



VALIDATION REPORT DATANG LAIZHOU WIND POWER Co., LTD.

VALIDATION OF THE SHANDONG LAIZHOU PHASE II WIND POWER PROJECT

REPORT No. **BVC/CHINA-VAL/0060/2008**
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BUREAU VERITAS CERTIFICATION

VALIDATION REPORT

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Datang Laizhou Wind Power Co.,Ltd		Mr. Xu Zhenchao	
Summary:			
<p>Bureau Veritas Certification has made the validation of the Shandong Laizhou phase II Wind Power Project of Datang Laizhou Wind Power Co., Ltd. The Project is a newly built wind farm located in Tushan Town, Laizhou City, Shandong Province, 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.</p> <p>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.</p> <p>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.</p> <p>In summary, it is Bureau Veritas Certification's opinion that the project correctly applies the baseline and monitoring methodology ACM0002 version 07 and meets all the relevant UNFCCC requirements for the CDM and the relevant host country criteria.</p>			
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Work carried out by:			
Jasmine Tang–Team Leader Liao Ling – Team Member		<input checked="" type="checkbox"/> No distribution without permission from the Client or responsible organizational unit	
Work verified by:			
Robin Wang (Reviewer)		<input type="checkbox"/> Limited distribution	
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Abbreviations change / add to the list as necessary

BM	Build Margin
BVC	Bureau Veritas Certification
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CH ₄	Methane
CL	Clarification Request
CO ₂	Carbon Dioxide
CPP	Captive Power Plant
CWEME	China National Water Resources & Electric Power Materials & Equipment Co., Ltd
DIS	Draft of International Standard
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
DRC	Development and Reform Committee
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
ERPA	Emission Reduction Purchase Agreement
FSR	Feasibility Study Report
GHG	Green House Gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
ISO	International Organization for Standardization
LOA	Letter of Approval
MoV	Means of Verification
MP	Monitoring Plan
NDRC	(China) National Development & Reform Commission
NCPG	North China Power Grid
NEPG	Northeast China Power Grid
NGO	Non Government Organization
ODA	Official Development Assistance
PCF	Prototype Carbon Fund
PR China	People's Republic of China
PDD	Project Design Document
UNFCCC	United Nations Framework Convention for Climate Change
VVM	Validation & Verification Manual



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VALIDATION REPORT

1. INTRODUCTION

The China National Water Resources & Electric Power Materials & Equipment Co., Ltd. (CWEME) has commissioned Bureau Veritas Certification to validate the CDM project Shandong Laizhou phase II Wind Power Project (hereafter called “the Project”) of Datang Laizhou Wind Power Co., Ltd (hereafter called “the PP”) at Shandong Province, P. R. China.

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

1.1. OBJECTIVE

The validation serves as project design verification and is a requirement of all projects. 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:

Jasmine Tang Xuemei Team Leader,

Bureau Veritas Certification, Climate Change Lead Verifier

Liao Ling Team Member,

Bureau Veritas Certification, Climate Change Verifier

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 of the Clean Development Mechanism Validation and Verification Manual, issued by the Executive Board at its 44 meeting on 28/11/2008. The protocol shows, in a transparent manner, criteria (requirements), means of verification

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 validation team will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of two tables. The different columns in these tables are described in **Figure 1**. The completed validation protocol is enclosed in **Appendix A** to this report.

Validation Protocol Table 1: Requirements checklist				
Checklist Question	Reference	Means of verification(MoV)	Comment	Draft and/or Final Conclusion
The various requirements in Table 1 are linked to checklist questions the project should meet. The checklist is organized in several sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.	Gives reference to documents where the answer to the checklist question or item is found.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) due to non-compliance with the checklist question. (See below). Clarification Request (CL) is used when the validation team has identified a need for further clarification.

Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests			
Report clarifications and corrective action requests	Ref. to checklist question in table 1	Summary of project owner response	Validation conclusion
If the conclusions from the Validation are either a Corrective Action Request or a Clarification Request, these should be listed in this section.	Reference to the checklist question number in Table 1 where the Corrective Action Request or Clarification Request is explained.	The responses given by the Client or other project participants during the communications with the validation team should be summarized in this section.	This section should summarize the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final Conclusion".

Figure 1 Validation protocol tables

2.1. REVIEW OF DOCUMENTS

The Project Design Document (PDD) submitted by China National Water Resources & Electric Power Materials & Equipment Co., Ltd. (CWEME, the Consultant) and additional background documents related to the project design and baseline, i.e. country Law, Guideline 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.

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To address Bureau Veritas Certification (BVC) corrective action and clarification requests CWEME revised the PDD and resubmitted it on 23/04/2009, and the validation findings presented in this report relate to the project as described in the PDD version 02 dated 23/04/2009.

2.2. FOLLOW-UP INTERVIEWS

On 29/07/2008, BVC performed an on-site visit and interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Datang Laizhou Wind Power Co., Ltd (The project participant), CDM consultant and local stakeholders were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Datang Laizhou Wind Power Co., Ltd (Project owner)	<ul style="list-style-type: none"> ➤ CDM consideration ➤ Project background information. ➤ 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 ➤ 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
CWEME (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) is issued, where:

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

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

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



3. VALIDATION FINDINGS

In the following sections, the findings of the validation are stated. The validation findings for each validation subject are presented as follows:

The findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found 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 **5** Corrective Action Requests and **13** Clarification Requests.

3.1 Approval

Letters of approval have been received and following support documentation:

- Letter of Approval issued by DNA of China in 11/2008 /3/ authorized Datang Laizhou Wind Power Co., Ltd as project participant and confirmed that Shandong Laizhou phase II Wind Power Project contributes to China's Sustainable development. No additional specification of the Project was contained in the LoA.
- Letter of Approval issued by DNA of United Kingdom of Great Britain and Northern Ireland on 14/05/2009 /4/ authorized Credit Suisse International as project participant for Shandong Laizhou phase II Wind Power Project in China.

BVC received Letters of Approval from the project participants and does not doubt its authenticity. Both parties (China and the UK) are Party to the Kyoto Protocol, and BVC considers the letters are in accordance with **Para. 45 – 48/ VVM**.

☞ **Complying with Para. 49, 50 and 125/VVM**, BVC recognizes that Shandong Laizhou phase II Wind Power Project of Datang Laizhou Wind Power Co., Ltd is helping country fulfill its goals of promoting sustainable development. The project is expected to be in line with host-country specific CDM requirements because it –

- To reduce greenhouse gas emissions compared to business-as-usual scenario;
- To reduce the emission of other pollutants resulting from local coal-based power plants compared to a business-as-usual scenario;
- To create approximately 15 employment opportunities during the project operation;
- To promote the local tourism industry and improve the livelihoods of local people.

There is also evidence in various approvals granted by the local government offices of host country China. There are as below,

- Feasibility Study Report (FSR) approved by Shandong Development and Reform Committee on 17/01/2008. /7/
- Environment Impact Assessment (EIA) approved by Environment Protect Bureau of Shandong Province on 02/11/2007. /9/
- The project activity of Grid connected wind power and the development of such Grid connected wind power is listed in the Renewable Energy Law, in the 2005 Guiding Catalogue of Industrial Structure Regulation Issued by National Development and Reform Commission and the Development Plan in New Energy Sources and Renewable Energy Sources from Year 2000 to 2015 as development priority of China. /30/

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, this is same with the baseline scenario. The Project Scenario is considered additional in comparison to the baseline scenario, and therefore eligible to receive Certified Emissions Reductions (CERs) under the CDM, based on an investment analysis presented by the PDD.

The expected operational lifetime of the Project of 20years is in line with the FSR. The project design is sound and the geographical (Shandong Province, P. R. China) and temporal (7 years) boundaries of the project are clearly defined.

✎ The review of documents and interview did not reveal any information indicates that the project can be seen as a diversion of official development assistance (ODA) funding towards China.

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 concluded this by review the letters of approval provided by PP and the information on UNFCCC website i.e.

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

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

3.3 Project Design Document

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

3.4 Project Description

The Project “Shandong Laizhou phase II Wind Power Project” (hereafter referred to as “the Project”) is sited in Tushan Town, Laizhou City, Shandong Province, P. R. China. The Project has geographical coordinates with east longitude of 119°43’34”~119°46’7” and north latitude of 37°06’17”~37°08’26”.

The objective of the project is to utilize wind power for generating electricity that will be sold to the North China Power Grid (NCPG). The total installed capacity of the project is 49.5MW with 33sets of turbines with a unit capacity of 1,500kW.

The estimated electricity delivered to the NCPG by the Project is 94,450MWh per year at the load factor of 0.22 as per approved FSR, thus result in annual emission reductions of 101,580tCO₂e during the first crediting period.

The process undertaken to validate the accuracy and completeness of the project description was including the document review and cross-check with the relevant approvals issued by local governments by BVC.

✎ Complying with **Para. 64/VVM**, BVC hereby confirms that the project description in PDD is accurate and complete in all respects.

3.5 Baseline and monitoring methodology

3.5.1 Baseline and monitoring methodology

The Project uses the approved consolidated baseline and monitoring methodology ACM0002 (version 07) – “Consolidated baseline methodology for grid-connected

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electricity generation from renewable sources”.

By on-site visit and interview with the PP, BVC confirmed that the information given in the PDD complied with the criteria of methodology ACM0002 (Version 7):

- The Project involves the electricity capacity additions from the wind sources as per approved FSR;
- The Project does not involve switching from fossil fuels to renewable energy at the site of the project activity;
- The geographic and system boundaries for the NCPG can be clearly identified and information on the characteristics of the NCPG is available, which is evidenced by *the Grid Connection Agreement signed between PP and the local Grid company* /24/ and *China’s Regional Grid Baseline Emission Factors* published by DNA of China. /27/

BVC hereby confirms that the selected baseline and monitoring methodology ACM0002 Ver. 07 is previously approved by the CDM Executive Board, and is applicable to the project activity, which, complies with all the applicability conditions therein.

BVC hereby confirms that, as a result of the implementation of the proposed CDM project activity, there are no greenhouse gas emissions occurring within the proposed CDM project activity 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 ACM0002 (Version 07).

3.5.2 Project Boundary

BVC validated the project boundary by a site visit and hereby confirms that the identified boundary and the selected sources and gases are justified for the project activity. i.e.

The project boundary is the physical, geographical site of project activity and all other power plants connected physically to NCPG.

☞ Complying with **Para. 57/VVM**, BVC hereby confirms that the identification of Project boundary is in line with the delineation of grid boundaries as provided by the DNA of China. (Refer to *the China’s Regional Grid Baseline Emission Factors* updated by DNA of China and publicly available on the website of China’s DNA.

3.5.1 Baseline identification

The Project is the installation of a new grid-connected renewable power plant that connects with and delivers electricity to the North China Power Grid. According to methodology ACM0002 (version 07), the baseline scenario is the following:

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 sources, as reflected in the combined margin (CM) calculations described in the “Tool to calculate the emission factor for an electricity system”.

As methodology ACM0002 prescribes the baseline scenario and no further analysis required, therefore, there is no need to take steps to identify the baseline scenarios.

According to the “Tool to calculate the emission factor for an electricity system” (version 1.1) and China’s DNA, the delineation of grid boundary of the Project is the North China Power Grid. Therefore, the baseline scenario of the Project is:

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Electricity delivered to the grid by the proposed project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources within the NCPG, as reflected in the combined margin (CM) calculated described latter.

