46)



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/Ref-6/ Guidance on the Demonstration and Assessment of Prior Consideration of the CDM version 02 (EB48, Annex 61) dated 17/07/2009
/Ref-7/ Guidance on the demonstration and assessment of prior consideration of the CDM version 03 (EB49, Annex 22)
/Ref-8/ Paragraph 54 of EB 38 dated 14/03/2008.
/Ref-9/ Glossary of CDM terms version 05
/Ref-10/ Guidelines for the Reporting and Validation of Plant Load Factors version 01 (EB48, Annex11)

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/ Ms. Qu Zhan	Beijing International New Energy Co., Ltd.
/2/ Mr. Xu Bin	ZhengXiangbaiqi branch, Beijing International New Energy Co., Ltd.
/3/ Mr. Wang Liming	Representative of local Environmental Protection Bureau
/4/ Mr. Xing Jiang	Project Manager of the CDM consultant
/5/ Mr. Jiang Dan	Project Manager of the CDM consultant
/6/ Mr. Su Yiheng	Stakeholder, villager live near the Project site



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7. CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Ms. Li Yiting	BVC, China	<p>Team Leader, Climate Change Lead Verifier</p> <p>She holds a Master Degree in Environmental Science. Before joining BV in 2009, she gained two and a half years of CDM technical working experience in P.R China. She obtained the certificate of CDM Lead Verifier, Lead Auditor for ISO 14001 and ISO 14064.</p>
Mr. Pin Tian	BVC, China	<p>Team Member, Climate Change Lead Verifier</p> <p>He holds a MEng in Industrial Engineering and a MSc in Product Lifecycle Management. Before joining BV in 2009, he gained two years working experience in project management in various industrial sectors. He obtained the certificate of CDM Lead Verifier, Lead Auditor for ISO 14001 and ISO 14064.</p>
Ms. Jasmine Tang Xuemei	BVC, China	<p>Internal Reviewer, Climate Change Lead Verifier</p> <p>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 Verifier, Lead Auditor for ISO 14001. She has completed the course assessment for the ISO 14064:2006.</p>



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APPENDIX A: COMPANY CDM PROJECT VALIDATION PROTOCOL

Table 1 Validation requirements based on the Validation and Verification Manual Version 01.2 (EB55 Annex 1)

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
1. Approval	VVM	44-50	COUNTRY A (China)	COUNTRY B (N/A)		
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	Yes, BVC received from the PP the Letter of Approval which was issued by the DNA of China in July 2009 (No. 2126), authorizing Beijing International New Energy Co., Ltd. as the Project Participant	N/A The Project is a unilateral CDM project.	OK	OK
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	VVM	45	Yes. The LoA confirms: P. R. China is a Party of the Kyoto Protocol. The PP's participation is voluntary. The Project assists China in achieving	N/A	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
- Refers to the precise proposed CDM project activity title in the PDD being submitted for registration			sustainable development. Refers to the precise proposed CDM project activity title in the PDD			
c. Is(are) the letter(s) of approval unconditional with respect to (b) above?	VVM	46	Yes.	N/A	OK	OK
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	Yes, the LoA of the proposed project was issued by the NDRC which is China's DNA.	N/A	OK	OK
e. Is there doubt with respect to the authenticity of the letter of approval?	VVM	48	No.	N/A.	OK	OK
f. If yes, was verified with the DNA that the letter of approval is authentic?	VVM	48	N/A.	N/A.	OK	OK
2. Participation	VVM	51-54	PP1 (Beijing International New Energy Co., Ltd.)	PP2 (N/A)		
a. Are the project participants listed in tabular form in section A.3 of the PDD?	VVM	52	Yes.	N/A	OK	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 PDD?	VVM	52	Yes	N/A	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
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	Yes. The LoA is dated in July 2009 (No. 2126)	N/A	OK	OK
e. Are any entities other than those approved as project participants included in these sections of the PDD?	VVM	52	No.		OK	OK
f. Has the approval of participation issued from the relevant DNA?	VVM	53	Yes.	N/A	OK	OK
g. Is there doubt with respect to (f) above?	VVM	53	No, there is no doubt with respect to (f) above.	N/A	OK	OK
h. If yes, was verified with the DNA that the approval of participation is valid for the proposed CDM project participant?	VVM	53	N/A.	N/A.	OK	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. As per the latest template form of CDM-PDD version 3.0 and CDM PDD GUIDELINE version 07		OK	OK
b. In CDM-PDD section A.1 are the following provided?	EB 41	Ann 12				
i. Title of project	EB 41	Ann 12	Inner Mongolia Jingneng Saihan Wind Farm Phase II Project		OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. Current version number and date of document	EB 41	Ann 12	Version: 1, date: 10/08/2009 Final Version: 2 dated 01/04/2011	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 purpose of the project activity is to utilize local wind power for electricity generation to supply to North China Power Grid - NCPG. The Project involves installation of 24 wind turbines with unit capacity of 2,000 kW, making a total installed capacity of 48 MW. The baseline scenario is the same to the existing scenario, which is electricity supply of equal amount as the proposed project from NCPG.	OK	OK
ii. Explanation on how the GHG emission reductions are effected	EB 41	Ann 12	By replacing the electricity generated from fossil fuel-fired power plants dominated North China Power Grid; the proposed project activity will achieve obvious greenhouse gas (GHG) emission reductions by avoiding CO2 emissions.	OK	OK
iii. The PP's views on the contribution of project activity to sustainable development	EB 41	Ann 12	The contribution to sustainable development is included in Section A.2 of the PDD and is deemed reasonable: GHG emission reduction	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>The project will help reduce the GHG emissions versus the high-growth, coal-dominated business-as-usual scenario in the NCPG by reducing the electricity generation from the fossil-fuel fired power plants, and the emission of SOx, NOx and dust.</p> <p>Employment opportunities</p> <p>The conducting of the proposed project will create employment opportunities during the construction phase and operational period.</p> <p>Economic Improvement</p> <p>The construction of the wind farm will promote local economy by contributing to local government with more tax revenues through selling power generation.</p>		
<p>iv. Are there any changes/modifications compared to the webhosted PDD?</p>	<p>EB 41</p>	<p>Ann 12</p>	<p>Pending on CAR-6.</p> <p>Annual net electricity supplied to the grid was 118,000 MWh in the GSP PDD. According to the FSR, annual net electricity supplied to the grid is 118,560 MWh in the final PDD.</p> <p>Annual emission reductions are 105,438CO₂e in the GSP PDD. Annual emission reductions are</p>	<p>Pending</p>	<p>OK</p>



