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Validation Report

Liaoning Institute of Energy Resources
VALIDATION OF THE CDM-PROJECT:
DALIAN TUCHENGZI WIND POWER PROJECT
30 MW

REPORT NO. 1100493

2008, August 13

TÜV SÜD Industrie Service GmbH
Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY

Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
1100493	2007-12-27	4	2008-08-13	-

Subject: Validation of a CDM Project	
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich Germany	TÜV SÜD Contract Partner: Jiangsu TUV Product Service Ltd. Guangzhou Branch 26 Floor & Unit 2703-2710, Dongbao 510600 Guangzhou China
Client: Liaoning Institute of Energy Resources No.88 Shifu Road, Yingkou, Liaoning Province, P.R.China	Project Site(s): Tuchengzi Town, Wafangdian City, Dalian City, Liaoning Province China
Project Title: DALIAN TUCHENGZI WIND POWER PROJECT 30 MW	
Applied Methodology / Version: ACM0002 / Version 06	Scope(s): 1
First PDD Version: Date of issuance: 2007-10-12 Version No.: 3.1 Starting Date of GSP 2007-12-01	Final PDD version: Date of issuance: 2008-06-15 Version No.: 06
Estimated Annual Emission Reduction: 62 938 tCO ₂ e	
Assessment Team Leader: Dr. Sven Kolmetz	Further Assessment Team Members: Sebastian Randig Xuemei (Olina) Li Madhuri Nanda
Summary of the Validation Opinion: <input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board in case letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively. <input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the CDM Executive Board and will inform the project participants and the CDM Executive Board on this decision.	

Abbreviations

ACM	Approved Consolidated Methodology
AM	Approved Methodology
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CM	Combined Margin
CR	Clarification Request
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EF	Emission Factor
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission reduction
FSR	Feasibility Study Report
GHG	Greenhouse gas(es)
IRL	Information Reference List
IRR	Internal Rate of Return
KP	Kyoto Protocol
MP	Monitoring Plan
NDRC	National Development and Reform Commission
NGO	Non Governmental Organisation
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed project activity against all defined criteria set for the registration under the Clean Development Mechanism (CDM). Validation is part of the CDM project cycle and will finally result in a conclusion by the executing DOE whether a project activity is valid and should be submitted for registration to the CDM-EB. The ultimate decision on the registration of a proposed project activity rests at the CDM Executive Board and the Parties involved.

The project activity discussed by this validation report has been submitted under the project title:

Dalian Tuchengzi Wind Power Project 30 MW

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of CDM project activities the scope is set by:

- The Kyoto Protocol, in particular § 12
- Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Further COP/MOP decisions with reference to the CDM (e.g. decisions 4 – 8/CMP.1)
- Decisions by the EB published under <http://cdm.unfccc.int>
- Specific guidance by the EB published under <http://cdm.unfccc.int>
- Guidelines for Completing the Project Design Document (CDM-PDD), and the Proposed New Baseline and Monitoring Methodology (CDM-NM)
- The applied approved methodology
- The technical environment of the project (technical scope)
- Internal and national standards on monitoring and QA/QC
- Technical guideline and information on best practice

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.

Once TÜV SÜD receives a first PDD version, it is made publicly available on the internet at TÜV SÜD's webpage as well as on the UNFCCC CDM-web pages for starting a 30 day global stakeholder consultation process (GSP). In case of any request a PDD might be revised (under certain conditions the GSP will be repeated) and the final PDD will form the basis for the final evaluation as presented by this report. Information on the first and on the final PDD version is presented at page 1.

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Dalian Tuchengzi Wind Power Project 30 MW



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The only purpose of a validation is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual, an initiative of Designated and Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

In order to ensure transparency, a validation protocol was customised for the project. TÜV SÜD developed a “cook-book” for methodology-specific checklists and protocol based on the templates presented by the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team and the results from validating the identified criteria. The validation protocol serves the following purposes:

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

The validation protocol consists of three tables. The different columns in these tables are described in the figure below.

The completed validation protocol is enclosed in Annex 1 to this report.

Validation Protocol Table 1: Conformity of Project activity and PDD				
Checklist Topic / Question	Reference	Comments	PDD in GSP	Final PDD
The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further subdivided. The lowest level constitutes a checklist question / criterion.	Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.	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. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any Request has to be substantiated within this column	Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (☑), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification.	Conclusions are presented in the same manner based on the assessment of the final PDD version.

Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests			
Clarifications and corrective action requests	Ref. to table 1	Summary of project owner response	Validation team conclusion
If the conclusions from table 1 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 summarised in this section.	This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final PDD".

In case of a denial of the project activity more detailed information on this decision will be presented in table 3.

Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests		
Clarifications and corrective action requests	Id. of CAR/CR 1	Explanation of the Conclusion for Denial
If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.	Identifier of the Request.	This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion.

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body “climate and energy”. The composition of an assessment team has to be approved by the Certification Body ensuring that the required skills are covered by the team. The Certification Body TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

The validation team was consisting of the following experts (the responsible Assessment Team Leader is written in bold letters):

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Dr. Sven Kolmetz	ATL	☑	☑	☑
Sebastian Randig	GHG-A	☑	☑	☑
Xuemei (Olina) Li	GHG-A	☑	☑	☑
Madhuri Nanda	T	☑	☑	

Dr. Sven Kolmetz is physicist and head at the department “TÜV Carbon Management Service” located in the head office of TÜV SÜD Industrie Service GmbH in Munich, Germany. Furthermore he is officially authorized expert in the verification of GHG emissions in the framework of the European Emission Trading Scheme. Before entering TÜV SÜD he worked as energy consultant for industrial companies and as consultant for the German Federal Government on instruments for the reduction of GHG emissions.