☞ Complying with **Para. 80 and 81/VVM**, Bureau Veritas Certification 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 sectoral 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 Additionality of a project activity

“*Tool for Demonstration and Assessment of Additionality*” version 5.2. 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:

3.6.1 Prior consideration of the clean development mechanism

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 activity 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:

Date	Events
07/2007	FSR finalized. <u>/6/</u> The tariff of 0.723RMB/kWh (Incl. VAT) provided in the FSR is not an approved or implied tariff in any official sense, instead, it is just a price estimated by the FSR designer based on the specific circumstances of the proposed project so that the Project IRR can reach the benchmark of 8%. However, comparing with wind farms contemporaneous in Shandong Province, this optimistic and higher tariff quoted from FSR could not be achieved in reality, considering the uncertainty of the expected tariff, the FSR made the proposal of inducing CDM to improve the financial stability to prevent the financial risk. <u>/6/</u>
16/08/2007	As discussed above, the expected tariff in FSR can not be achieved, therefore, considering <i>the Initial guidance on feed-in tariff for Laizhou Phase I wind power project /20/</i> , another project developed by the same PP, which showed that the feed-in tariff forecasted (0.66RMB/kWh, incl. VAT) by local government would be lower than the one estimated in FSR

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	(0.723RMB/kWh, incl. VAT), thus make the Project IRR of the Project lower than the benchmark, and local DRC encouraged the PP to develop the Project as a CDM project to reduce the potential investment risk.
20/08/2007	An internal meeting of directors was hold to discuss the matters of the proposed project applying for CDM. According to the meeting minute, PP made a decision to develop the proposed project as a CDM project to improve the project's financial index and reduce investment risk. /14/
27/01/2008	Construction service contract /10/
01/02/2008	Construction permission /11/
09/05/2008	Wind Turbine Purchase Contract /12/
02/04/2008	Letter of Authorization for CDM consultant /15/
15/04/2008	ERPA /16/ As indicated in the PDD, although the EPRA was signed on 15/04/2008, when the PDD was webhosted on 14/07/2008, "the buyer is to be determined" was mentioned in A.3 of PDD, it is because the ERPA has not become effective after signature until the Due Diligence was finished and satisfied by the buyer, the time limit of Due Diligence is 30/09/2008, therefore, the buyer was not listed in PDD as project participant at the time of GSP. The ERPA has been provided and checked satisfactory.
14/07/2008	PDD was webhosted for GSP

From above table, BVC was able to verify that the start date of the project activity determined as 27/01/2008 is appropriate (the signed date of Construction Service Contract), which is the earliest of the dates at which the implementation or construction or real action of the project activity began. This is in accordance with the latest CDM glossary. The Project with a start date before 02/08/2008 and prior to the date of publication of the PDD for Global stakeholder consultation, and PP demonstrated that the CDM was seriously considered in the decision to implement the project activity.

BVC has checked all physical documents mentioned in above table and is able to verify that all documents are substantial and reasonable at that situation in the host country. BVC was therefore able to verify that the incentives of CDM were seriously considered prior to the start of the project activity and continuing and real action were taken to secure CDM status for the project in parallel with its implementation, which are evident accordance with the "Guidance on the Demonstration and Assessment of Prior Consideration of the CDM" (EB41, Annex 46).

The annual output delivered to the grid, total static investment, annual O&M cost and tariff are key parameters to evaluate the financial feasible for a wind power project. According to the FSR, the **annual output** of the Project was calculated based on the monitored data of local wind resource and characteristic of wind turbine provided by manufacturer, and then the calculation was carried out using professional WASP software (www.wasp.dk); The **total static investment** was calculated using relevant regulations such as "Temporary Management Measures on Pre-phase Work of Wind Power Plant" /36/, "Management Regulation of Budget for Construction of Electric Power Engineering" /37/, and "Electric Power Engineering Budget Estimation Quota" /38/, and so on; And the **annual O&M cost** was calculated based on "Code on compiling feasibility study report of wind power projects" /18/. Therefore, these three parameters in FSR are evidence-based and reasonable. While the **tariff** indicated in the FSR for this specific

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project is an estimated one to make the project financial attractive thus reach the benchmark of 8%. Therefore, unlike other key indicators, such as the annual output, total static investment and annual O&M expense, the tariff indicated in the FSR was an estimated one which is just a reference made for consideration of the PP itself as FSR approval is mainly for the eligibility of the Project, and the PP can decide whether investment project or not based on the actual achievable tariff guided by local government or confirmed with grid company. Therefore, the FSR made the proposal of inducing CDM to improve the financial stability to prevent the financial risk.

According to the *Initial guidance on feed-in tariff for Laizhou Phase I wind power project* issued by local DRC on 16/08/2007 /2./, the feed-in tariff forecasted by local government was just 0.66RMB/kWh, incl. VAT), lower than the one estimated in FSR (0.723RMB/kWh (incl. VAT)), which was set as an critical point to reach the benchmark of 8%, is not achievable. Therefore, PP final decided to develop the Project as a CDM Project /14/

☞ Complying with **Para. 102/VVM**, BVC verified this issue which was considered much related to the additionality of the Project and can conclude that the serious consideration under the context of the Project has been addressed appropriately in accordance with the above guidance, consequently, the chronological events described with the relevant documented evidences can form the objective basis of the validation opinions of Bureau Veritas Certification.

As stated in methodology ACM0002, the latest “Tool for Demonstration and Assessment of Additionality” version 5.2 is used to demonstrate the additionality of the Project in the PDD.

3.6.2 Identification of alternatives to the project activity consistent with current laws and regulations (step 1)

Plausible and credible baseline scenarios available to the Project that provide outputs or services comparable to the proposed CDM project activity include:

Alternative (a): The proposed project itself, but not undertaken as a CDM project activity;

Alternative (b): Construction of a coal-fired power plant with equivalent installed capacity or annual electricity generation;

Alternative (c): Construction of a power plant using other sources of renewable energy, such as hydro, geothermal, solar PV and biomass power plant with equivalent installed capacity or annual electricity generation; and

Alternative (d): Provision of an equivalent amount of annual power output by the grid into which the Project is connected.

The list is in line with the provision of the additionality tool. Of these identified alternatives, Alternative (b) was correctly excluded based on the evidence that in China the coal-fired power plant with a capacity less than 135MW are prohibited to be built. /25/ the Alternative (c) was also correctly excluded because there are no similar scale exploitable water resources /31/, and the biomass power generation, geothermal power plant and solar PV farm are financial unattractive /32/.

BVC verified the all relevant evidence and found satisfactory to exclude Alternative (b) and (c).

3.6.3 Investment analysis (Step 2)

Option III (benchmark analysis) is applied for conducting the investment analysis in the PDD. Project IRR 8% was employed by the project as benchmark. BVC has reviewed the

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source of 8%, i.e. “*Interim Rules on Economic Assessment of Electric Power Engineering Retrofit Projects*” /17/, which is widely applied in Chinese power generation industries; therefore, BVC concludes that the benchmark is suitable for the project.

Based on the data from the Feasibility Study Report, the project IRR of the Project without CERs revenue is 6.68%, much lower than the benchmark, which shows that the project is not financially attractive compared to the benchmark in the absence of CDM benefits.

BVC has verified that the IRR calculation is correct and the data input are relied on values from the approved FSR which was carried out by an authorized third party viz. *Hebei Electric Power Design & Research Institute* granted as a top class design institute in the power industry by the government of the host country. Therefore, BVC confirms that the input values from FSR were valid and applicable at the time of the investment decision.

According to the relevant evidence provided, BVC has confirmed that: the PP’s final decision to proceed with the investment in the Project has been made based on the FSR /6/ finished in **07/2007**. Later, according to the *Initial guidance on feed-in tariff for Laizhou Phase I wind power project* issued by local DRC /20/, PP noticed that the estimated tariff in FSR is un-achievable, and based on the internal assessment on the approved FSR, PP decided to invest the project soon on **20/08/2007/14/** with consideration of CDM revenues. BVC was therefore confident that it is unlikely in the context of the underlying project activity that the input values would have materially changed, which is in line with the report of **par. 54th (a) EB38** meeting.

At the same time, BVC compared the key input values for the financial analysis in the PDD and FSR, and confirmed that the investment analysis is in accordance with **par. 54th (b) EB38** meeting, i.e.:

All input parameters used in the financial analysis are taken from the FSR except the bus-bar tariff of **0.66RMB/kWh** (incl. VAT) taken from *Initial guidance on feed-in tariff for Laizhou Phase I wind power project* /20/ on **16/08/2007**. As discussed above, unlike other parameters, the tariff of 0.723RMB/kWh (Incl. VAT) provided in the FSR is not an approved or implied tariff in any official sense, instead, it is just a price estimated by the FSR designer based on the specific circumstances of the proposed project so that the Project IRR can reach the benchmark of 8%, which can not reflect the bus-bar tariff policy environment of the Project when making decision, therefore, the bus-bar tariff (incl. VAT) of **0.66RMB/kWh** (incl. VAT) issued by local government is more reasonable.

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

- The **operating period** of 20years 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*” ver. 2, i.e. “a minimum period of 10 years and a maximum of 20 years will be appropriate”.
- The **Residual Value** was selected reasonably following relevant regulation in China;

Besides, the input values from the FSR have been crosschecked with BVC as follows:

- The main part of **total static investment** in the FSR had been crosschecked with the signed contracts /12/, /13/ of key equipments and construction contracts /10/ by BVC, and found that the total contract value is close to the sub-item in the FSR, therefore, the assumptions for the total investment is reasonable;

- The **tariff** employed in the FSR is an estimated one which was set as the critical point, and the one used in the PDD is appreciate as it was guided by local DRC. Furthermore, the tariff has been crosschecked with *the Letter of Approval of Grid-connected tariff for wind projects in China (No. Fa Gai Jia Ge [2008]1876)* issued by NDRC on **23/07/2008** /21/ after the start of project, and found that the tariff of 0.66RMB/kWh (incl. VAT) used in the PDD is higher than the price issued by NDRC. Besides, BVC has checked the PDDs of registered CDM wind power projects in Shandong province and found that the tariff used in the PDD is within the range of the tariffs for the registered CDM projects. Therefore, BVC is of the opinion that the tariff used in the PDD for investment analysis is appropriate.
- As discussed above, the **annual output delivered to the grid** of the Project was designed based on the wind resource data of the local area in the latest 30 years and calculated based on the monitored data of local wind resource, and characteristic of wind turbine provided by manufacturer, and then the calculation was carried out using professional WASP software, therefore, BVC confirms that the procedure for annual output delivered to the grid is common practice in China, and the annual output used in the PDD for investment analysis is valid and appropriate.
- BVC has confirmed that the **annual O&M cost** is the sum of salary and welfare of employees, materials fee, maintenance fee and Miscellaneous account, which was studied based on the “Code on Compiling Feasibility Study Report of Wind Farms” issued by NDRC /18/. The original figure for calculating annual O&M expense has been crosschecked with relevant criteria for wind farm design and found reasonable.
- BVC also verified values of **various taxes** through cross-check with the taxation rules conducted by local government and found to be fully consistent.

In summary, based on the above reliable data sources, BVC was able to conclude that the input values from the approved FSR are valid and applicable at the time of making the investment decision. Therefore, BVC concludes that the investment analysis is in accordance with **par. 54th (c) EB38** meeting.

BVC has reviewed the IRR calculation /19/ and confirmed that the IRR processing is consistent with the “*Guidance on the assessment of investment analysis*” (Annex of “*Tool for Demonstration and Assessment of Additionality version 5.2*”) and the data sources as well as the analysis approach are reliable and based on the FSR linking directive to the actual situation of the host country. As it shows, without CDM income, the project IRR of the Project is 6.68%, which is lower than the benchmark (8%).

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

- Total static investment
- Annual O&M cost
- Annual output delivered to the grid
- Tariff

According to “Code on compiling feasibility study report of wind power projects” /19/ published by NDRC, total static investment, annual output and tariff should be taken as uncertainty factors to do sensitivity analysis, and $\pm 10\%$ variation of above factors shall be considered in the sensitivity analysis. Therefore, BVC confirms that the variables and variations $\pm 10\%$ performed for sensitivity analysis is deemed to be reasonable in the wind farm sector in China.