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			112,655CO2e in the final PDD.		
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	Yes. The proposed project is a unilateral project of which the PP is Beijing International New Energy Co., Ltd.	OK	OK
ii. Identification of Host Party	EB 41	Ann 12	Yes. Host Party is P.R. China	OK	OK
iii. Indication whether the Party wishes to be considered as project participant	EB 41	Ann 12	P.R. China is also a project participant.	OK	OK
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	The proposed project is located in Suniteyouqi, Xilinguole League, Inner Mongolia Autonomous Region, P. R. China.	OK	OK
ii. Detailed physical location with unique identification of the project activity (eg. Longitude/latitude)	EB 41	Ann 12	Yes. The centre of the Project geographical coordinates is E 112°51'00" (112.85°) and N 42°37'00" (42.62°).	OK	OK
iii. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	No. There are no changes/modifications compared to	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			the webhosted PDD.		
f. In CDM-PDD section A.4.2 is the list of categories of project activities provided?	EB 41	Ann 12	Category: Renewable electricity in grid-connected applications Sectoral Scope: 1 Energy Industries	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	This project suppliers are domestic manufacturers hence doesn't directly involve any technology transfer to the Host Party.	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	The project is to build a new wind farm and the existing scenario prior to the implementation of the project activity is generation of electricity by grid connected power plants. No change has been found during the site visit.	OK	OK
iii. List and arrangement of the main manufacturing/production technologies, systems and equipments involved	EB 41	Ann 12	Model specified for wind turbine & generator is FD80-2000. CL-1 Source of plant load factor (PLF) of the proposed project should be described with justification of appropriateness. PLF has been described in the PDD. The calculation is correct and is found consistent with the FSR verified by BVC.	GL-4	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Hence CL-1 is closed.		
iv. The emissions sources and GHGs involved	EB 41	Ann 12	By replacing the electricity generated from fossil fuel-fired power plants dominated North China Power Grid; the proposed project activity will achieve obvious greenhouse gas (GHG) emission reductions by avoiding CO2 emissions.	OK	OK
v. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	Refer to CL-1. Yes, PLF has been described in the final PDD which is in accordance with the PDD guideline.	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.	OK	OK
i. In CDM-PDD section A.4.5 is Information regarding Public funding provided?	EB 41	Ann 12	There is no public funding from Annex 1 Parties for this project.	OK	OK
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-1 The PDD should apply the latest "Tool to calculate the emission factor for an electricity system" and methodology with validity. The following methodology and tool has been applied: "Consolidated baseline methodology for grid-	CAR-1	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			connected electricity generation from renewable sources" ACM0002 Version 12.1.0, "Tool to calculate the emission factor for an electricity system" version 02.1 CAR-1 was hence closed.		
ii. Any methodologies or tools which the above approved methodology draws upon and their version number	EB 41	Ann 12	Pending on close CAR-1. "Tool to calculate the emission factor for an electricity system" version 02.1 "Tool for the demonstration and assessment of additionality" Version 5.2	Pending	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	The Project is a new wind power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plants). The Project does not involve switching from fossil fuels to renewable energy at the site of the project activity.	OK	OK
ii. Documentations with references that had been used. This can be provided in Annex 3 instead	EB 41	Ann 12	Pending on CAR-1 References are provided for ACM0002 ver. 12.1.0 "Consolidated methodology for grid-connected electricity generation from renewable sources" "Tool for demonstration and assessment of additionality" version 05.2	Pending	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			"Tool to calculate the emission factor for an electricity system" version 02.1		
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	<p>Yes. Both have been described in B.3</p> <p>CL-2 Identification of any connected electricity system to the project electricity system (NCPG) should be analyzed.</p> <p>The proposed project supplies electricity to the North China Power Grid (NCPG). And the connected electricity system of NCPG is the Northeast China Power Grid (NECPG) which consists of Liaoning, Jilin and Heilongjiang Power Grids, and Central China Power Grid (CCPG) which consists of Chongqing, Henan, Hubei, Hunan, Jiangxi and Sichuan Power Grids. The information of connected electricity system has been added in the final PDD. Hence CL-2 is closed.</p>	CL-2	OK
ii. A flow diagram of the project boundary physically delineating the project activity	EB 41	Ann 12	Yes.	OK	OK
iii. The flow diagram with all equipments, systems and flows of mass and energy etc	EB 41	Ann 12	Yes.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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	Yes. Methodology ACM0002 prescribes the baseline scenario and no further analysis required, thus there is no need to take steps to identify the baseline scenarios.	OK	OK
ii. Justification of key assumptions and rationales	EB 41	Ann 12	Not applicable.	OK	OK
iii. Transparent illustration of all data used to determine the baseline scenario (variables, parameters, data sources, etc.)	EB 41	Ann 12	Not applicable.	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. Methodology ACM0002 prescribes the baseline scenario and no further analysis required, thus there is no need to take steps to identify the baseline scenarios.	OK	OK
v. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	Pending on CAR-1. The GSP PDD has applied ACM0002 version 10 and "Tool to calculate the emission factor for an electricity system" version 1.1. The final PDD has applied ACM0002 Version	Pending §	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			12.1.0 and "Tool to calculate the emission factor for an electricity system" version 2.1		
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	Yes. The benchmark analysis (Option III) is chosen to assess and demonstrate the additionality. Without CERs revenue, IRR of the project is lower than the benchmark of 8%.	OK	OK
ii. Justification of key assumptions and rationales	EB 41	Ann 12	Yes.	OK	OK
iii. Transparent illustration of all data used to determine the baseline scenario (variables, parameters, data sources etc)	EB 41	Ann 12	Yes.	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	GL-3 Evidence of notification of CDM to the UNFCCC secretariat and Host Party DNA should be provided. When the notification on prior consideration of CDM was required to be sent to UNFCCC secretariat on EB48 meeting which dated on 14-17/07/2009, it had been five-month later for the proposed project starting date. According to the letter which replied from UNFCCC secretariat, it indicated that notifications sent to the DNA only	GL-3 GL-4 CAR-2	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>prior to EB 48 are acceptable.</p> <p>The requirement of sending notification to UNFCCC has become compulsory since "Guidance-Prior Consideration" version 02 /Ref-6/ on 17/07/2009. For the Project, a letter replied to the PP by UNFCCC on 09/09/2009 /18/ stated if the notification was sent to DNA before EB48, 17/07/2009, notification to the UNFCCC can be exempted for the PP. Therefore, BVC is able to confirm the prior consideration of the Project was appropriate in accordance with the required EB's guidance and the "Guidance-Prior Consideration" version 01, and not in conflict with the latest "Guidance-Prior Consideration" version 03. Hence CL-3 is closed.</p> <p>CL 4 The Project starting date should be clarified and indicated in the timeline of the proposed project in accordance with the "Glossary of CDM terms".</p> <p>The timeline of the proposed project was added in the B.5. of PDD. The date of signing the wind turbine purchasing contract of 06/02/2009 is figured as the starting date of the proposed project, which is the earliest date among the date of signing the construction commencement order,</p>		



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>the date of signing the construction contract, the date of signing the long term loan contract and main equipment contract. Some other continuing and real actions taken by the project owner were also listed in the timeline in Section B.5, version 2 of the PDD.</p> <p>The relevant content has been revised and found consistent with evidence provided. Hence CL-4 is closed.</p> <p>CAR-2 In the PDD the date of board decision is 23/11/2008 which is not consistent with the documented evidence which shows 22/12/2008.</p> <p>The date of board decision has been corrected in the PDD as 22/12/2008.</p> <p>Hence CAR-2 is closed.</p> <p>The start date of the project activity is identified as 06/02/2009, which is earlier than the period of global stakeholder consultation (13/08/2009). As the Project is a new project activity with a start date after 02/08/2008, notification was sent to the DNA on 15/07/2009.</p> <p>Incentive from the CDM was seriously considered in the decision to proceed with the project activity</p>		