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- With a decrease in **total static investment** by 9.3%, the Project IRR may reach 8%. BVC is confident that the total investment won't decrease by 9.3% because the already signed contract value /10/ /12/ /13/ , which accounts a majority of total static investment, is almost close to the sub-item in FSR and price of construction materials and turbines are keeping increasing in China¹.
- With a decrease in **annual O&M cost** by 37.7%, the Project IRR may reach 8%. However, it is evident impossible since the annual O&M is the sum of salary and welfare of employees, materials fee, maintenance fee and Miscellaneous account, and all of these expenses are determined by qualified entity based on long term operation experience; Besides, there are a number of indicators suggesting that O&M costs are rising as time goes by.
- With an increase in **annual output delivered to the grid** by 9.55%, the Project IRR will reach 8%. However, by checking the FSR and design parameters of wind turbine manufactured by Sinovel Windtec Co., Ltd., the annual output of the Project is estimated based on wind resource data of the latest 30 years and attenuation coefficient as stated in the FSR. Furthermore, according to the "Methodology of wind energy resource assessment for wind farm" (GB/T 18710-2002) used in FSR, the location Laizhou phase II wind farm sited with a Wind Power Class rating of 3, which indicates that comparing to other regions with good wind condition, the wind condition in terms of wind speed and wind power density in this area is relatively poor. Therefore, BVC is of the opinion that it is unlikely that the annual electricity output increases beyond 9.55%.
- With an increase in **tariff** by 9.45%, the Project IRR will reach 8%. However, as indicated above, the tariff used in the PDD (0.66RMB/kWh) is higher than the guided one for other projects located in Shandong Province. Therefore, BVC confirms that the expected Tariff is unlikely to increase beyond 9.45%.

Considering of the CERs sales revenues (calculated with EURO12.5 /tCO₂e), the project IRR of the Project can reach the benchmark by 9.87%.

According to the Investment Analysis above, it is the opinion of BVC that without CDM incentives the investment barrier the Project faced is insurmountable. Considering of the CERs sales revenues the project IRR of the Project will be significantly improved.

3.6.4 Barrier analysis (Step 3)

No barrier analysis had been applied.

3.6.5 Common practice analysis (Step 4)

Shandong Province is selected as the geographical scope of the common practice analysis, and BVC confirms that the geographical scope is appropriate since the investment circumstance and regulations related to wind power of each province in China are significant different. The project is a newly built large scale wind farm located in Shandong Province; therefore wind farms located in Shandong Province with installed capacity higher than 15MW are considered as similar activities to the Project in the PDD, which deems reasonable.

Data of wind power plants in Shandong are taken from the *Statistics of Installed capacity of wind farm in China in 2007* /26/ by Mr. Shi Pengfei, Vice Chairman of Chinese Wind Association. *Statistics of Installed capacity of wind farm* are employed by almost all CDM

¹ <http://www.crein.org.cn/2008news/2008010901.htm>

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projects in China as data source of common practice; therefore, BVC confirms that the source is reasonable.

Among all the similar power projects located in Shandong, only two wind farms are not registered or validated as CDM projects. The essential distinction between the proposed CDM project activity and the two similar projects has been assessed as follow:

- Shandong Changdao Wind Farm Project with installed capacity of 21.45MW is supported by the soft loan from German Government /33/.
- Shandong Jimo Qiangdao Huawei Wind Farm with installed capacity of 16.4MW is a joint-venture project between Qingdao Dongyi Co., Ltd and Nordex Energy GmbH, and the joint-venture enterprise in China has the favorable taxation policy. /34/ /35/

Therefore, BVC confirms that the proposed CDM project activity is not common practice.

3.7 Calculation of GHG Emissions

According to the baseline methodology ACM0002 Version 07, the emission reductions from the Project shall be calculated based on the *Tool to calculate the emission factor for an electricity system (version 1.1)*.

As per *Tool to calculate the emission factor for an electricity system (version 1.1)*, six steps are applied to calculate the emission factor:

Step 1.-Identify the relevant electric power system.

The North China Power Grid is selected as the electric power system of the Project and, Northeast China Power Grid (NEPG) was identified connected electric power system since there are net electricity imports from NEPG to the NCPG. The weighted average operating margin (OM) emission rate of the exporting grid (NEPG) is selected to calculate the CO₂ emission factor(s) for net electricity imports.

China's Regional Grid Baseline Emission Factors published by DNA of China on 09/08/2007 /28/ has been verified, and BVC confirms that the identified electric power system is correct.

Step 2.-Select an operating margin (OM) method.

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

The calculation for low cost/ must-run constitute of the total grid generation has been checked by BVC and confirmed the calculation is correct, therefore, simple OM emission factor calculation method is selected reasonable. Data from China Electric Power Yearbook 2002-2006 has been applied correctly.

Step 3.-Calculate the operating margin emission factor according to the selected method.

The data on electricity generation and auxiliary electricity consumption are obtained from the China Electric Power Yearbook from 2004 to 2006 (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 2004 to 2006. 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 renewable crediting period is adopted for the Project and the OM will be fixed for the first crediting period.

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 4.-Identify the cohort 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 electricity.

2) Use of weights estimated using installed capacity in place of annual electricity generation.

Step 5.-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 DNA of China.

Step 6.-Calculate the combined margin (CM) emissions factor.

According to the “*Tool to calculate the emission factor for an electricity system*” the default weights: $\omega_{OM} = 0.75$ for Operating Margin and $\omega_{BM} = 0.25$ for build Margin in the first crediting period of Wind Power Projects are adopted.

As per baseline methodology ACM0002 and “*Tool to calculate the emission factor for an electricity system*”, the baseline emission sources considered are the emission reduction ER_y during the crediting period is the difference between baseline emissions, project emissions and emissions due to leakage. These are:

1) Baseline emissions: baseline emissions (BE_y in tCO_2) are equal to baseline emissions factor ($EF_{grid,CM,y}$ in tCO_2/MWh) times the net electricity supplied to the grid (EG_y in MWh).

2) Project Emissions: the project emissions are regarded as zero for wind power projects as per the ACM0002 Version 07.

3) Leakage: no leakage has to be considered for the proposed project activity as per methodology ACM0002 Version 07.

4) Emission reduction: $ER_y = BE_y - PE_y - L_y = BE_y = EF_{grid,CM,y} * EG_y$

With reference to the *China's Regional Grid Baseline Emission Factors* published by DNA of China on 09/08/2007 [30], the Simple OM emission factor ($EF_{grid,OM,y}$) of the North China Power Grid is calculated as $1.1208tCO_2e/MWh$. Similarly, the build margin emission factor ($EF_{grid,BM,y}$) of the North China Power Grid is calculated ex-ante as $0.9397tCO_2e/MWh$.

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

$$EF_{grid,CM,y} = 0.75 \times 1.1208 + 0.25 \times 0.9397 = 1.0755 \text{ tCO}_2\text{e/MWh}$$

According to the estimated annual electricity delivered to the grid 94,450MWh as stated in the FSR, the estimated annual emission reductions of the Project is 101,580tCO₂e during the first crediting period represents a reasonable estimation using the assumptions given by the Project.

As assessed the equation and parameters in the PDD, ACM0002 Version 07 and *Tool to calculate the emission factor for an electricity system (version 1.1)*, BVC confirmed that the baseline methodology has been applied correctly to calculate the emission reductions, all assumptions and data used by PP have been listed in the PDD and all values used in the PDD are considered reasonable.

BVC has confirms that the calculation approach is in accordance with the ACM0002 Version 07 and the "*Tool to calculate the emission factor for an electricity system*" based on data from an official source and made publicly available.

3.8 Monitoring Plan

The Project uses the approved consolidated monitoring methodology ACM0002 version 07 for "Consolidated baseline methodology for grid-connected electricity generation from renewable sources".

Applicability of this methodology is justified in PDD as it involves grid connected renewable power generation using wind energy. Refer discussions on the validity of the methodology at section 3.5.1 above.

According to methodology ACM0002 version 07, the parameter required to be monitored for the proposed CDM project activity is *electricity supplied by the project activity to the grid*. Accordingly the monitoring plan, *the electricity delivered by the Project to the grid and electricity imported by the Project from the grid* will be monitored through metering equipments (main meter and backup meter) installed at grid side, and data may be verified against the Electricity Transaction Notes. In order to increase economic efficiency, it is common in China that the new power generation projects share the same metering equipment. If it appears for the project, separate metering equipment will be installed at the project site to ensure that the parameters can be measured directly. BVC confirms that the parameters are clearly described in the PDD and the means of monitoring described in the plan comply with the requirements of the methodology ACM0002.

According to ACM0002 version 07 no leakage has to be considered for the proposed project activity, viz. $LE_y = 0$.

Operational management for the project activity is comprehensively detailed in PDD and this includes description of the responsibility, training, procedure reference, calibration frequency and maintenance needs are clearly mentioned. Archiving of the records is indicated.

By reviewing the provided training plan [/22/](#) 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 proposed CDM project activity can be reported ex post and verified.

☺ Complying with **Para. 122/VVM**, Bureau Veritas Certification hereby confirms that the project participants are able to implement the monitoring plan.

3.9 Environmental Impacts

Bureau Veritas Certification has confirmed that Environment Impact Assessment (EIA) Report has been carried out by a qualified third party and approved by Environment Protection Bureau of Shandong Province on 02/11/2007. (Document No. Lu Huan Bao Gao Biao [2007]309) /8/

The environmental impact results from the Project have been identified and analyzed in the PDD. By checking the EIA report BVC is able to ensure that the environment impacts occurs in the construction period and operation period due to waste water and sewage, land use, dust and air quality, noise and solid waste. All above impacts would be within an acceptable limit by carrying out corresponding mitigation measures as per the statement of the EIA.

DOE therefore concludes that the Project will not have any significant impacts on the environment by means of measures of pollution avoidance and control as well as ecological recovery.

Furthermore, Letter of Approval issued by DNA of China on 28/10/2008 /3/ confirmed that Shandong Laizhou phase II Wind Power Project contributes to China's Sustainable development.

☞ Complying with **Para. 131/VVM**, Bureau Veritas Certification hereby confirms that the Project will not have any significant impacts on the environment by means of measures of pollution avoidance and control as well as ecological recovery.

3.10 Local Stakeholders Consultation

Prior to the publication of the PDD on the UNFCCC website, viz, in 12/2007, the Project owner conducted surveys to local stakeholders of the project including local residents and local government via distributing and collection responses to a questionnaire.

The questionnaires were distributed to villages. Total 23 questionnaires had been distributed and all of them had been returned with 100% return rate.

According to the 23 filled questionnaires, the outcome of this survey show that the interested stakeholder have a very good understanding of the Project, and they agreed that the project can improve their livelihoods with increase of job opportunities, increase of income and others. 100% of the local stakeholders supported the construction of the Project.

The returned questionnaires with answers of interested stakeholders are maintained by the project owner and were presented to DOE for assessment during the site visit of the validation activity. /23/

The stakeholders viewed the Project as contributing to local environmental benefits and socio-economy. These views were endorsed by the local stakeholders interviewed during the site visit of the validation activity.

During the on-site visit, DOE has conducted an interview with local stakeholders and confirms that the stakeholders impacted had been invited transparency, the interview with stakeholders and review of 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. DOE is therefore of its opinion that the local stakeholder consultation is adequate.

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☞ Complying with **Para. 128/VVM**, BVC hereby confirms that the local stakeholder consultation was performed Project will benefit to the local sustainable development without positively affect to the local stakeholders.

4. COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

According to the modalities for the Validation of CDM projects, the DOE shall make publicly available the project design document and receive, within 30 days, comments from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available.

☞ Complying with **Para. 166/VVM**, BVC published the project documents on the UNFCCC CDM website (<http://cdm.unfccc.int>) on 14/07/2008 and invited comments within 12/08/2008 by Parties, stakeholders and non-governmental organizations.

No Comments were received from any persons.

5. VALIDATION OPINION

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

The validation consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up 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 54 of EB 38* and the *Guidance-Prior consideration* -*Guidance on the demonstration and assessment of prior consideration of the CDM (version 01)* to demonstrate the additionality of the Project. In line with this tool, 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 01.1) 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 investment analysis demonstrates that the proposed project activity is not a likely 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 likely to achieve the annual emission reductions of 101,580tCO₂e.

The review of the project design documentation (version 02) 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.

The validation is based on the information made available to us and the engagement conditions detailed in this report.

6. REFERENCES

Category 1 Documents:

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Documents provided by Type the name of the company that relates directly to the GHG components of the project.

/1/	PDD Version 01 dated 19/06/2008
/2/	PDD Version 02 dated 23/04/2009
/3/	Letter of Approval from DNA of the host country dated 11/2008.
/4/	Letter of Approval from DNA of United Kingdom of Great Britain and Northern Ireland dated 14/05/2009
/5/	Statement of Modalities of Communication signed between Datang Laizhou Wind Power Co., Ltd and Credit Suisse International dated 23/03/2009
/6/	Feasibility Study Report finalized by Hebei Electric Power Design & Research Institute in 07/2007
/7/	FSR Approval issued by Shandong Provincial Development and Reform Committee on 17/01/2008 (Document no. Lu Fa Gai Neng Jiao [2008]47)
/8/	Environment Impact Assessment Report finalized by Laizhou City Lvnuo Environmental and Scientific Technology Research Co., Ltd.
/9/	EIA approval issued by Environment Protection Bureau of Shandong Province on 02/11/2007 (Document No. Lu Huan Bao Gao Biao [2007]309).
/10/	Contract for construction services on 27/01/2008
/11/	Start construction evidence on 01/02/2008
/12/	Wind turbine purchase contract signed between PP and manufacturer on 09/05/2008
/13/	Tower for wind turbine purchase contract signed between PP and manufacturer on 05/2008
/14/	Investment decision with CDM consideration on 20/08/2007
/15/	Letter of Authorization for CDM consultant on 02/04/2008
/16/	Emission Reduction Purchase Agreement signed on 15/04/2008
/17/	Interim Rules on Economic Assessment of Electric Power Engineering Retrofit Projects
/18/	Code on compiling feasibility study report of wind power projects
/19/	IRR spreadsheets of the project
/20/	Initial guidance on feed-in tariff for Laizhou Phase I wind power project issued by local DRC on 16/08/2007
/21/	Letter of Approval of Grid-connected tariff in China issued by NDRC on 23/07/2008 (Document No. Fa Gai Jia Ge [2008]1876)
/22/	Training Plan
/23/	Evidence of Local stakeholders' comments viz. 23 pieces of filled questionnaires
/24/	Grid Connection Agreement signed between PP and the local Grid company
/25/	Notice on Strictly Prohibiting the Violative Installation of Thermal Power Generation

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	Units with the Capacity of 135 MW or Below issued by the General Office of the State Council, decree no. 2002-6.
/26/	Installed capacity of Wind Farms in China in 2007 issued by Mr. Shi Pengfei, Vice Chairman of Chinese Wind Association
/27/	China's Regional Grid Baseline Emission Factors published by DNA of China on 09/08/2007
/28/	Emission reduction calculation sheet
/29/	National Renewable Energy Law issued by NDRC of China effective from 01/01/2006.
/30/	Renewable Energy Law of People's Republic of China
/31/	http://www.sdhh.gov.cn/news/Article_show.asp?ArticleID=12491
/32/	http://nyj.ndrc.gov.cn/zywx/t20060206_58771.htm
/33/	http://www.lunenggroup.com/new/2007-1/2007112111712.htm
/34/	http://www.qdda.gov.cn/yqlj/jimoshi/wenquanxinmao.htm
/35/	http://www.canet.com.cn/tax/ssyh/swyh/200807/21-50282.html
/36/	Temporary Management Measures on Pre-phase Work of Wind Power Plant
/37/	Management Regulation of Budget for Construction of Electric Power Engineering
/38/	Electric Power Engineering Budget Estimation Quota

Category 2 Documents:

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

/1/	ACM0002 Version 07 dated 14/12/2007
/2/	Tool to calculate the emission factor for an electricity system version 1.1 dated 29/07/2008
/3/	Tool for demonstration and assessment of additionality Version 5.2 dated 26/08/2008
/4/	Paragraph 54 of EB 38 th Report dated 14/03/2008.
/5/	Guidance on the Demonstration and Assessment of Prior Consideration of the CDM-dated 02/08/2008 (EB41 Annex 46)

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. Cao Jia Ying, Datang Laizhou Wind Power Co., Ltd
/2/	Ms. Bian Jing, CWEME, PDD in details
/3/	Mr. Zhu Qing Rong, CWEME
/4/	Ms. Chi Shengqiu, Local resident
/5/	Mr. Zhang Deming, Local resident

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

Mr. Robin Wang	Bureau Veritas Certification, China	Internal Reviewer Climate Change Lead Verifier, He holds a Bachelor Degree in Gas & Heating Engineering. He was a Gas Engineer with over 10 years' experiences in petrochemical sector in P.R. China. He obtained the certificate of CDM Lead Verifier and Lead Auditor for ISO 14000. He has been involved in above 30 CDM validation / verification or voluntary GHG projects in P.R. China.
Ms. Jasmine Tang	Bureau Veritas Certification, China	Team leader Climate Change Lead Verifier, She holds a Master Degree in Environment Engineering. She has 2 years of CDM consulting experience in energy sector in P.R China and involved in approximate 20 CDM projects in P.R China. She obtained the certificate of CDM Lead Verifier and Lead Auditor for ISO 14001.
Mr. Liao Ling	Bureau Veritas Certification, China	Team member Team Member, CDM Verifier. He holds a Bachelor Degree in Atmosphere Science. He has total experience of 2 years of CDM consulting experience in P.R China and involved in several CDM projects in P.R China. He obtained the certificate of CDM Lead Verifier.

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APPENDIX A: CDM PROJECT VALIDATION PROTOCOL

Table 1 Validation requirements based on the Validation and Verification Manual (EB44 Annex 3)

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl.	Final Concl.
1. Approval			COUNTRY A <i>(China)</i>	COUNTRY B		
A. Have all Parties involved approved the project activity?	VVM	44	Not yet been presented CAR-1	The GSP PDD is silent about the country from Annex I.	CAR-1	OK
B. 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 participatn or directly from the DNA)	VVM	45	CAR-1	N.A.	-	OK
C. Does the letter of approval from DNA of each Party involved:	VVM	45				
i. confirm that the Party is a Party of the Kyoto Protocol?	VVM	45.a	P. R. China has ratified the Kyoto Protocol on 30/08/2002,	N.A.	OK	OK
ii. confirm that participation is voluntary?	VVM	45.b	Pending close CAR-1	N.A.	-	OK
iii. confirm that, in the case of the host Party, the proposed CDM project activity contributes to the	VVM	45.c	Pending close CAR-1	N.A.	-	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl.	Final Concl.
sustainable development of the country?						
iv. Refers to the precise proposed CDM project activity title in the PDD being submitted for registration?	VVM	45.d	Pending close CAR-1	N.A.	-	OK
D. Is(are) the letter(s) of approval unconditional with respect to (i) to (iv) above?	VVM	46	No. It is conditional in China	N.A.	OK	OK
E. Has(ve) the letter(s) of approval been issued by the respective Party's designated national authority (DNA)?	VVM	47	China's DNA is NDRC	N.A.	-	OK
F. If there is doubt with respect to (e) above, was verified with the DNA that the letter of approval is valid for the proposed CDM project activity under validation?	VVM	47	Pending close CAR-1	N.A.	-	OK
2. Participation			<i>PP1 (Datang Laizhou Wind Power Co.,Ltd)</i>	<i>No PP from annex I country was listed in the GSP PDD.</i>		
A. Have all project participants been listed in a consistent manner in the project documentation?	VVM	51	Pending close CAR-1	N.A.	-	OK
B. Has the participation of the project participants in the project activity been approved by a Party to the Kyoto Protocol?	VVM	51	Yes. Refer to http://maindb.unfccc.int/public/country.pl?country=CN	N.A.	OK	OK
C. Are the project participants listed in tabular form in section A.3 of the PDD?	VVM	52	Yes	N.A.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl.	Final Concl.
D. 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
E. Has the participation of each of the project participants been approved by at least one Party involved, either in a letter of approval or in a separate letter specifically to approve participation? (Provide reference of the approval document for each of the project participants)	VVM	52	Pending close CAR-1	N.A.	-	OK
F. Are any entities other than those approved as project participants included in these sections of the PDD?	VVM	52	No.		OK	OK
G. Has the approval of participation issued from the relevant DNA?	VVM	53	Pending close CAR-1	N.A.	-	OK
3. Project desing document						
A. Is the PDD used as a basis for validation prepared in accordance with the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM website?	VVM	55	Yes. Latest Version 03.2. per the GUIDELINES FOR COMPLETING CDM-PDD, CDM-NMB and CDM-NMM – Version 07 – 02/08/2008		OK	OK
B. Is the PDD in accordance with the applicable CDM requirements for completing the PDD?	VVM	56	Yes		OK	OK
C. In CDM-PDD section A.1 are the following provided?	EB 41	Ann 12	Yes			
i. Title of project	EB 41	Ann 12	Yes. Shandong Laizhou phase II Wind Power Project		OK	OK
ii. Current version number and date of document	EB	Ann	Yes.		OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
	41	12	GSP Version number: 01, dated 19/06/2008 Final Version number: 02 dated 23/04/2009		
D. In CDM-PDD section A.2 are following provided (max. one page)?	EB 41	Ann 12			
i. A brief description of the project activity covering purpose which includes the scenario existing prior to the start of the project, project scenario and baseline scenario	EB 41 - VVM	Ann 12 - 58 59 60	Yes The proposed CDM project activity is a newly – built large scale wind farm project. The Project involves the installation of 33 wind turbines of 1.5MW, which amount to a total capacity of 49.5MW. The description of the scenarios is incomplete in section A.2 and A.4.3.	CL-1	OK
ii. Does the proposed CDM project activity involve the alteration of an existing installation or process?	VVM	63	No. It is a newly –built project.	OK	OK
iii. Explanation on how the GHG emission reductions are effected	EB 41	Ann 12	Yes. To utilize the wind power for power generation which will be delivered to the North China Power Grid (NCPG) and displace the power from thermal power plants.	OK	OK
iv. The PP's vies on the contribution of project activity to sustainable development	EB 41	Ann 12	Yes. The contribution to sustainable development is included in Section A.2 of the PDD. ➤ Reduce pollution and GHG emissions	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
			<p>generated from the high-growth, coal-dominated power generation;</p> <ul style="list-style-type: none"> ➤ Create employment opportunities and improve the livelihoods of local people; ➤ Promote local tourism industry; and ➤ Assist China in stimulating and accelerating the commercialization of grid connected renewable energy technologies and markets <p>The evidences regarding above contributions viz. approved FSR had been checked by DOE during interview.</p>		
E. 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	<p>Yes.</p> <p>The project participants involved in the project activity are listed at section A.3 of the PDD.</p> <p>Host Country-China – Datang Laizhou Wind Power Co., Ltd</p> <p>The GSP PDD is silent about the project participant from Annex I Country.</p>	OK	OK
ii. Identification of Host Party			<p>Yes.</p> <p>P.R. China</p>	OK	OK
iii. Indication whethre the Party wishes to be considered as project participant	EB	Ann	No.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
	41	12			
F. In CDM-PDD section A.4.1 are following provided?	EB 41	Ann 12			
i. Technical description, location, host party(ies) and address as required	EB 41	Ann 12	Yes. Tushan Town, Laizhou city, Shandong Province; P.R.C. The turbines (model-FL1500/77) are manufactured by the largest domestic producer - Sinovel Windtec. Co., Ltd	OK	OK
ii. Detailed physical location with unique identification of the project activity (eg. Longitude/latitude) – not to exceed one page	EB 41	Ann 12	The extension of geographical coordinates is required to show the detailed physical location of the project.	CL-2	OK
G. In CDM-PDD section A.4.2 is the list of categories of project activities provided?	EB 41	Ann 12	Scope 1: Energy Industries (renewable sources)	OK	OK
H. 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	Yes. The technology reflects the current good practice in the host country. The WTG is manufactured by the largest domestic producer. PDD is silent about whether the Project activity involves the technology transfer.	CL-3	OK
ii. Explanation of purpose of project activity with	EB	Ann	The project is a newly built wind farm.	-	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
scenario existing prior to the start of project, scope or present activities and the baseline scenario	41	12	Pending on close CL-1 of 3.D.i.		
iii. List and arrangement of the main manufacturing/production technologies, systems and equipments involved	EB 41	Ann 12	Yes. Refer the specification listed in A.4.3. of PDD.	OK	OK
iv. The emissions sources and GHGs involved	EB 41	Ann 12	Yes. To reduce greenhouse gas emissions of CO ₂ produced in NCPG.	OK	OK
I. In CDM-PDD section A.4.4 is the estimation of emission reductions provided as requested in a tabular format?	EB 41	Ann 12	7×3 renewable crediting periods chosen; Annual emission reduction of 101,580tCO ₂ e is estimated for the first crediting period;	OK	OK
J. In CDM-PDD section A.4.5 is Information regarding Public funding provided?	EB 41	Ann 12	Yes. No public founding involved confirmed with the approved FSR.	OK	OK
K. In CDM-PDD section B.1 are following provided?	EB 41	Ann 12			
i. The approved methodology and version number	EB 41	Ann 12	Yes. ACM0002 ver.07 <i>"Consolidated methodology for grid-connected electricity generation from renewable sources"</i>	OK	OK
ii. Any methodologies or tools which the above approved methodology draws upon and their version number	EB 41	Ann 12	As per methodology ACM0002, the latest version of the latest version of "tool to calculate the emission factor for an electricity system" version 1.1 and "tool for demonstration and	CL-4	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
			assessment of additionality" version 5.2 should be used in the PDD.		
L. In CDM-PDD section B.2 is justification of the choice of methodology that the project activity meets each of the applicability conditions provided?	EB 41	Ann 12	Yes.		
M. 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	Yes. Only emission of CO ₂ is considered in baseline emission.	OK	OK
ii. A flow diagram of the project boundary physically delineating the project activity	EB 41	Ann 12	Not illuminated.	CL-5	OK
iii. The flow diagram with all equipments, systems and flows of mass and energy etc	EB 41	Ann 12	No. Refer to above.	-	OK
N. 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	Not applicable. 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