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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	Pending on CAR-1. Latest tool "Tool to calculate the emission factor for an electricity system" version 02.1 has been applied correctly.	Pending	OK
ii. Equations used in calculating emission reductions	EB 41	Ann 12	CAR-3 The PDD misses out equations and steps required in the ACM0002, in particularly: $BE_y = EG_{PJ,y} * EF_{grid,CM,y}$ and for Greenfield renewable energy power plant: $EG_{PJ,y} = EG_{facility,y}$ Complete calculation process for emission reductions has been added. The calculation processes are in compliance with the ACM0002 Version 10 and ACM0002 Version 12.1.0 Hence CAR-3 is closed	CAR-3	OK
iii. Explanation and justification for all relevant methodological choices, including different scenarios or cases, options and default values	EB 41	Ann 12	Yes.	OK	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	EB 41	Ann 12	Yes. Relevant information from public sources is compiled in this section.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
only once and thus remains fixed throughout the crediting period and that are available when validation is undertaken					
ii. The actual value applied	EB 41	Ann 12	Yes.	OK	OK
iii. Explanation and justification for the choice of the source of data	EB 41	Ann 12	The explanation and justification for the choice of the source of data are consistent with the official data issued on 02/07/2009 by China's DNA.	OK	OK
iv. Clear and transparent references or additional documentation in Annex 3	EB 41	Ann 12	<p>CL-6 China Electricity Power Yearbook and China Energy Statistical Yearbook version 2008 are the latest available references. therefore data referring version 2006, 2007 of both books should be updated in substep1b as well as in section B.6.2 of the PDD.</p> <p>In substep1b of Section B.5., according to China Electricity Power Yearbook 2008 (Page 734), the annual average utilization hours for fossil fuel power plant in 2007 is 5,344 hrs. This has been updated in the PDD.</p> <p>In Section B.6.2. of PDD, China Electricity Power Yearbook 2008 and China Energy Statistical Yearbook 2008 has been updated in the data source. Hence CL-6 is closed.</p>	CL-6	OK
v. Where values have been measured, a	EB	Ann	N/A.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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	41	12			
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	Refer to CAR-3 Yes. Calculation has been followed transparently as per the ACM0002 Version 10 and ACM0002 Version 12.1.0.	Pending	OK
ii. Documentation how each equation is applied, in a manner that enables the reader to reproduce the calculation	EB 41	Ann 12	GL-5 The source of the "Wind Turbine Adjustment Report" mentioned in B.6.3 should be given in the PDD. The description of "wind turbine adjustment report" in Section B.6.3 is not appropriate, and this is not the exact situation of the proposed project. The source of net electricity supplied to the grid by the proposed project is Feasibility Study Report (FSR) compiled by Inner Mongolia Power Exploration & Design Institute, and the description in Section	GL-5	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			B.6.3 has been corrected in version 2 of the PDD. Hence CL-5 is closed.		
iii. Additional background information and or data in Annex 3, including relevant electronic files (i.e. spreadsheets)	EB 41	Ann 12	Yes. A complete calculation process of Emission Factors of NCPG has been provided in Annex 3 of PDD.	OK	OK
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	<p>CAR-5 The monitored parameters and procedure are not consistent with the actual situation as the Project shares the transmission line and the grid substation with Inner Mongolia Jingneng Saihan Wind Farm Phase I Project.</p> <p>Electricity supplied to the grid by the proposed project $EG_{output,y}$ will be directly monitored by four meters. Power supplied to the grid will be double checked according to electricity sales receipts as the formula. Electricity imported from the grid by the proposed project $EG_{import,y}$ is monitored by the main meter (M1) at the connection point between the proposed project and the Grid. Hence $EG_{import,y}$</p>	CAR-5	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>is total electricity imported from the grid by the proposed project and Project B. BVC has assessed the formula and the monitoring system and considered the monitoring system in line with ACM0002 Version 12.1.0 and is conservative.</p> <p>Situations during emergencies are also analyzed in B.7.2 and checked by BVC and regarded acceptable.</p> <p>Hence CAR-5 is closed.</p>		
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 several sources may be used, explain and justify which data sources should be preferred.	EB 41	Ann 12	Yes	OK	OK
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	EB 41	Ann 12	<p>The relevant data will be continuously measured and monthly recorded.</p> <p>As for QA/QC, The metering equipments at the substation will be calibrated once a year according to the relevant standard DL/T228-4000. Readings of power supplied to the grid will be double-checked against electricity sales receipts.</p> <p>Pending close out CAR-5.</p>	Pending	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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.			Detailed information can be found in the Section B.7.2 of PDD.		
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.	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	Pending on close of the CAR-5. Yes. As per ACM0002 Version 10 and ACM0002 Version 12.1.0.	Pending	OK
v. Relevant further background information in Annex 4	EB 41	Ann 12	There is no further background information.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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, 01/04/2011	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.	OK	OK
iii. Indication if the person/entity is also a project participant listed in Annex 1	EB 41	Ann 12	Yes. All the persons listed are not project participants.	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, The starting date of the project activity is 06/02/2009 which is the date of signing the wind turbine purchasing contract. CL-7 The starting date (01/01/2010) of the first crediting period in C.2.1.1 is not rational The starting date in C.2.1.1 has been revised. It is deemed appropriate. Hence CL-7 is closed.	CL-7	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	EB	Ann	Yes.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
crediting time clearly defined and reasonable (renewable crediting period of max. three x 7 years or fixed crediting period of max. 10 years)? ?	41	12	Renewable crediting period.		
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	The identified impacts have been clearly described in this section. And it can be concluded that the environmental impacts of the proposed project are not considered significant. The EIA was finally approved by Inner Mongolia Autonomous Regional Environmental Protection Bureau on 10/07/2008, which should be recognized as the key event for the approval from EPB.	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. The survey was carried out by distributing questionnaires to 50 residents in local area on 21/03/2009. An invitation notice was issued and local stakeholders were invited to a consultation meeting on 15/03/2009.	OK	OK
ii. The project activity is described in a manner, which allows the local stakeholders to understand the project activity, taking into	EB 41	Ann 12	Yes. The PP conducted a survey in local area by	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
account confidentiality provisions of the CDM modalities and procedures.			distributing questionnaires in which a proposed project description is provided.		
iii. The local stakeholder process has been completed before submitting the proposed project activity to the DOE for validation.	EB 41	Ann 12	Yes. It was completed on 21/03/2009, before the PDD submission for GSP on 13/08/2009	OK	OK
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.	OK	OK
ii. A summary of this comments.	EB 41	Ann 12	Comments received from the survey of the local stakeholders have been summarized.	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	The PP will take due action under supervision of the EPA to mitigate the environment impacts highlighted in the comments of the local stakeholder.	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.	OK	OK
ii. For each organisation listed in section A.3 the following mandatory fields: Organization, Name of contact person, Street, City, Postfix/ZIP, Country, Telephone and Fax or e-mail	EB 41	Ann 12	Yes.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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	There is no public funding for the Project.	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	There is no additional information.	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	Yes.	OK	OK
ii. accurate?	VVM	59	Pending on CL-1 CAR-6 Yes.	Pending	OK
iii. providing the reader with a clear understanding of the nature of the proposed CDM project activity?	VVM	59	Yes.	OK	OK
iv. Are there any changes/modifications compared to the webhosted PDD?	VVM	59	Yes. Annual net electricity supplied to the grid was 118,000 MWh in the GSP PDD. According to the	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			FSR, annual net electricity supplied to the grid is 118,560 MWh in the final PDD. Annual emission reductions are 105,438CO ₂ e in the GSP PDD. Annual emission reductions are 112,655 CO ₂ e in the final PDD.		
b. Is the proposed CDM project activity in existing facilities or utilizing existing equipments?	VVM	60	No.	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 The physical site visit has been conducted on 10/09/2009. The audit purpose and methodology were briefed in the opening meeting participated by the following persons. Ms. Qu Zhan Beijing International New Energy Co., Ltd. Mr. Xu Bin ZhengXiangbaiqi branch, Beijing International New Energy Co., Ltd.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Mr. Wang Liming Representative of local Environmental Protection Bureau Mr. Xing Jiang Project Manager of the CDM consultant Mr. Jiang Dan Project Manager of the CDM consultant Mr. Su Yiheng Stakeholder, villager live near the Project site		
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
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	N/A.	OK	OK
k. If yes, does the project description clearly state the differences resulting from the project activity	VVM	63	N/A.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
compared to the pre-project situation?					
5. Baseline and monitoring methodology					
a. General requirement	VVM	65-67			
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	Yes	OK	OK
b. Is the selected methodology applicable to the project activity?	VVM	66	Pending on CAR-1 Yes	Pending a	OK
c. Had the PP correctly applied the selected methodology?	VVM	66	Pending on CAR-1 Yes	Pending g	OK
d. Had the selected methodology been correctly applied with respect to project boundary?	VVM	67	Pending on CAR-1 CL-2 Yes	Pending g	OK
e. Had the selected methodology been correctly applied with respect to baseline identification?	VVM	67	Yes.	OK	OK
f. Had the selected methodology been correctly applied with respect to Algorithms and/or formulae used to determine emission reductions?	VVM	67	Pending on CAR-3 Yes.	Pending g	OK
g. Had the selected methodology been correctly applied with respect to additionality?	VVM	67	Yes. As per "Tool for demonstration and assessment of additionality" version 05.2.	OK	OK
h. Had the selected methodology been correctly applied with respect to monitoring methodology?	VVM	67	Pending on CAR-5 Yes.	Pending g	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
<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-1 Yes. "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" ACM0002 Version 12.1.0	Pending	OK
b. Are the applicability conditions of the methodology met?	VVM	71			
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	The project is to build a greenfield plant hence meets condition (a)	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 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	ACM	0002	N.A.	OK	OK
iii. In the case of capacity additions, retrofits or	ACM	0002	N.A.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
replacements: 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.					
iv. In case of hydro power plants, one of the following conditions must apply: <ul style="list-style-type: none"> - 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 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. 	ACM	0002	Not applicable.	OK	OK
v. The methodology is not applicable to the following conditions. Please confirm	ACM	0002	The Project does not involve switching from fossil fuels to renewable energy at the site of the project	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
<ul style="list-style-type: none"> 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. 			activity.		
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	Yes.	OK	OK
f. Have the project participants shown that the project activity meets each of the applicability conditions of any tool or other methodology component referred to the methodology?	VVM	71	Yes.	OK	OK
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	VVM	71	Yes. BVC has checked FSR, EIA and their approvals, and through on-site visit and is able to confirm the	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
choices)			Project meets the applicability of the applied methodology.		
i. Can a determination regarding the applicability of the selected methodology to the proposed CDM project activity be made?	VVM	72	Yes.	OK	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 Executive Board has approved the proposed deviation or revision?	VVM	74	N/A.	OK	OK
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	Pending on CL-2. Yes.	Pending g	OK
b. Does the delineation in the PDD of the project boundary meet the requirements of the selected baseline?	VVM	79	Pending on CL-2. Yes.	Pending g	OK
c. Have changes been made to the project	VVM	79	Yes. Connected electricity system to the project	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
boundary in comparison to the webhosted PDD? If yes please comment on the reason for the changes.			electricity system has been identified.		
d. Have all sources and GHGs required by the methodology been included within the project boundary?	VVM	79	Yes.	OK	OK
e. Does the methodology allow project participant to choose whether a source or gas is to be included within the project boundary	VVM	79	No.	OK	OK
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	No. The ACM0002 prescribe the baseline scenario.	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			