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
O. 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. Investment analysis used for demonstration of the additionality.	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. See PDD B.5, Step 2.	OK	OK
iv. Evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity, if the starting date of the project activity is before the date of validation	EB 41	Ann 12	The start date of the Project is identified before the date of validation. However, the description that CDM was seriously considered in the decision to implement the project activity was not indicate in the initial PDD submitted to DOE for validation. It is required to be demonstrated in the PDD with reliable evidences.	CL-6	OK
P. 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	EB 41	Ann 12	Complying with ACM0002, the “ <i>Tool to calculate the emission factor for an electricity system</i> ” ver. 01.1 is used. (referred to as “ Tool-Grid EF ” in the report)	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
proposed project activity					
ii. Equations used in calculating emission reductions	EB 41	Ann 12	The equations of “Tool-Grid EF” are used.	OK	OK
iii. Explanation and justification for all relevant methodological choices, including different scenarios or cases, options and default values	EB 41	Ann 12	The official data of Chinese power grid issued by NDRC annually are used. (referred to as “ Notification of China Grid EF ” in the report).	OK	OK
Q. In CDM-PDD section B.6.2 are following provided?	EB 41	Ann 12			
i. A compilation of information on the data and parameters that are not monitored throughout the crediting period but that are determined only once and thus remains fixed throughout the crediting period AND that are available when validation is undertaken	EB 41	Ann 12	Yes. Complying with “Tool-Grid EF”, the necessary official data of power grid made publically by NDRC are available and determined during validation.	OK	OK
ii. Explanation and justification for the choice of the source of data	EB 41	Ann 12	The official data i.e. Notification of China Grid EF were based on the data of China Energy Statistical Yearbook and China Power Yearbook, and authorities’ expertise.	OK	OK
iii. Clear and transparent references or additional documentation in Annex 3	EB 41	Ann 12	Yes.	OK	OK
iv. Where values have been measured, a description of the measurement methods and procedures (e.g. which standards have been used), indicated the responsible person/entity having undertaken the measurement, the date of measurement(s) and the	EB 41	Ann 12	It is not applicable in this case as the emission factor is determined ex-ante as per the options in ACM0002.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
measurement results					
R. In CDM-PDD section B.6.3 are following provided?	EB 41	Ann 12			
i. A transparent <i>ex ante</i> calculation of project emissions, baseline emissions (or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the approved methodology	EB 41	Ann 12	Yes. The calculation process is in line with the steps taken prescribed in “Tool-Grid EF” and addressed in PDD B.6.3 and Annex 3.	OK	OK
ii. Documentation how each equation is applied, in a manner that enables the reader to reproduce the calculation	EB 41	Ann 12	Yes. The spreadsheets are used.	OK	OK
iii. Additional background information and or data in Annex 3, including relevant electronic files (i.e. spreadsheets)	EB 41	Ann 12	Yes. The calculation spreadsheet has been presented for re-produce.	OK	OK
S. 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. From 09/2009 to 08/2016 with year-wise data of emission reductions.	OK	OK
T. 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	Yes. <i>EG_y</i> –net electricity supplied to NCPG In addition, <i>EG_{export,y}</i> and <i>EG_{import,y}</i> are listed in	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
			B.7.1.		
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	N/A No other outside source(s) of data should be used.	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 measurement method, who is the responsible person/entity that should undertake the measurements and what is the measurement interval; (i) A description of the QA/QC procedures (if any) that should be applied; (ii) Where relevant: any further comment. Provide any relevant further background documentation in Annex 4.	EB 41	Ann 12	The accuracy class both of the above two meters is 0.5. The measurement interval is on hourly basis. More information on monitoring plan should be given.	CAR-2	OK
U. In CDM-PDD section B.7.2 are following provided?	EB 41	Ann 12			

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
i. A detailed description of the monitoring plan	EB 41	Ann 12	Refer to 3.T.ii.b	-	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. No project emission and leakage need to be considered as per ACM0002	OK	OK
iii. The responsibilities for and institutional arrangements for data collection and archiving	EB 41	Ann 12	Yes.	OK	OK
iv. Indication that the monitoring plan reflect good monitoring practice appropriate to the type of project activity	EB 41	Ann 12	Yes Widely applied in power sector.	OK	OK
v. Relevant further background information in Annex 4	EB 41	Ann 12	Not addressed separately. Same to PDD Section B7.2	OK	OK
V. In CDM-PDD section B.8 are following provided?	EB 41	Ann 12	Yes	OK	OK
i. Date of completion of the application of the methodology to the project activity study in DD/MM/YYYY	EB 41	Ann 12	Yes On 23/04/2009 in the final PDD.	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. China National Water Resources & Electric Power Materials & Equipment Co., Ltd. (CWEME) registered in Beijing P.R.China.	OK	OK
iii. Indication if the person/entity is also a project participant listed in Annex 1	EB 41	Ann 12	No, PDD is silent about whether the person /entity described in section B.8 of the PDD is also	CL-7	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
			a project participant.		
W. In CDM-PDD section C.1.1 are following provided?	EB 41	Ann 12			
i. The starting date of a CDM project activity, which is the earliest of the date(s) on which the implementation or construction or real action of a project activity begins/has begun (EB33, Para 76/CDM Glossary of terms/EB41, Para 67)	EB 41	Ann 12	The starting date of the project activity should be identified following the latest CDM Glossary with clear evidence.	CAR-3	OK
ii. A description of how this start date has been determined, and a description of the evidence available to support this start date	EB 41	Ann 12	Refer to 3.VV.i	-	OK
iii. If this starting date is earlier than the date of publication of the CDM-PDD for global stakeholder consultation by a DOE, description in Section B.5 contain a of how the benefits of the CDM were seriously considered prior to the starting date (EB41, Para 67).	EB 41	Ann 12	No, refer to 3.O.iv.	-	OK
X. 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. 21 years (including 1 construction year).	OK	OK
Y. In CDM-PDD section C.2 is it stated whether the project activity will use a renewable or a fixed crediting period and is C.2.1 or C.2.2 completed accordingly?	EB 41	Ann 12			
Z. In CDM-PDD section C.2.1 is it indicated that each crediting period shall be at most 7 years and may be	EB 41	Ann 12	Yes. 3x7 years	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
renewed at most two times, provided that, for each renewal, a designated operational entity determines and informs the Executive Board that the original project baseline is still valid or has been updated taking account of new data where applicable?			This baseline determination is for the first 7 years.		
AA. In CDM-PDD section C.2.1.1 are dates in the following format: (DD/MM/YYYY) provided?	EB 41	Ann 12	Yes. 01/01/2009 in the GSP PDD and revised as 01/10/2009 in current version.	OK	OK
BB. In CDM-PDD section C.2.1.2 is the length of the first crediting period in years and months provided?	EB 41	Ann 12	Yes. 7 y and 0 m	OK	OK
CC. In CDM-PDD section C.2.2 is the fixed crediting period at most ten (10) years provided?	EB 41	Ann 12	N/A.	OK	OK
DD. In CDM-PDD section C.2.2.1 are the dates provided in the following format: (DD/MM/YYYY)?	EB 41	Ann 12	N/A.	OK	OK
EE. In CDM-PDD section C.2.2.2 is the length of the crediting period in years and months Provided?	EB 41	Ann 12	N/A.	OK	OK
FF. In CDM-PDD section D.2 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 conclusion stated.	OK	OK
GG. In CDM-PDD section E.1 are the following	EB	Ann			

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
provided?	41	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 stakeholders have been invited via distribution questionnaires.	OK	OK
ii. The project activity is described in a manner, which allows the local stakeholders to understand the project activity, taking into account confidentiality provisions of the CDM modalities and procedures.	EB 41	Ann 12	Yes. By distributing questionnaires	OK	OK
iii. The local stakeholder process has been completed before submitting the proposed project activity to the DOE for validation.	EB 41	Ann 12	PDD is silent about when the local stakeholders' process was conducted.	CL-8	OK
HH. 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. It covers local habitants nearby the Tushan Town.	OK	OK
ii. A summary of this comments.	EB 41	Ann 12	Yes. See PDD-E.2	OK	OK
II. 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	No measure need to be considered.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
JJ. 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	The PP name is different from A.3.	CL-9	OK
KK. In CDM-PDD Annex 2 is information from Parties included in Annex I on sources of public funding for the project activity which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties provided?	EB 41	Ann 12	Yes.	OK	OK
LL. 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
MM. In CDM-PDD Annex 4 is the background information used in the application of the monitoring methodology provided?	EB 41	Ann 12	No. Refer to PDD-B.7.2.	OK	OK
4. Baseline and monitoring methodology					
A. General requirement					
a. Is the baseline and monitoring methodologies selected by the project participants previously	VVM	65	Yes.	OK	OK

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approved by the CDM Executive Board?			The proposed project is falling into the category "grid-connected electricity generation from renewable sources" "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" ACM0002 version 07 valid from 14/12/2007 was selected, which complies with the methodologies previously approved by the CDM EB.		
b. Is the selected methodology applicable to the project activity?	VVM	66	Yes, the methodology AM0002 Ver. 07 applies to project activities that generate electricity from renewable energy sources. The applicability has been properly elaborated in Section B.2. of the PDD. Viz. <ul style="list-style-type: none"> ➤ the project involves the electricity capacity additions from the wind power plant; ➤ the project does not involve switching from fossil fuels to renewable energy at project site; ➤ The geographic and system boundaries of North China Power Grid (NCPG) can be clearly identified and the information of this grid is available. 	OK	OK
c. Had the selected methodology been correctly applied?	VVM	66	Yes. Refer to (4.B) below	OK	OK
d. Had the selected methodology been correctly applied with respect to project boundary?	VVM	67	Refer to (4.C) below	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
e. Had the selected methodology been correctly applied with respect to baseline identification?	VVM	67	Refer to (4.D) below	OK	OK
f. Had the selected methodology been correctly applied with respect to Algorithms and/or formulae used to determine emission reductions?	VVM	67	Refer to (4.E) below	OK	OK
g. Had the selected methodology been correctly applied with respect to additionality?	VVM	67	Yes.	OK	OK
B. Applicability of the selected methodology to the project activity					
a. Is the selected baseline and monitoring methodology, previously approved by the CDM Executive Board, applicable to the project activity?	VVM	68	Yes. ACM0002 version 07 Valid from 14/12/2007 to August 2009	OK	OK
b. Is the methodology correctly quoted?	VVM	69	Yes.	OK	OK
c. Are the applicability conditions of the methodology met?	VVM	70	Yes, refer to 4.A.b above.	OK	OK
d. Is the project activity expected to result in emissions other than those allowed by the methodology?	VVM	70	No other emissions other than CO ₂ are identified.	OK	OK
e. 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	70	Yes.	OK	OK
f. If yes, was the PDD cross checked against the other sources to confirm that the project activity meets the applicability conditions of the methodology? (provide the reference to these choices)	VVM	70	Yes. http://www.ndrc.gov.cn/zcfb/zcfbtz/2008tongzhi/t20080813_230718.htm	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
g. Can a determination regarding the applicability of the selected methodology to the proposed CDM project activity be made?	VVM	71	Yes.	OK	OK
h. If no, clarification of the methodology was requested, in accordance with the guidance provided by the CDM Executive Board?	VVM	71	N/A	OK	OK
i. If answer to (4.B.c) above is “no”, revision or deviation from the methodology was requested, in accordance with the guidance provided by the CDM Executive Board?	VVM	72	N/A	OK	OK
C. Project boundary					
a. Does the PDD correctly describe the project boundary, including the physical delineation of the proposed CDM project activity included within the project boundary for the purpose of calculating project and baseline emissions for the proposed CDM project activity?	VVM	77	Yes. In Section B.3 of the PDD. The Project boundary is clearly identified that includes the physical, geographical site of the project activity and all power plants connected physically to the North China Power Grid (NCPG) that the project is connected to. This is in line with the delineation of grid boundaries as provided by the DNA of China. The defined project boundary is in line with ACM0002 ver 07. And all emission sources and GHGs have been included in the project boundary.	OK	OK
b. Is the delineation in the PDD of the project boundary correct?	VVM	78	Yes.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
c. Does the delineation in the PDD of the project boundary meet the requirements of the selected baseline?	VVM	78	Yes. Clearly identified.	OK	OK
d. Have all sources and GHGs required by the methodology been included within the project boundary?	VVM	78	Yes. For wind power projects only CO ₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity.	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	78	Not applicable	OK	OK
f. If yes, have the project participants justified that choice?	VVM	78	Not applicable	OK	OK
g. If yes, is the justification provided reasonable? (provide reference to the supporting documented evidence provided by the project participants)	VVM	78	Not applicable	OK	OK
D. Baseline identification					
a. Does the PDD identify the baseline for the proposed CDM project activity, defined as the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed CDM project activity?	VVM	80	Yes. The baseline scenario is clearly identified in section B.4. in accordance with ACM0002 ver 07. And the baseline scenario is “ <i>electricity delivered to the grid by the proposed project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources within the NCPG, as reflected in the combined margin (CM)</i> ”	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
			<i>calculated</i> .		
b. Has any procedure contained in the methodology to identify the most reasonable baseline scenario, been correctly applied?	VVM	81	Not applicable, as methodology ACM0002 prescribes the baseline scenario and no further analysis required, therefore, there is no need to take steps to identify the baseline scenarios.	OK	OK
c. Does the selected methodology require use of tools (such as the “Tool for the demonstration and assessment of additionality” and the “Combined tool to identify the baseline scenario and demonstrate additionality”) to establish the baseline scenario?	VVM	81	No.	OK	OK
d. If yes, was the methodology consulted on the application of these tools? (In such cases, the guidance in the methodology shall supersede the tool.)	VVM	81	N/A	OK	OK
e. Does the methodology require several alternative scenarios to be considered in the identification of the most reasonable baseline scenario?	VVM	82	No. Refer to (4.D.b) above	OK	OK
f. 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	82	N/A.	OK	OK
g. Has any reasonable alternative scenario been excluded?	VVM	82	N/A . Refer to (4.D.b) above	OK	OK
h. Are the documents and sources referred to in the PDD correctly quoted and interpreted?	VVM	83	N/A. Refer to (4.D.b) above	OK	OK
i. Was the information provided in the PDD cross	VVM	83	N/A.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
checked with other verifiable and credible sources, such as local expert opinion, if available? (identify the sources)					
j. Have all applicable CDM requirements been taken into account in the identification of the baseline scenario for the proposed CDM project activity?	VVM	84	N/A.	OK	OK
k. 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	84	Refer to 4.D.g. above	OK	OK
l. 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	85	Yes. It is identified in the PDD B.4 that " <i>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 sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system".</i> "	OK	OK
<i>E. Algorithms and/or formulae used to determine emission reductions</i>					
a. Do the steps taken and equations applied to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected baseline and monitoring?	VVM	88	Yes. Tool to calculate the emission factor for an electricity system are required to be used by ACM0002.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
b. Have the equations and parameters in the PDD been correctly applied with respect those in the select approved methodology?	VVM	89	The steps and equations applied are consistent with the Tool and ACM0002.	OK	OK
c. Does the methodology provide for selection between different options for equations or parameters?	VVM	89	Options in Step 1, 2 and 3 are used for OM factor determination. The PDD is silent about electricity imports to NCPG and as mentioned in the step 3 of "Tool to calculate the emission factor for an electricity system", option C should only be used if only nuclear and renewable power generation are considered as low-cost/must-run power sources and if the quantity of electricity supplied to the grid by these sources is known. However, PDD is silent about it.	GL-10	OK
d. 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	89	Yes. The relevant justifications in Step 1, 2 and 3.	OK	OK
e. If yes, have correct equations and parameters been used, in accordance with the methodology selected?	VVM	89	Yes.	OK	OK
f. Will data and parameters be monitored throughout the crediting period of the proposed CDM project activity?	VVM	90	Not applicable as the emission factor is determined ex ante for the Project.	OK	OK
g. If no, and these data and parameters will remain fixed throughout the crediting period, are all data sources and assumptions:	VVM	90			

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
i. Appropriate and correct?	VVM	90	Yes, the data issued by China's DNA was used, which is appropriate and correct.	OK	OK
ii. Applicable to the proposed CDM project activity?	VVM	90	Yes.	OK	OK
iii. Resulting in a conservative estimate of the emission reductions?	VVM	90	Yes.	OK	OK
h. Will data and parameters be monitored on implementation and hence become available only after validation of the project activity?	VVM	90	Not applicable	OK	OK
i. If yes, are the estimates provided in the PDD for these data and parameters reasonable?	VVM	90	Not applicable	OK	OK
5. Additionality of a project activity					
a. Does the PDD describe how a proposed CDM project activity is additional?	VVM	93	Pending close out all Findings in this section.	-	OK
b. Does the CDM-PDD state the latest version of the additionality tool being used?	VVM	94	Yes. The approved "Tool for the Demonstration and Assessment of Additionality" version 05.2 is used in the revised PDD.	OK	OK
c. Were the steps taken of the "Tool for the Demonstration and Assessment of Additionality" to assess additionality used:	EB 39	Ann 10	Step 1(identification of alternatives of the project activity), step 2(investment analysis) and step 4(common practice analysis) of "Tool for the Demonstration and Assessment of Additionality" were used. While step 3 (barrier analysis) was not used.	OK	OK
i. Identification of alternatives to the project activity?	EB	Ann	Yes, all plausible and credible alternative		OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
(Step 1)	39	10	<p>scenarios have been identified in the PDD, including:</p> <p><u>Alternative I:</u> The project activity undertaken without being registered as a CDM project activity;</p> <p><u>Alternative II:</u> Construction of a coal-fired power plant with equivalent installed capacity or annual electricity generation;</p> <p><u>Alternative III:</u> Construction of a power plant using other sources of renewable energy with equivalent installed capacity or annual electricity generation;</p> <p><u>Alternative IV:</u> Provision of an equivalent amount of annual power output by the grid into which the Project is connected.</p> <p>Other renewable energies, such as Solar PV and geothermal are supposed to be included in Alternative III.</p>	GL-14	
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? (Step 2)	EB 39	Ann 10	<p>Yes, (2) is used.</p> <p>The appropriate analysis method is clearly discussed and determined in the PDD.</p> <p>Option III (benchmark analysis) is chosen for investment analysis.</p>	OK	OK
iii. Barriers analysis?	EB 39	Ann 10	Not used.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
iv. Common practice analysis?	EB 39	Ann 10	Yes. The Project is a large scale wind farm located in Shandong Province. As projects of same type developed within the same region face a similar regulatory framework that makes them comparable. Therefore, activities similar to the Project should be wind farm located in Shandong Province with installed capacity of larger than 15MW.	OK	OK
d. In step 1 (i) have all the sub-steps as below been followed?	EB 39	Ann 10	Yes.	OK	OK
i. Sub-step 1a: Define alternatives to the project activity	EB 39	Ann 10	Refer to 5.c.ii.	-	OK
ii. Sub-step 1b: Consistency with mandatory laws and regulations	EB 39	Ann 10	Yes. The relative regulations and laws are clearly discussed for all other scenarios in the PDD. According to Chinese power regulations, construction of a fossil fuel-fired power plant of less than 135 MW are prohibited in the areas covered by large grids according to current regulations in China. Hence the alternative II- <i>Construction of a coal-fired power plant with equivalent installed capacity or annual electricity generation</i> is not a realistic and credible alternative. The left alternatives are alternative I and alternative IV.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
e. Have the following alternatives been included while defining alternatives as per sub-step 1a?	EB 39	Ann 10	Yes.	OK	OK
i. (a) The proposed project activity undertaken without being registered as a CDM project activity;	EB 39	Ann 10	Yes. Refer to 5.c.i. above.	OK	OK
ii. (b) Other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality, properties and application areas, taking into account, where relevant, examples of scenarios identified in the underlying methodology;	EB 39	Ann 10	Yes. Refer to 5.c.i. above.	OK	OK
iii. (c) If applicable, continuation of the current situation (no project activity or other alternatives undertaken).	EB 39	Ann 10	Yes. Refer to 5.c.i. above.	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 II and III are correctly excluded. Therefore Alternative I and Alternative IV are analyzed in Step 2 as potential baseline alternatives.	OK	OK
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	Yes. Alternative II) is strictly regulated for installation per the current regulations in China i.e.: <i>Notice on Strictly Controlling the Manufacturing and Construction of Small-scale Fuel-fired Generators.</i>	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
			Consequently, alternative II is excluded.		
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	Yes. Alternative II, Construction of a coal-fired power plant with equivalent installed capacity or annual electricity generation, is enforced and generally that noncompliance with those requirements is not appeared in the country.	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 regulations done correctly? Please state the outcome.	EB 39	Ann 10	Yes. Alternative II is not consistent with mandatory laws and regulations	OK	OK
j. Has PP selected Step 2 (Investment analysis) or Step 3 (Barrier analysis) or both Steps 2 and 3?	EB 39	Ann 10	Yes.	OK	OK
k. In step 2, have all the sub-steps as below been followed?	EB 39	Ann 10	Yes.	OK	OK
i. Sub-step 2a: Determine appropriate analysis method;	EB 39	Ann 10	Yes. The appropriate analysis method is clearly discussed and determined in the PDD. Option III (benchmark analysis) is chosen for investment analysis.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
ii. Sub-step 2b: Option I. Apply simple cost analysis;	EB 39	Ann 10	It is considered not applicable to the Project since the proposed wind power project generates financial and economic benefits through the sales of electricity other than CDM related income.	OK	OK
iii. Sub-step 2b: Option II. Apply investment comparison analysis;	EB 39	Ann 10	It is considered not applicable to the Project since the baseline scenario is not a new investment project.	OK	OK
iv. Sub-step 2b: Option III. Apply benchmark analysis;	EB 39	Ann 10	The benchmark analysis method based on Project IRR is chosen.	OK	OK
v. Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III);	EB 39	Ann 10	Yes.	OK	OK
vi. Sub-step 2d: Sensitivity analysis (only applicable to Options II and III).	EB 39	Ann 10	Yes.	OK	OK
I. In sub-step 2a has the determination of appropriate method of analysis done as per the guidance as below?	EB 39	Ann 10	Yes.	OK	OK
i. Simple cost analysis if the CDM project activity and the alternatives identified in Step 1 generate no financial or economic benefits other than CDM related income (Option I).	EB 39	Ann 10	Yes. Excluded as the proposed project will earn revenues from not only the CDM but also the electricity output.	OK	OK
ii. Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis (Option III). Specify option used with justification.	EB 39	Ann 10	Yes. The baseline scenario of the Project is to supply	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
			equivalent annual power output from the Grid rather than a new investment project. Thus the Option III is chosen.		
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 Step1 and demonstrate that there is at least one alternative which is less costly than the project activity.	EB 39	Ann 10	Not applicable.	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	Not applicable.	OK	OK
o. Has the below guideline followed for Sub-step 2b: Option III. Apply benchmark analysis?	EB 39	Ann 10		OK	OK
i. Identify the financial/economic indicator, such as IRR, most suitable for the project type and decision context.	EB 39	Ann 10	Yes. IRR was 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	EB 39	Ann 10	Yes, the financial analysis was based on parameters that are standard in the market, considering the specific characteristics of the project type, i.e. wind power.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
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.					
iii. Discount rates and benchmarks shall be derived from: (a) Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial) expert or documented by official publicly available financial data; (b) Estimates of the cost of financing and required return on capital (e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned), based on bankers views and private equity investors/funds' required return on comparable projects; (c) A company internal benchmark (weighted average capital cost of the company), only in the particular case referred to above in 2. The project developers shall demonstrate that this benchmark has been consistently used in the past, i.e. that project activities under similar conditions developed by the same company used the same benchmark; (d) Government/official approved benchmark where such benchmarks are used for investment decisions; (e) Any other indicators, if the project participants can demonstrate that the above	EB 39	Ann 10	Yes. Derived from (d) With reference to <i>Interim Rules on Economic Assessment of Electric Engineering Retrofit Projects</i> , the financial benchmark IRR of Chinese electricity industry is 8% on Project, which has been used widely in feasibility studies of new power plants, including wind power projects in China.	OK	OK