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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 PDD correctly quoted and interpreted?	VVM	84	Yes.	OK	OK
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	Yes. The information has been cross checked with the applied methodology and valid official EF data at the time of validation and found consistent.	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	VVM	89-93			



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<i>determine emission reductions</i>					
a. Have the equations and parameters in the PDD been correctly applied with respect those in the select approved methodology?	VVM	90	Pending on CAR-3. Yes.	Pending g	OK
b. Does the methodology provide for selection between different options for equations or parameters?	VVM	90	Yes.	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 other evidence provided)?	VVM	90	CAR-4 The PDD has applied 0.5 for OM and 0.5 for BM in calculating the CM factor The correct weights have been applied and emission reductions have been revised accordingly. The increase of emission reduction is only due to replacing the correct weights as per ACM0002 Version 10 and ACM0002 Version 12.1.0 Hence CAR-4 is closed.	CAR-4	OK
d. If yes, have correct equations and parameters been used, in accordance with the methodology selected?	VVM	90	Pending on CAR-3 Yes. Equations and parameters used are in accordance with ACM0002 Version 12.1.0	Pending g	OK
e. Will data and parameters be monitored throughout the crediting period of the proposed CDM project activity?	VVM	91	No.	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			



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i. Appropriate and correct?	VVM	91	Pending on CAR-4 Yes. Sourced from data in the China Energy Statistics yearbook and China electricity power yearbook which have been verified by BVC.	Pending g	OK
ii. Applicable to the proposed CDM project activity?	VVM	91	Pending on CAR-4 Yes.	Pending g	OK
iii. Resulting in a conservative estimate of the emission reductions?	VVM	91	Pending on CAR-4 Yes	Pending g	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 additionality tool being used?	VVM	95	Yes. The approved "Tool for the Demonstration and Assessment of Additionality" version 05.2 is used in the PDD.	OK	OK
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



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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
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. Alternative 1) is identified. Alternative 1): the proposed project not taken as a CDM project.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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. Alternative 2): construction of a fossil fuel power plant with equivalent amount of annual electricity output; Alternative 3): construction of a power plant using other sources of renewable energy with equivalent amount of annual electricity output;	OK	OK
iii. (c) If applicable, continuation of the current situation (no project activity or other alternatives undertaken).	EB 39	Ann 10	Yes. Alternative 4) is identified as: Supply of equivalent annual power output by the Grid to which the proposed project is connected.	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. Construction of a fossil fuel power plant with equivalent amount of annual electricity output, however this is excluded in Alternative 2):	OK	OK
f. Has the outcome of Step 1a: Identified realistic and credible alternative scenario(s) to the project activity done correctly? Please briefly mention the outcome.	EB 39	Ann 10	Alternative 3) is excluded due to limit by the technology development status and the high cost of power generation, solar PV and also an evidenced lack of geothermal resources, exploitable biomass or hydro resources in the	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			project area.		
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, new construction of a coal-fired plant with an installed capacity less than 135MW is prohibited in large grid areas; installation of fossil fuel-fired power units with less than 100MW capacity is also strictly restricted. Hence the alternative 2), construction of a fossil fuel power plant with equivalent amount of annual electricity generation is not a realistic and credible alternative. Alternative 1) and 4) remain.	OK	OK
h. If an alternative does not comply with all mandatory applicable legislation and regulations, 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?	EB 39	Ann 10	No, the regulation on new construction of a thermal power plant less than 135MW is strictly enforced in China.	OK	OK
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	EB 39	Ann 10	Yes. Alternative 3) is excluded	OK	OK



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regulations done correctly? Please state the outcome.					
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 has been applied.	OK	OK
k. In step 2, have all the sub-steps as below been followed?	EB 39	Ann 10			
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	Yes.	OK	OK
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
l. In sub-step 2a has the determination of appropriate method of analysis done as per the guidance as below?	EB 39	Ann 10			
i. Simple cost analysis if the CDM project activity and the alternatives identified in Step 1 generate no financial or economic benefits	EB 39	Ann 10	Yes, not applicable for the proposed project as it generates income from selling electricity other	OK	OK



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other than CDM related income (Option I).			than CER revenue.		
ii. Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis (Option III). Specify option used with justification.	EB 39	Ann 10	Yes. Investment comparison analysis (Option II) is applicable only to cases where alternative scenarios are comparable with the proposed project. The remaining alternative is the grid supply of electricity from NCPG therefore cannot be regarded as a new investment project. Hence benchmark analysis (Option III) will be applied using project IRR.	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 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	EB 39	Ann 10	N/A.	OK	OK
o. Has the below guideline followed for Sub-step 2b: Option III. Apply benchmark analysis?	EB 39	Ann 10	Yes. Project IRR of 8% (post tax) is determined as the	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			benchmark.		
i. Identify the financial/economic indicator, such as IRR, most suitable for the project type and decision context.	EB 39	Ann 10	Yes. The project post-tax IRR is identified.	OK	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 company undertaking the project activity can be considered.	EB 39	Ann 10	Yes. Project IRR of 8% (post tax) is widely used in the Chinese power sector. The financial analysis is 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 the PP.	OK	OK
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	EB 39	Ann 10	Derived from (d) Government/official approved benchmark where such benchmarks are used for investment decisions; With reference to Interim Measures on Economic Assessment of Electric Engineering Retrofit Projects issued by former State Power Corporation of China in 2002 stated the financial benchmark of total investment Internal rate of return (IRR) post-tax in China's power industry is 8%.	OK	OK



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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.					
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,	EB 39	Ann 10	Yes. The Project IRR has been calculated so as to be compared with the available benchmark.	OK	OK



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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.					
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	Yes. Calculation processes have been presented in an excel sheet separate to the PDD.	OK	OK
iii. Justify and/or cite assumptions.	EB 39	Ann 10	<p>CL-8 The appropriateness of using the electricity tariff of 0.51RMB/kWh at the investment decision and why the tariff will not increase should be justified.</p> <p>Through an analysis of the tariff of similar wind power projects in Western Inner Mongolia region before and after 05/2008 (FSR) and 12/2008(investment decision). The analysis has been checked and verified by BVC. It can be concluded that the tariff of 0.51 RMB Yuan/kWh has been widely applied in the region where the project is located at the time of investment decision; hence 0.51 RMB Yuan/kWh is appropriately taken as the input value for calculating the project IRR. Furthermore, BVC has checked the calculation of IRR of the Project, to apply EB's regional highest tariff of 0.54</p>	GL-8	OK



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			RMB/kWh or to apply 0.579 RMB/kWh for the first 30,000h, which is the highest tariff in that region, and found the project IRR will not exceed the benchmark. Hence CL-8 is closed.		
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	Yes, relevant costs are included.	OK	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	Yes. The IRR of the Project is lower than the benchmark.	OK	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	Yes. For sensitivity analysis of the project, key indicators identified are: <ul style="list-style-type: none"> • Total static investment, • Annual O&M costs, • Tariff, • Annual power output The project IRR has been tested against a	Pending	OK



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			variation from -10% ~ +10% of the above indicators. Pending on CL-8. BVC has checked the calculation of IRR of the Project, to apply EB's regional highest tariff of 0.54 RMB/kWh or to apply 0.579 RMB/kWh for the first 30,000h, which is the highest tariff in that region, and found the project IRR will not exceed the benchmark.		
r. Has the outcome of Step 2 clearly mentioned with justification?	EB 39	Ann 10	Yes, the Project is financial unattractive without CDM revenues.	OK	OK
s. In step 3: Barrier analysis have all the sub-steps as below been followed?	EB 39	Ann 10			
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 implementation of the proposed CDM project?	EB 39	Ann 10			



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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	EB 39	Ann 10	N/A.	OK	OK



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manufacturer information, The 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			
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



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ii. Provide transparent and documented evidence, 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.	EB 39	Ann 10	N/A.	OK	OK
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	Ann			



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	39	10			
i. Sub-step 4a: Analyze other activities similar to the proposed project activity;	EB 39	Ann 10	Yes.	OK	OK
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	<p>Inner Mongolia Autonomous has been chosen as geographical scope.</p> <p>CL-9 How the Inner Mongolia region is selected for common practice analysis should be described.</p> <p>The analysis presented in B.5 is regarded sufficient and appropriate. Hence CL-9 is closed.</p> <p>The criteria of identifying similar projects are:</p> <ul style="list-style-type: none"> • located in Inner Mongolia Autonomous • After year 2002 • Non-CDM wind power projects with capacity larger than 15MW <p>CL-10 Reference to the latest "Statistics of wind power installed capacity in China" should be used.</p> <p>The latest data available for common practice are "Statistics of wind power installed capacity in</p>	<p>CL-9</p> <p>CL-10</p>	OK



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			<p>China 2009”, “Statistics of wind power installed capacity in China 2008” and “Statistics of wind power installed capacity in China 2007” issued by Chinese Wind Energy Association, which has been updated in the Step 4 of Section B.5., version 2 of the PDD.</p> <p>As per these wind power installed capacity report, two more project “Bailingmiao phase two Wind Project” and “Honiton Xiwu phase one Wind Farm Project” are identified, which has been added on Step 4 of Section B.5., version 2 of the PDD. The relevant reference and projects has been revised and updated. Hence CL-10 is closed.</p> <p>Four projects have been filtered out from the public sources and statistics made by the authorities using the above criteria.</p>		
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	EB 39	Ann 10	<p>Pending on CL-10.</p> <p>Yes. The identified projects are essentially different from the Project in terms of investment and implementation. Dali Phase Three project was invested by the National Debt Fund and such support is no longer applicable, and thus is not available to the Project. Bailingmiao Phase One and Phase Two wind power projects, Honiton Xiwu phase one Wind Farm Project</p>	Pending	OK



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essential distinctions between them that explain 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.			applied for VER under Golden Standard Voluntary Carbon Standard as the projects were invested by foreign investor in China.		
aa. Has the outcome from Step 4 clearly mentioned in PDD?	EB 39	Ann 10	Yes. It has been justified and concluded that the proposed project is not a common practice.	OK	OK
bb. Has it been proved that the project is additional?	EB 39	Ann 10	Yes.	OK	OK
<i>a. Prior consideration of the clean development mechanism</i>	VVM	98-104			
a. Is the project activity start date prior to the date of publication of the PDD for stakeholder comments?	VVM	98	Yes. The start date is 06/02/2009, which is prior to publication of the PDD for stakeholder comments on 13/08/2009.	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, evidence has been provided to show the board meeting held on 22/12/2008 decided to seek CDM.	OK	OK



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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	Pending on CL-4 Yes. The starting date of the Project is the date of Wind turbine purchasing contract signed on 06/02/2009 according to the latest Glossary of CDM terms.	Pending g	OK
d. Does the project activity require construction, retrofit or other modifications?	VVM	99	Yes, the Project 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	The date of commissioning is not considered as the project activity start date.	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	It is a 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	Pending on CL-3 Refer to 3.n.iv. Yes. The notification was sent to the DNA on 15/07/2009.	Pending g	OK
h. For an existing project activity, for which the start	VVM	102			



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date is prior to the date of publication of the PDD for global stakeholder consultation, are the following evidences provided:					
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			
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 of the potential CERs (including correspondence with multilateral financial institutions or carbon funds)?	VVM	102	N/A.	OK	OK



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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. It has prescribed the baseline scenario directly as per both ACM0002 Version 10 and ACM0002 Version 12.1.0. Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation power sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system".	OK	OK
b. If no, does the PDD identify credible alternatives to the project activity in order to determine the	VVM	105	Not applicable	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
most realistic baseline scenario?					
c. Does the list of alternatives given in the PDD ensure that:	VVM	106			
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. As the approved methodology ACM0002 selected by the proposed CDM project activity prescribes the baseline scenario and no further analysis is required.	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	108-114			
a. Has investment analysis been used to demonstrate the additionality of the proposed CDM project activity?	VVM	108	Yes.	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	N/A. The benchmark analysis is applied.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. economically or financially feasible, without the revenue from the sale of certified emission reductions (CERs)?	VVM	108	Yes.	OK	OK
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	The project IRR is lower than the benchmark hence insufficient to justify the required investment.	OK	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 covers 1 year construction phase and 20 years operational period.	OK	OK
e. Does the project IRR and equity IRR calculations reflect the period of expected operation of the	EB 51	Ann	Yes, the Project IRR is calculated based on the expected 20-year operation period.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
underlying project activity (technical lifetime), or - if a shorter period is chosen - include the fair value of the project activity assets at the end of the assessment period?		58			
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 relevant costs are taken into account in the annual O&M cost.	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 chosen period of assessment complies with the requirement of the "Guidance of wind power financial analysis" issued by government on 13/05/2005 and also widely applied in China's wind power sector, therefore it reflects the expected operation of the underlying project activity.	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, a fair value of the project activity assets has been recovered in the final year in calculation.	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. 5% was selected reasonably following relevant regulation in China, i.e. Notice of Clarifying Enforcement Time of Adjustment of Residual Value Ratio of Enterprise Fixed Assets issued by State Administration of Taxation of China	OK	OK
j. Does the fair value calculations include both the book value of the asset and the reasonable	EB 51	Ann	Yes.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
expectation of the potential profit or loss on the realization of the assets?		58			
k. Was depreciation, and other non-cash items related to the project activity, which have been 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)?	EB 51	Ann 58	Yes. The depreciation is considered in calculating the profit on which income tax is calculated, and added back to net profits for the purpose of calculating the financial indicator.	OK	OK
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	The FSR was developed in May, 2008 and the investment decision by the board was made in 22/12/2008. It is reasonable to consider the FSR is a valid basis of the decision.	OK	OK
n. Is the timing of the investment decision consistent and appropriate with the input values?	EB 51	Ann 58	Yes.	OK	OK
o. Are all the listed input values been consistently applied in all calculations?	EB 51	Ann 58	CAR-6 Annual net electricity supplied to the grid and total static investment is found inconsistent with the FSR. Main reason of the above changes is that in the FSR, there are different installation plans proposed under consideration including using WTG 2000, 48MW (actual implemented); WTG	CAR-6 CAR-7	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>1500 and WTG 750, 49.5MW (alternative plans). Parameters in the GSP PDD including total static investment (47,688 million RMB), annual O&M cost (11.7865 million RMB), and annual power supply (118,000 MWh), are mistakenly sited from the alternative plan (WTG 1500), which are different from the values of the actual implemented plan (WTG 2000, 48MW). Therefore, the three parameters have been revised in the final PDD to be consistent with the FSR. Hence the CAR-6 is closed.</p> <p>CAR-7 Education surtax and city construction surtax rate are not in accordance with the FSR.</p> <p>According to the FSR, the <i>Education surtax</i> should be 3% and the <i>City construction surtax</i> should be 5%. For details, please check the revised information in the Section B.5 in version 2 of the PDD. CAR-7 was hence closed.</p> <p>Also refer to CL-8.</p> <p>Yes. Values in the PDD are consistent with the FSR.</p>		
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	EB 51	Ann 58	<p>Yes.</p> <p>The FSR was developed in May, 2008 and the investment decision by the board was made in</p>	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
after the commencement and where implementation is recommenced due to consideration of the CDM?			22/12/2008.		
q. Have project participants supplied the spreadsheet versions of all investment analysis?	EB 51	Ann 58	Yes.	OK	OK
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