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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	Yes.	OK	OK
i. Calculate the suitable financial indicator for the proposed CDM project activity and, in the case of Option II above, for the other alternatives. Include all relevant costs (including, for example, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but possibly including inter alia subsidies/fiscal incentives, ODA, etc, where applicable), and, as appropriate, non-market cost and benefits in the case of public investors if this is standard practice for the selection of public investments in the host country.	EB 39	Ann 10	Yes.	OK	OK
ii. Present the investment analysis in a transparent manner and provide all the relevant assumptions, preferably in the CDM-PDD, or in separate annexes to the CDM-PDD.	EB 39	Ann 10	Yes. IRR sheet has been provided and assessed satisfactory.	OK	OK
iii. Justify and/or cite assumptions.	EB 39	Ann 10	Yes. All indicators are from the approved FSR other than the tariff. The VAT value should be recalculated instead of use the one in the FSR directly since the tariff used in the PDD is not	CL-12	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
			inconsistent with the one in the FSR.		
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. 6.68% VS benchmark of 8%	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. Four financial parameters, i.e. static total investment, Annual O&M cost, bus-bar Tariff and Annual output delivered to the grid, are chosen for sensitive analysis with variation range of 10%.	OK	OK
r. Has the outcome of Step 2 clearly mentioned with justification?	EB 39	Ann 10	As shown in the PDD, three indicators, static total investment, tariff and annual output will exceed the benchmark (8%) when the variables close to $\pm 10\%$. And it had been elaborated in the PDD the variables is impossible.	OK	OK
s. In step 4: Common practise analysis have all the sub-steps as below followed?	EB 39	Ann 10		OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
i. Sub-step 4a: Analyze other activities similar to the proposed project activity;	EB 39	Ann 10	The projects related to CDM should not be identified as similar projects.	CAR-4	OK
ii. Sub-step 4b: Discuss any similar Options that are occurring.	EB 39	Ann 10	Pending on close CAR-4	-	OK
t. 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	Yes. The Criteria used is that: Technology or industry type: wind farms; Geographical scope: Shandong Province ; Installed capacity range: larger than 15MW as the project is a large scale project.	OK	OK
u. Has the below guideline followed for Sub-step 4b: Discuss any similar Options that are occurring? If similar activities are identified, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially/economically unattractive or subject to barriers. This can be done by comparing the proposed project activity to the other similar activities, and pointing out and explaining essential distinctions between them that explain why the similar activities enjoyed certain benefits that	EB 39	Ann 10	Yes. The Shandong Changdao21.45MW Wind Farm has been approved in 1998 by the Shandong Province Planning Commission; the German Government offered favorable terms, including a lower soft loan. The Jimo Qingdao Huawei Wind Farm, a joint-venture project between Qingdao Dongyi Co., Ltd and Nordex Energy GmbH, started relatively earlier. In total there are 15 wind turbines	OK	OK

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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.			installed and providing a total capacity of 16.4MW. In addition, in China, the Chinese-foreign joint-venture enterprise has the favorable taxation policy compared with domestic company in terms of lower income tax and so on.		
v. Has the outcome from Step 4 clearly mentioned in PDD?	EB 39	Ann 10	Yes. The Project is not common practice within the region	OK	OK
w. Has it been proved that the project is additional?	EB 39	Ann 10	Yes.	OK	OK
A. Prior consideration of the clean development mechanism					
a. Is the project activity start date prior to the date of publication of the PDD for stakeholder comments?	VVM	96	Yes. As stated in section C of revised PDD, the starting date of the project is defined as 27/01/2008, which is prior to 14/07/2008 the validation commissioned.	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	96	Yes, as interviewed with PP, CDM benefits were considered necessary in the decision to undertake the project as a proposed CDM project activity. Pending on close CL-6 in above 3.O.iv	-	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	97	No, pending on close CAR-3	-	OK
d. Does the project activity require construction, retrofit or other modifications?	VVM	97	Not required.	OK	OK
e. If yes, is it ensured that the date of commissioning cannot be considered as the project activity start date?	VVM	97	N/A.	OK	OK
f. Is it a new project activity (project activities with starting date on or after 02 August 2008) or an existing project activity (project activities with a start date before 02 August 2008)?	VVM	98	It is an existing 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 Executive Board before the project activity start date, had the PP informed the Host Party DNA and/or 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/or UNFCCC secretariat).	VVM	99	Not applicable	OK	OK
h. For an existing project activity, for which the start date is prior to the date of publication of the PDD for global stakeholder consultation, are the following	VVM	100			

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
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	100	Pending close CL-6 in above 3.O,iv.	-	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?			See above	-	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	100	PDD is silent about the continuing and real actions were taken to secure CDM status for the project in parallel with its implementation.	CAR-5	OK
(a). contract with consultants for CDM/PDD/methodology services?	VVM	100	Yes, contract with CWEME on 02/04/2008.	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	100	Yes, ERPA signed with Credit Suisse International on 15/04/2008	OK	OK
(c). evidence of agreements or negotiations with a DOE for validation services?	VVM	100	Yes. Kept by BV Certification.	OK	OK
(d). submission of a new methodology to the CDM Executive Board?	VVM	100	Not applicable	OK	OK

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(e). publication in newspaper?	VVM	100	Not applicable	OK	OK
(f). interviews with DNA?	VVM	100	Yes, the information of the project can be found from DNA website: http://cdm.ccchina.gov.cn/website/CDM/pdf/Item_new/Item_new3425.pdf	OK	OK
(g). earlier correspondence on the project with the DNA or the UNFCCC secretariat?	VVM	100	Not applicable	OK	OK
B. Identification of alternatives					
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	103	Yes. It has prescribed the baseline scenario i.e. 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 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 most realistic baseline scenario?	VVM	103	Not applicable	OK	OK
c. Does the list of alternatives given in the PDD ensure that:	VVM	104	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

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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	104	N.A.	OK	OK
ii. the list contains all plausible alternatives that the DOE, on the basis of its local and sectoral knowledge, considers to be viable means of supplying the outputs or services that are to be supplied by the proposed CDM project activity?	VVM	104	N.A.	OK	OK
iii. the alternatives comply with all applicable and enforced legislation?	VVM	104	N.A.	OK	OK
C. Investment analysis					
a. Has investment analysis been used to demonstrate the additionality of the proposed CDM project activity?	VVM	106	Yes.	OK	OK
b. If yes, does the PDD provide evidence that the proposed CDM project activity would not be:	VVM	106			
i. the most economically or financially attractive alternative?	VVM	106	Not applied.	-	OK
ii. economically or financially feasible, without the revenue from the sale of certified emission reductions (CERs)?	VVM	106	Concluded based on the IRR calculation of 6.68%, which is less than the benchmark of 8%.	OK	OK
c. Was this shown by one of the following approaches?	VVM	107	Yes.	OK	OK
i. Demonstrate that the proposed CDM project activity would produce no financial or economic	VVM	107	Not applicable.	OK	OK

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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.					
ii. The proposed CDM project activity is less economically or financially attractive than at least one other credible and realistic alternative.	VVM	107	Not applicable.	OK	OK
iii. The financial returns of the proposed CDM project activity would be insufficient to justify the required investment.	VVM	107	Yes.	OK	OK
d. Is the period of assessment limited to the proposed crediting period of the CDM project activity?	EB 41	Ann 45	No. The period of assessment covers the 3x7 crediting period of the Project.	OK	OK
e. Does the project IRR and equity IRR calculations reflect the period of expected operation of the underlying project activity (technical lifetime), or - if a shorter period is chosen - include the fair value of the project activity assets at the end of the assessment period?	EB 41	Ann 45	Yes. 20 years for operation period per the approved FSR. The operation period of 20 years is widely applied in Chinese wind Power Sector.	OK	OK
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 41	Ann 45	Yes.	OK	OK

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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 41	Ann 45	Yes.	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 41	Ann 45	9,780 thousand RMB same as in the approved FSR.	OK	OK
i. Has the fair value been calculated in accordance with local accounting regulations where available, or international best practice?	EB 41	Ann 45	Yes.	OK	OK
j. 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	109	Yes. All parameters and assumption used in calculating the relevant financial indicator are accurate and suitable.	OK	OK
k. Were the parameters cross-checked against third-party or publicly available sources, such as invoices or price indices?	VVM	109	Yes.	OK	OK
l. Were feasibility reports, public announcements and annual financial reports related to the proposed CDM project activity and the project participants reviewed?	VVM	109	The FSR provided has been reviewed	OK	OK
m. Was the correctness of computations carried out and documented by the project participants assessed?	VVM	109	Yes	OK	OK
n. Was the sensitivity analysis by the project participants to determine under what conditions	VVM	109	Yes. Project IRR will achieve benchmark (8%) when the variables changed, i.e.	OK	OK

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variations in the result would occur, and the likelihood of these conditions assessed?			-Static total investment decrease by 9.3% -Tariff (excl. VAT) increase by 9.45% -Annual output increase by 9.55% -Annual O&M cost decrease by 37.7% And PDD had discussed that above variations would not be occurred by credible evidence.		
o. 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	110			
i. assessing previous investment decisions by the project participants involved?	VVM	110	Yes.	OK	OK
ii. determining whether the same benchmark has been applied?	VVM	110	The benchmark of 8% is widely used for wind power projects similar to the Project in China.	OK	OK
iii. determining if there are verifiable circumstances that have led to a change in the benchmark?	VVM	110	No other benchmark rate can be applied in China power sector.	OK	OK
p. Did the project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed project activities?	VVM	111	Yes. Except the bus-bar tariff.	OK	OK
q. If yes: (EB38 para.54)	VVM	111			
(a).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	VVM	111	Yes, as interviewed, the PP's final decision to proceed with the investment in the Project has	OK	OK

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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?			been made based on the FSR finalized in 07/2007 and decided to invest the project soon on 20/08/2007 with consideration of CDM revenues. BVC was therefore confident that it is unlikely in the context of the underlying project activity that the input values would have materially changed.		
(b). Are the values used in the PDD and associated annexes fully consistent with the FSR? If not, was the appropriateness of the values validated?	VVM	111	All parameters except tariff used in the PDD are fully consistent with the FSR. The evidence on tariff used in the PDD should be provided and the difference of the tariff between the FSR and IRR calculation sheet should be clarified.	GL-13	OK
(c). 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	111	Yes, the already signed contracts were used to crosscheck the total investment and the tariff approval of the Project was used to crosscheck the tariff.	OK	OK
D. Barrier analysis					
a. Has barrier analysis been used to demonstrated the additionality of the proposed CDM project activity?	VVM	113	Not applied in the PDD.	OK	OK
E. Common practice analysis					
a. Is this a large-scale, or first-of-its kind small-scale project activity?	VVM	117	a large-scale	OK	OK
b. If yes, was common practice analysis carried out as	VVM	117	Yes.	OK	OK