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
x. Was a pre-tax benchmark be applied?	EB 51	Ann 58	A post tax benchmark is applied.	OK	OK
y. In cases where a post-tax benchmark is applied, is actual interest payable taken into account in the calculation of income tax?	EB 51	Ann 58	Depreciation and actual interest payable already taken into account for income tax.	OK	OK
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. The interest rate applied in the investment analysis (sourced from the FSR) is the same as prevailing commercial interest rates in China	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	No.	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 presented?	EB 51	Ann 58	Yes. The benchmark was source from <i>Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects</i> issued by former State Power	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Corporation of China in 2002, which has been used widely in feasibility studies of new power plants, including wind power projects in China.		
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.	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	No.	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	EB 51	Ann 58	N/A.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
conducted?					
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	N/A.	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	N/A.	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



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
nn. Is the range of variations selected is reasonable in the project context?	EB 51	Ann 58	Yes. The range of -10%+10% has been analyzed.	OK	OK
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	N.A.	OK	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	OK	OK
ii. The plant load factor determined by a third party contracted by the project participants	EB	Ann	Yes.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
(e.g. an engineering company)?	48	11	The PLF is determined by an authorized third part contracted by the PP.		
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	<p>Pending on CAR-6.</p> <p>CL-11 The appropriateness of O&M cost of the Project should be justified in the PDD.</p> <p>With the related basic information of the proposed project, the O&M cost in FSR is the sum of salary and welfare of employees, materials fee, maintenance fee, insurance and miscellaneous account, which estimated according to "Methodology of Budget Assessment and Calculation Rules of Compiling Feasibility Study Report for Wind Power Project".(DL/T5067-1996). Hence the CL-11 is closed.</p>	CL-11	OK
ss. Were the parameters cross-checked against third-party or publicly available sources, such as invoices or price indices?	VVM	111	<p>Yes.</p> <p>The parameters have been checked with the FSR and public available guidances such as "Economic Evaluation Method and Parameters for Project Construction" 3rd edition, China Wind Power Report, and "Code on Compiling Feasibility Study Report of Wind Farms" issued by NDRC.</p>	OK	OK
tt. Were feasibility reports, public announcements and annual financial reports related to the	VVM	111	Yes.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
proposed CDM project activity and the project participants reviewed?					
uu. Was the correctness of computations carried out and documented by the project participants assessed?	VVM	111	Yes.	OK	OK
vv. 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 8 CAR 6 Yes.	Pending	OK
ww. Is the type of benchmark applied suitable for the type of financial indicator presented?	VVM	112	Yes. The benchmark of 8% is widely used for wind power projects similar to the Project in China.	OK	OK
xx. Do any risk premiums applied determining the benchmark reflect the risks associated with the project type or activity?	VVM	112	No.	OK	OK
yy. 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	N.A		
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



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
zz. 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	Yes.	OK	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 the DOE to confirm that it is unlikely in the context of the underlying project activity that the input values would have materially changed?	VVM	113	Yes. The FSR was developed in May, 2008 and the investment decision by the board was made in 22/12/2008.	OK	OK
ii. Are the values used in the PDD and associated annexes fully consistent with the FSR?	VVM	113	Pending on CAR-6 CAR-7 Yes.	Pending g	OK
iii. If not, was the appropriateness of the values validated?	VVM	113	Pending on CAR-6 CAR-7 CL-8 CL-11 N.A.	Pending g	OK
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, the total investment was crosschecked with the signed contract. The PLF was crosschecked with the approved FSR and the registered wind projects in Western Inner Mongolia covered.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			The annual O&M cost was crosschecked with the registered wind projects in Western Inner Mongolia covered. The tariff was crosschecked with relevant tariff notifications.		
d. Barrier analysis	VVM	115-118			
a. Has barrier analysis been used to demonstrated the additionality of the proposed CDM project activity?	VVM	115	No.	OK	OK
b. If yes, does the PDD demonstrate that the proposed CDM project activity faces barriers that:	VVM	115			
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	VVM	116	N/A.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
(6.c) above}}					
d. Were the barriers determined as real by:	VVM	117			
i. assessing 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 data such as relevant national legislation, surveys of local conditions and national or international statistics?	VVM	117	N/A.	OK	OK
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	VVM	117	N/A.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
identified baseline scenario?					
e. Common practice analysis	VVM	119-121			
a. Is this a proposed large-scale, or first-of-its kind small-scale project activity?	VVM	119	Yes. It is a large-scale project activity.	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 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).	VVM	120	Refer to CL-9 Yes. Inner Mongolia region is selected because the electricity generated from the proposed project will be supplied to the Inner Mongolia Power Grid and the Inner Mongolia Autonomous Region is different from other Provinces/Autonomous Regions in the following aspects: the price policy, the approved on-grid tariff for wind farm; grid-connected structure; geological conditions and economic development status, etc.	Pending	OK
d. Was a region other than the entire host country chosen?	VVM	120	Yes Inner Mongolia Autonomous Region.	OK	OK
e. If yes, was the explanation why this region is more appropriate assessed?	VVM	120	Refer to CL-9 Yes.	Pending	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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	Yes, the proposed project is not considered common practice in the selected region.	OK	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	Other than CDM project activities, only four similar wind power projects commissioned in that region were identified.	OK	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	Distinctions between the selected projects in the region and the proposed project are considered essential.	OK	OK
7. Monitoring plan	VVM	122-124			
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	Refer to CAR-5 Yes.	Pending	OK
d. Does the monitoring plan contains all necessary parameters?	VVM	123	Refer to CAR-5 Yes.	Pending	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
e. Are the parameters clearly described?	VVM	123	Refer to CAR-5 Yes.	Pending	OK
f. Does the means of monitoring described in the plan comply with the requirements of the methodology?	VVM	123	Refer to CAR-5 Yes.	Pending	OK
g. Are the monitoring arrangements described in the monitoring plan feasible within the project design?	VVM	123	Refer to CAR-5 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	Yes.	OK	OK
ii. quality assurance procedures?	VVM	123	Yes.	OK	OK
iii. quality control procedures?	VVM	123	Yes.	OK	OK
8. Sustainable development	VVM	125-127			
a. Does the CDM project activity assists Parties not included in Annex I to the Convention in achieving sustainable development?	VVM	125	Yes, described in section A.2.	OK	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	VVM	126	Yes, described in the provided LoA.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
development of the host Party?					
9. Local stakeholder consultation	VVM	128-130			
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. The local stakeholder consulting on 21/03/2009 is prior to webhosting the PDD on the UNFCCC on 13/08/2009.	OK	OK
b. Have comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity been invited?	VVM	129	Yes. The survey was carried out by distributing questionnaires to 50 residents in local area. Invitation notice was also issued to local stakeholders; representatives were invited to a consultation meeting.	OK	OK
c. Is the summary of the comments received as provided in the PDD complete?	VVM	129	Yes.	OK	OK
d. Have the project participants taken due account of any comments received and described this process in the PDD?	VVM	129	Noise level concerned in the comments has been mitigated by the PP and supervised by the authority during construction.I	OK	OK
10. Environmental impacts	VVM	131-133			



 VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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. EIA was carried out in 22/05/2008.	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. It has been approved by the Inner Mongolia Autonomous Regional Environmental Protection Bureau.	OK	OK



VALIDATION REPORT

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 conclusion
CAR-1 The PDD should apply the latest “Tool to calculate the emission factor for an electricity system” and methodology with validity.	3.j.i 3.j.ii 3.m.v 3.o.i 5.a. b 5.a. c 5.a.d 5.b.a	<p>First Response: According to the latest tool approved by EB, “Tool to calculate the emission factor for an electricity system” has been updated from version 1.1 to version 2.1.</p> <p>Second Response: According to the latest ACM0002 methodology approved by EB, the version of which has been updated from version 10 to 12.1.0.</p> <p>http://cdm.unfccc.int/methodologies/PAmethodologies/approved.html</p>	<p>Latest tool “Tool to calculate the emission factor for an electricity system” version 02.1 has been applied correctly.</p> <p>First Response: Please apply the latest ACM0002 methodology as the ACM0002 Version 10 is about to expire.</p> <p>Final Conclusion: The latest ACM0002 Version 12.1.0 is also applied. Hence CAR-1 is closed.</p>
CAR-2 In the PDD the date of board decision is 23/11/2008 which is not consistent with the documented evidence which shows 22/12/2008.	3.n.iv	According to the Board Meeting Minutes, the date of which should be 22/12/2008, not 23/12/2008 in GSP PDD. The date is revised in version 2 of PDD.	The date of board decision has been corrected in the PDD as 22/12/2008. Hence CAR-2 is closed.
CAR-3 The PDD misses out equations and steps required in the ACM0002, in	3.o.ii 3.q.i	According to the methodology ACM0002, the missing equations	Complete calculation process for emission reductions have been added



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 conclusion
particularly: $BE_y = EG_{PJ,y} * EF_{grid,CM,y}$ and for Greenfield renewable energy power plant: $EG_{PJ,y} = EG_{facility,y}$	5.a.f 5.e.a 5.e.d	$BE_y = EG_{PJ,y} * EF_{grid,CM,y}$ and $EG_{PJ,y} = EG_{facility,y}$ is added in version 2 of the PDD.	as per ACM0002 Version 10 and is also consistent with ACM0002 Version 12.1.0. Hence CAR-3 is closed.
CAR-4 The PDD has applied 0.5 for OM and 0.5 for BM in calculating the CM factor. The default weights for wind project are 0.75 and 0.25 as per tool "Tool to calculate the emission factor for an electricity system"	5.e.c 5.e.f.i 5.e.f.ii 5.e.f.if.iii	The incorrect default weights have been corrected. The weights should be 0.75 for OM and 0.25 for BM. Thus the combined margin emission factor should be 0.9502tCO ₂ /MWh for the proposed project. Therefore, the annual emission reductions were corrected to be 112,655tCO ₂ . All of them have been updated in version 2 of the PDD.	The correct weights have been applied as per ACM0002 Version 10 and is also consistent with ACM0002 Version 12.1.0. As a result, the emission reduction is increased. Emission reductions have been revised accordingly. Hence CAR-4 is closed.
CAR-5 The monitored parameters and procedure are not consistent with the actual situation as the Project shares the transmission line and the grid substation with Inner Mongolia Jingneng Saihan Wind Farm Phase I Project.	3.s.i 3.s.ii.b 3.t.iv 5.a.h 7.c 7.d 7.e	The net electricity supplied to the Grid by the proposed project will be measured based on electricity supplied by the project to the grid ($EG_{output,y}$) and electricity purchased from the Grid ($EG_{import,y}$) Electricity supplied to the grid by the proposed project ($EG_{output,y}$) will be monitored by meters (MA1, MA2, MA3 and MA4) at the connection point between the proposed project and the 35kV/220kV	Electricity supplied to the grid by the proposed project $EG_{output,y}$ will be directly monitored by four meters. Power supplied to the grid will be double checked according to electricity sales receipts as the formula. Electricity imported from the grid by the proposed project $EG_{import,y}$ is monitored by the main meter (M1) at the connection point between the proposed



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	7.f 7.g	<p>substation. Power supplied to the grid will be double checked according to electricity sales receipts as formula 12, and the more conservative data will be adopted.</p> <p>Total electricity imported from the grid by the proposed project and Project B ($EG_{import,y}$) will be monitored by the main meter (M1) at the connection point between the proposed project and the Grid.</p> <p>For details, please check the revised information in the Section B.7.2 in version 2 of the PDD.</p>	<p>project and the Grid. Hence $EG_{import,y}$ is total electricity imported from the grid by the proposed project and Project B. BVC has assessed the formula and the monitoring system and considered the monitoring system in line with ACM0002 Version 12.1.0 and is conservative.</p> <p>Situations during emergencies are also analyzed in B.7.2 and checked by BVC and regarded acceptable.</p> <p>Hence CAR-5 is closed.</p>
<p>CAR-6 Annual net electricity supplied to the grid and total static investment is found inconsistent with the FSR.</p>	6.c.o 4.a.ii 6.c. rr 6.c.vv	<p>According to the FSR which complied by a qualified design institute in 2008, the total static investment should be 46,635 not 47,688 million RMB; the annual power supply for the proposed project should be 118,560 not 118,000 MWh in GSP PDD.</p> <p>For change of total static investment and annual Power supply, the main reason of the above changes is that in the FSR, there are different installation plans</p>	<p>BVC has checked the FSR of the Project and identified the correct values of annual net electricity supplied to the grid, total static investment. BVC confirms the revised final values are more conservative and have been applied in the revised financial analysis.</p> <p>BVC further verified the appropriateness of those input values</p>



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		<p>proposed under consideration, which are WTG 2000, 48MW; WTG 1500 and WTG 750, 49.5MW. The actual installed capacity of the Project is 48MW, the others are alternative plans.</p> <p>Parameters in the GSP PDD including total static investment (47,688 million RMB) and annual power supply (118,000 MWh), are mistakenly sited from the alternative plan (WTG 1500), which are different from the values of the actual implemented plan (WTG 2000). Therefore, the parameters have been revised in the final PDD to be consistent with the FSR.</p> <p>For details, please check the revised information in the Section B.5 in version 2 of the PDD.</p>	<p>against the statistics of the registered projects in that region. BVC concludes the values applied are credible and appropriate.</p> <p>Hence the CAR-6 is closed.</p>
<p>CAR-7 Education surtax and city construction surtax rate are not in accordance with the FSR.</p>	<p>6.c.o 6.c.yy.ii 6.c.yy.iii</p>	<p>According to the FSR, the <i>Education surtax</i> should be 3% and the <i>City construction surtax</i> should be 5%.</p> <p>For details, please check the revised information in the Section B.5 in version 2 of the PDD.</p>	<p>BVC has checked both surtax in the FSR and the revised PDD and found in accordance with the "The State Council's decision to revise 'provisional rules for charging education surtax'" effective on 01/10/2005 and</p>



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			<p>“provisional rules for city construction surtax” effective since 1985. The revised tax rates are in accordance with the FSR.</p> <p>Hence CAR-7 is closed.</p>
<p>CL-1 Source of plant load factor (PLF) of the proposed project should be described with justification of appropriateness.</p>	<p>3.g.iii 3.g.v 4.a.ii</p>	<p>The plant load factor of the proposed project is 0.28, which is calculated with annual operational hours (2,470 hrs) divided by the whole hours in a year (8760 hours), the annual operational hours is calculated with annual power output (118,560MWh) divided by the installed capacity(48MW).</p> <p>The annual power supplied to the grid is determined by a qualified third party contracted by the PP, Inner Mongolia Power Exploration & Design Institute. Related information has been added in the Section A.4.3 in version 2 of the PDD.</p>	<p>PLF has been described in the PDD. The calculation is correct and complies with EB48 Annex 11 verified by BVC.</p> <p>Hence CL-1 is closed.</p>
<p>CL-2 Identification of any connected electricity system to the project electricity system (NCPG) should be analyzed.</p>	<p>3.l.i 5.c.a 5.c.b</p>	<p>The proposed project supplies electricity to the North China Power Grid (NCPG). And the connected electricity system of NCPG is the Northeast China Power Grid</p>	<p>The relevant description has been added and regarded correct.</p> <p>Hence CL-2 is closed.</p>



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		<p>(NECPG) which consists of Liaoning, Jilin and Heilongjiang Power Grids, and Central China Power Grid (CCPG) which consists of Chongqing, Henan, Hubei, Hunan, Jiangxi and Sichuan Power Grids.</p> <p>The information of connected electricity system has been added in version 2 of the PDD.</p>	
<p>CL-3 Evidence of notification of CDM to the UNFCCC secretariat and Host Party DNA should be provided.</p>	<p>3.n.iv 6.a.g</p>	<p>When the notification on prior consideration of CDM was required to be sent to UNFCCC secretariat on EB48 meeting which dated on 14-17/07/2009, it had been five-month later for the proposed project. According to the letter which replied from UNFCCC secretariat, it indicated that notifications sent to the DNA only prior to EB 48 are acceptable.</p> <p>The notification on prior consideration of CDM had been sent to China DNA on 15/07/2009, which has been provided to BVC for validation.</p>	<p>The requirement of sending notification to UNFCCC has become compulsory since "Guidance-Prior Consideration" version 02 on 17/07/2009. For the Project, a letter replied to the PP by UNFCCC on 09/09/2009 indicates that only if the notification was sent to DNA before EB48 on 17/07/2009, then notification to the UNFCCC is not mandatory. Therefore, BVC is able to confirm the prior consideration of the Project was appropriate in accordance with the required EB's guidance and the "Guidance-Prior Consideration" version 01, and not in conflict with the latest "Guidance-Prior Consideration"</p>