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a credibility check of the other available evidence used by the project participants to demonstrate additionality?					
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	118	Yes. The Project is located in Shandong Province. As projects of same type developed within the same region face a similar regulatory framework that makes them comparable. Therefore, activities similar to the Project should be wind farm located in Shandong Province.	OK	OK
d. Was a region other than the entire host country chosen?	VVM	118	Yes. Shandong Province	OK	OK
e. If yes, was the explanation why this region is more appropriate assessed?	VVM	118	Shandong is large enough for analysis.	OK	OK
f. Using official sources and local and industry expertise, was it determined to what extent similar and operational projects (e.g., using similar technology or practice), other than CDM project activities, have been undertaken in the defined region?	VVM	118	Pending on close CAR-4 in above 5.s.i.	-	OK
g. Are similar and operational projects, other than CDM project activities, already "widely observed and commonly carried out" in the defined region?	VVM	118	Two similar project activities were identified: Shandong Changdao Wind Farm Shandong Jimo Qiangdao Huawei Wind Farm	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
h. If yes, was it assessed whether there are essential distinctions between the proposed CDM project activity and the other similar activities?	VVM	118	<p>Yes.</p> <p>The Shandong Changdao 21.45MW Wind Farm has been approved in 1998 by the Shandong Province Planning Commission; the German Government offered favorable terms, including a lower soft loan.</p> <p>The Jimo Qingdao Huawei Wind Farm, a joint-venture project between Qingdao Dongyi Co., Ltd and Nordex Energy GmbH, started relatively earlier. In total there are 15 wind turbines installed and providing a total capacity of 16.4MW. In addition, in China, the Chinese-foreign joint-venture enterprise has the favourable taxation policy compared with domestic company in terms of lower income tax and so on.</p>	OK	OK
6. Monitoring plan					
a. Does the PDD include a monitoring plan?	VVM	120	Yes.	OK	OK
b. Is this monitoring plan based on the approved monitoring methodology applied to the proposed CDM project activity?	VVM	120	Yes.	OK	OK
c. Were the list of parameters required by the the selected methodology identified?	VVM	121	Yes, net electricity generated should be monitored.	OK	OK
d. Does the monitoring plan contains all necessary parameters?	VVM	121	Yes.	OK	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
			Electricity supplied by the Project to the grid and Electricity imported by the Project from the grid will be monitored to get the net electricity generated.		
e. Are the parameters clearly described?	VVM	121	Yes	OK	OK
f. Does the means of monitoring described in the plan comply with the requirements of the methodology?	VVM	121	Yes.	OK	OK
g. Are the monitoring arrangements described in the monitoring plan feasible within the project design?	VVM	121	Yes. In line with local practices in power sector	OK	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	121	Pending on close CAR-2 of above 3.T.ii.b.	-	OK
i. data management procedures?	VVM	121	Yes. The procedures are appropriate and practicable.	OK	OK
ii. quality assurance procedures?	VVM	121	Yes. The procedures are appropriate and practicable.	OK	OK
iii. quality control procedures?	VVM	121	Yes. The procedures are appropriate and practicable.	OK	OK
7. Sustainable development					
a. Does the CDM project activity assists Parties not	VVM	123	Pending close out above CAR-1	-	OK

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl.	Final Concl.
included in Annex I to the Convention in achieving sustainable development?					
b. Does the letter of approval by the DNA of the host Party confirm the contribution of the proposed CDM project activity to the sustainable development of the host Party?	VVM	124	Pending close out above CAR-1	-	OK
8. Local stakeholder consultation					
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	126	Yes. The local stakeholders including local villagers, officers of EPA were invited by the PP; 23 pieces of questionnaires were distributed and 23 returned with a response rate of 100%. However, the information given in the PDD is not sufficient. Pending on close CL-8.	-	OK
b. Have comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity been invited?	VVM	127	Yes.	OK	OK
c. Is the summary of the comments received as provided in the PDD complete?	VVM	127	Yes.	OK	OK
d. Have the project participants taken due account of any comments received and described this process in the PDD?	VVM	127	No. As Section E.3.of PDD addressed, there is no need to be modified the project due to the comments received.	OK	OK
9. Environmental impacts					

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	129	Yes. EIA and its approval made by local EPA are presented.	OK	OK
b. Have the project participants undertaken an analysis of environmental impacts?	VVM	130	Yes. EIA work out by Laizhou Lvnuo Enviornmental and Scientific Technology Research Co., Ltd. in 2007.	OK	OK
c. Does the host Party require an environmental impact assessment?	VVM	130	Yes.	OK	OK
d. If yes, have the environmental impact assessment approved by local government?	VVM	130	Yes. Approved on 02/11/2007 by local EPA	OK	OK

VM-CLEAN DEVELOPMENT MECHANISM VALIDATION AND VERIFICATION MANUAL-Version 01-EB 44, Annex 03- dated 28/11/2008
 EB 39 Annex 10- TOOL FOR THE DEMONSTRATION AND ASSESSMENT OF ADDITIONALITY-Version 5-dated 26/08/2008
 EB 41 ANNEX 45- GUIDANCE ON THE ASSESSMENT OF INVESTMENT ANALYSIS-VERSION 02-DATED 26/08/2008

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 Please provide LoA from DNA of China	1.A	LOA from China DNA provided.	The LoA issued in 11/2008 by DNA of China. CAR-1 is hence closed.
CAR-2 More information on monitoring plan should be given.	3.T.ii.b	The information on the metering equipment and monitoring structured had been included in the revised PDD.	The revised monitoring plan is sufficient. CAR-2 is hence closed.
CAR-3 The detailed timeline is required to identify the starting date of the project activity and the documents to show the starting date of the project activity should be provided.	3.W.i	A detailed time was given in section B.5 of revised PDD, and signed date of construction service contract of 27/01/2008 was identified the starting date of the Project.	The timeline had been checked with provided evidence and found fully consistent with each other. CAR-3 is hence closed.
CAR-4 As per the “ <i>Tool for the demonstration and assessment of additionality</i> ”, the CDM project activities are not required to be included in the common practice analysis.	5.s.i	The common practice analysis has been improved without consideration of CDM project activities.	The revised PDD has checked and found satisfactory. CAR-4 is hence closed.
CAR-5 PDD is silent about the continuing and real actions were taken to secure CDM status for the project in parallel with its	5.A.h.ii	The timeline in section B.5 of revised PDD shows that the continuing and real actions were taken to secure CDM	The timeline had been checked with provided evidence and found fully consistent with each

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
implementation.		status for the project in parallel with its implementation.	other. CAR-5 is hence closed.
CL-1 The description of the scenarios is incomplete in section A.2 and A.4.3 of PDD. please update.	3.D.i	The baseline scenario of the Project is NCPG providing the same electricity service as the proposed project, which is same as the scenario existing prior to the start of the Project.	The revised PDD has been checked with available and found satisfactory. CL-1 is hence closed.
CL-2 The extension of geographical coordinates is required to show the detailed physical location of the project.	3.F.ii	The geographical coordinates of the project is east longitude 119°43'34"~119°46'7" and north latitude 37°06'17"~37°08'26", which has been added in the revised PDD.	The revised PDD has checked and found satisfactory. CL-2 is hence closed.
CL-3 PDD is silent about whether the Project activity involves the technology transfer.	3.H.i	As indicated in the revised PDD, the project activity does not involve technology transfer.	The revised PDD has been checked and found satisfactory. CL-3 is hence closed.
CL-4 As per methodology ACM0002, the latest version of the latest version of "tool to calculate the emission factor for an electricity system" version 1.1 and "tool for demonstration and assessment of additionality" version 5.2 should be used in the PDD.	3.K.ii	The "tool to calculate the emission factor for an electricity system" version 1.1 and "tool for demonstration and assessment of additionality" version 5.2 had been used in the revised PDD.	The revised PDD has been checked and found satisfactory. CL-4 is hence closed.

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
CL-5 As per latest CDM-PDD guideline, a flow diagram of the project boundary should be included in section B.3 of PDD.	3.M.ii	A flow diagram of the project boundary physically delineating the project activity has been included in the revised PDD.	The flow diagram in the revised PDD has been checked and found satisfactory. CL-5 is hence closed.
CL-6 Please include the description that CDM was seriously considered in the decision to implement the project activity in the revised PDD with reliable evidences.	3.O.iv	A timeline was included in the revised PDD which indicates that CDM was seriously considered in the decision to implement the project activity, and relevant evidences had been provided to DOE.	The provided evidence had been checked and found fully consistent with the description in the revised PDD. CL-6 is hence closed.
CL-7 Please indicate whether the person /entity described in section B.8 of the PDD is also a project participant.	3.V.iii	As indicated in the revised PDD, CWEME is not a project participant.	The revised PDD has been checked and found satisfactory. CL-7 is hence closed.
CL-8 PDD is silent about when the local stakeholders' process was conducted.	3.GG.iii	The stakeholders' consultation process was conducted in 12/2007 to local residents of Tushan town, which was indicated in the revised PDD.	The revised PDD has been checked and found consistent with the evidence provided. CL-8 is hence closed.
CL-9 The organisation listed in section A.3 and Annex 1 is inconsistent. Please clarify.	3.JJ.ii	The mistake has been corrected.	The revised PDD has been checked and found satisfactory. CL-9 is hence closed.

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
CL-10 The PDD is silent about electricity imports to NCPG and as mentioned in the step 3 of "Tool to calculate the emission factor for an electricity system", option C should only be used if only nuclear and renewable power generation are considered as low-cost/must-run power sources and if the quantity of electricity supplied to the grid by these sources is known. However, PDD is silent about it.	4.E.c	As indicated in the revised PDD, the NCPG imports electricity from Northeast China Power Grid, meanwhile, only nuclear and renewable power generation are considered as low-cost/must-run power sources and if the quantity of electricity supplied to the grid by these sources is known, therefore, option C is applicable.	The revised PDD has been checked and found satisfactory. CL-10 is hence closed.
CL-11 Other renewable energies i.e. Solar PV and geothermal are supposed to be included in Alternative III.	5.c.i	Solar PV and geothermal are included in alternative III and had been excluded due to technology development and the high cost.	The revised PDD has been checked and found satisfactory. CL-11 is hence closed.
CL-12 The IRR spread calculation sheet had been provided, however, the VAT value should be recalculated instead of use the one in the FSR directly since the tariff used in the PDD is not inconsistent with the one in the FSR.	5.p.iii	According to the FSR, the VAT is calculated on a deductible basis, in other words, the VAT equals output VAT minus input VAT. The output VAT was calculated based on the sales revenues, and can be affected by the tariff; nevertheless, regarding the input VAT, can only be affected by the goods or services purchased.	The revised IRR calculation sheet had been checked and found satisfactory. Furthermore, the net VAT calculated by output VAT minus input VAT resulted a higher IRR compared to only consider output VAT, which is conservative. CL-12 was hence closed.

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
		The detail processing please refer to the revised IRR sheet.	
CL-13 Please provide the evidence on tariff used in the PDD and clarify the difference of the tariff between the FSR and IRR calculation sheet.	5.C.q.(b)	The evidence on tariff had been provided to DOE and the difference of the tariff had been explained in the revised PDD.	The provided evidence and revised PDD has been checked and found satisfactory. CL-13 is hence closed.
		when the PDD was webhosted on 14/07/2008 for GSP, "the buyer is to be determined" was mentioned in A.3 of PDD, it is because the ERPA has not become effective after signature until the Due Diligence was finished and satisfied by the Buyer, and now the Due Diligence has been finished and the buyer was fixed, therefore, the buyer has been included in section A.3 and annex I of PDD and the LOA issued by DNA of annex I (United Kingdom) has been provided to DOE.	The LoA issued on 14/05/2009 by DNA of United Kingdom has been provided and checked satisfactory.