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			version 03. Hence CL-3 is closed.
CL-4 The Project starting date should be clarified and indicated in the timeline of the proposed project in accordance with the “Glossary of CDM terms”.	3.n.iv 6.a.c	The timeline of the proposed project was added in the B.5. of PDD. The date of signing the wind turbine purchasing contract of 06/02/2009 is figured as the starting date of the proposed project, which is the earliest date among the date of signing the construction commencement order, the date of signing the construction contract, the date of signing the long term loan contract and main equipment contract. Some other continuing and real actions taken by the project owner were also listed in the timeline in Section B.5, version 2 of the PDD.	The relevant content has been revised and found appropriate. Hence CL-4 is closed.
CL-5 The source of the “Wind Turbine Adjustment Report” mentioned in B.6.3 should be given in the PDD.	3.q.ii	The description of “wind turbine adjustment report” in Section B.6.3 is not appropriate, and this is not the exact situation of the proposed project. The source of net electricity supplied to the grid by the proposed project is <i>Feasibility</i>	There’s no such report involved for the Project. The typo mistake has been corrected and found satisfactory. Hence CL-5 is closed.



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		<p><i>Study Report</i> (FSR) complied by Inner Mongolia Power Exploration & Design Institute, and the description in Section B.6.3 has been corrected in version 2 of the PDD.</p>	
<p>CL-6 China Electricity Power Yearbook and China Energy Statistical Yearbook version 2008 are the latest available references. therefore data referring version 2006, 2007 of both books should be updated in substep1b as well as in section B.6.2 of the PDD.</p>	3.p.iv	<p>In substep1b of Section B.5., according to China Electricity Power Yearbook 2008 (Page 734), the annual average utilization hours for fossil fuel power plant in 2007 is 5,344 hrs. This has been updated in the PDD.</p> <p>In Section B.6.2. of PDD, China Electricity Power Yearbook 2008 and China Energy Statistical Yearbook 2008 has been updated in the data source.</p>	<p>The relevant content has been revised. It is checked by BVC and regarded correct and appropriate.</p> <p>Hence CL-6 is closed.</p>
<p>CL-7 The starting date (01/01/2010) of the first crediting period in C.2.1.1 is not rational.</p>	3.v	<p>The starting date of the first crediting period has been updated in revised the PDD.</p>	<p>The starting date in C.2.1.1 has been revised and changed accordingly. It is deemed appropriate.</p> <p>Hence CL-7 is closed.</p>
<p>CL-8 The appropriateness of using the electricity tariff of 0.51RMB/kWh at the investment decision and why the tariff</p>	6.p.iii 6.q 6.c.vv	<p>The justification of appropriate of the tariff of 0.51 RMB/kWh applied for the proposed project has been added in the Sub-step 2c</p>	<p>Through an analysis of the tariff of similar wind power projects in Western Inner Mongolia region before and after</p>



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will not increase should be justified.		<p>of section B.5. Considering the approved tariff for the wind farms in Western Inner Mongolia Autonomous Region and the latest tariff policy available at the point of making investment decision, the tariff of 0.51RMB /kWh applied for the proposed project is deemed to be appropriate.</p> <p>According to the justification on the appropriateness of the tariff, the tariff applied for the proposed project is unified to be 0.51 RMB Yuan/kWh and does not change in the latest approved tariff policy. The Project IRR will not exceed the benchmark with application of the highest reported tariff of 0.54 RMB Yuan/kWh (including VAT) in Inner Mongolia Autonomous Region, which is still below the benchmark.</p> <p>According to the registered PDD of Inner-Mongolia Ximeng Abag 49.5MW Wind Power Project*, the electricity tariff for the</p>	<p>05/2008 (FSR) and 12/2008(investment decision). The analysis has been checked and verified by BVC. It can be concluded that the tariff of 0.51 RMB Yuan/kWh has been widely applied in the region where the project is located at the time of investment decision; hence 0.51 RMB Yuan/kWh is appropriately taken as the input value for calculating the project IRR.</p> <p>According to the latest official tariff policy, the tariff for projects in the Western Inner Mongolia region is 0.51 RMB Yuan/kWh. The tariff will remain stable. Furthermore, BVC has checked the calculation of IRR of the Project, to apply EB's regional highest tariff of 0.54 RMB Yuan/kWh or to apply 0.579 RMB Yuan/kWh for the first 30,000h, which is the highest tariff in that region,</p>

* <http://cdm.unfccc.int/Projects/DB/RWTUV1218614638.67/view>



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		<p>first 30,000 operation hours is 0.579 (including VAT, Yuan/kWh), and electricity tariff after 30,000 operation hours is 0.40 (including VAT, Yuan/kWh) with annual increase by 3%. To be conservative, the higher tariff of 0.40 (including VAT, Yuan/kWh) with annual increase by 3% after 30,000 operation hours is applied for the proposed project after 30,000 operation hours. With this high tariff as Inner-Mongolia Ximeng Abag 49.5MW Wind Power Project for the proposed project, the Project IRR of the proposed project is calculated to be 7.273%, which is still lower than the benchmark of 8%.</p> <p>Hence, the tariff is not possible to increase to cross the benchmark.</p>	<p>and found the project IRR will not exceed the benchmark.</p> <p>Hence CL-8 is closed.</p>
<p>CL-9 How the Inner Mongolia region is selected for common practice analysis should be described.</p>	<p>6.y 6.e.c 6.e.e</p>	<p>Firstly, the electricity generated from the proposed project will be supplied to the Inner Mongolia Power Grid.</p> <p>Secondly, the Inner Mongolia Autonomous Region is different from other Provinces/Autonomous Regions in the</p>	<p>BVC check the description and concludes that Inner Mongolia Autonomous Region is selected reasonably and the analysis presented in B.5 is regarded sufficient and appropriate.</p>



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		<p>following aspects: the price policy, the approved on-grid tariff for wind farm; grid connected structure; geological conditions and economic development status, etc.</p> <p>According to the CDM guidance, projects with installed capacity of or below 15 MW belong to small scale projects comparing with big project. Hence, the bottom range for comparison with the proposed project is defined to 15MW.</p>	Hence CL-9 is closed.
<p>CL-10 Reference to the latest “<i>Statistics of wind power installed capacity in China</i>” should be used.</p>	6.y	<p>The latest data available for common practice are “Statistics of wind power installed capacity in China 2009”, “Statistics of wind power installed capacity in China 2008” and “Statistics of wind power installed capacity in China 2007” issued by Chinese Wind Energy Association, which has been updated in the Step 4 of Section B.5., version 2 of the PDD.</p> <p>As per these wind power installed capacity report, two more project “Bailingmiao phase two Wind Project” and “Honiton Xiwu phase one Wind Farm Project” are</p>	<p>According to the latest data available, two more projects have been identified. The relevant reference and projects has been revised and updated.</p> <p>Hence CL-10 is closed.</p>



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		identified, which has been added on Step 4 of Section B.5., version 2 of the PDD.	
CL-11 The appropriateness of O&M cost of the Project should be justified in the PDD.	6.c.rr 6.c.yy.iii	With the related basic information of the proposed project, the O&M cost in FSR is the sum of salary and welfare of employees, materials fee, maintenance fee, insurance and miscellaneous account, which estimated according to "Methodology of Budget Assessment and Calculation Rules of Compiling Feasibility Study Report for Wind Power Project".(DL/T5067-1996).	The O&M cost has been broken down. The value applied for each cost component of O&M has been justified from the FSR. The justification has been verified by BVC against the FSR and found correct. Hence the CL-11 is closed.