Sebastian Randig is a GHG auditor for environmental management systems at the “Carbon Management Service” in the head office of TÜV SÜD Industrie Service GmbH, Germany. He holds a M.Sc. degree in Renewable Energy and has gathered experience in planning and installing renewable energy installations before joining TÜV SÜD. He has received training in the CDM validation process and participated in several CDM project assessments.

Xuemei (Olina) Li is an auditor for environmental management systems (according to ISO 14001) at TÜV SÜD China. She is based in Guangzhou. In her position she is responsible for the implementation of validation, verification and certifications audits for management systems. She has received

training in the CDM validation process and participated already in several CDM project assessments.

Madhuri Nanda is an auditor trainee at TÜV SÜD Industrie Service GmbH, Germany. She holds a M.Sc. degree in Environment Management and has gathered experience in climate change policy, sustainability reporting, environmental compliances and environmental impact assessment studies before joining TÜV SÜD. She is also a lead auditor for SA 8000 and has worked on management systems (ISO 9001, ISO 14001, OHSAS 18001)

2.2 Review of Documents

The first PDD version submitted by the client and additional background documents related to the project design and baseline were reviewed as initial step of the validation process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.

2.3 Follow-up Interviews

On December 27th, 2007 TÜV SÜD performed interviews on-site with project stakeholders to confirm selected information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in the context of this on-site visit.

Name	Organisation
Mr. Li Chao	Dalian Tuchengzi Wind Power Co.
Mr. Lai Tianyu	Dalian Tuchengzi Wind Power Co.
Mr. Liang Hui	Dalian Tuchengzi Wind Power Co.
Mr. Guo Jun	CDM Project Office of Liaoning Province

2.4 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the project design. The Corrective Action Requests and Clarification Requests raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are summarised in chapter 3 below and documented in more detail in the validation protocol in annex 1.

2.5 Internal Quality Control

As final step of a validation the validation report and the protocol have to undergo an internal quality control procedure by the Certification Body "climate and energy", i.e. each report has to be approved either by the head of the certification body or his deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

It rests at the decision of TÜV SÜD's Certification Body whether a project will be submitted for requesting registration by the EB or not.

3 SUMMARY OF FINDINGS

As informed above all findings are summarized in table 2 of the attached validation protocol.

History of the validation process

A first version of the PDD was submitted to the DOE in December 2007. Based on this documentation, a document review and a fact finding mission in form of an on-site audit was performed in December 2007. Afterwards, the client revised the PDD according to the requests indicated during the assessment work. The final PDD version that was submitted in June 2008 serves as the basis for the final assessment presented herewith. Changes are not considered to be significant with respect to the qualification of the project as a CDM project based on the two main objectives of the CDM, i.e. to achieve a reduction of anthropogenic GHG emissions and to contribute to a sustainable development.

Project description

The following description of the project as per PDD could be verified during the on-site audit:

The proposed project is a grid connected renewable energy project exploiting wind energy potential of the region. Located in Liaoning province in North East China, the project generates electricity and sells into China North East Power Grid (NEPG). In all, 40 wind turbines with 750 KW capacity have been installed in the project providing a total capacity of 30 MW. Thus, project achieves CO₂ emissions reduction by replacing electricity generated in the grid (NEPG) by fossil fuel based power plants.

The annual electricity generation is 66, 982MWh. The estimated annual output is 54,925MWh. Those 5 reasons below have shown why 18 % of the total generated electricity has been consumed (IRL 6, 7).

1. The utilization rate of the wind turbine unit is 95% (loss of 5%);
2. A loss of 2% from the wear and tear of leaves;
3. The loss of 4% caused by transmission line & own consumption;
4. A deal of 2 % comes from the influence of controlling and turbulent flow;
5. 5% for guarantee the power curve.

Findings

In total the assessment team expressed 2 Clarification Requests (CRs) and 20 Corrective Action Requests (CARs).

Investment analysis is an important part of the project. Hence, special emphasis has been laid to check the various inputs in detail. It was verified that the 8% value taken as benchmark is justified based on the Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects, China Planning Press 2006 (CAR8). Further, 8.5% VAT was clarified by the project proponent (CR2) with the supporting government document. CAR 11 addressed the sensitivity analysis to include variation in the electricity tariff among other parameters.

During the process of validation, it was further clarified and evidenced by the client that CDM was considered seriously by the management in August 3, 2007 and the project started later in August 2007 (CAR 9). Hence CDM consideration for the project was clearly justifiable.

The project boundary was verified further with a check to ensure that NEPG does not import electricity from other grids (CAR7). The calibration frequency of the parameter "electricity supplied to the grid" was included by the project proponent in the PDD while addressing CAR 15. The training plan was further provided by the client for the project and addressed in CR1.

Rest of the CARs were requesting corrections in the figures reported in the PDD, inputs in the emissions calculation and overall formatting of the PDD.

Baseline calculation

The calculation of the baseline emissions followed the procedures described in the methodology ACM0002 Version 06. The North-East China Power Grid is considered to be the project boundary. The operating margin emission factor (EF_{OM}) was determined based on the simple OM method. The ex-ante option was chosen for this calculation. The calculation of the build margin emission factor (EF_{BM}) was based on modified methods agreed by the EB, because plant specific data are not available in China. The emission factor of the thermal power plants was calculated by the proportion of the emissions of coal, gas and oil times the emission factor of the best available coal, gas and oil power plant as defined and published by the Chinese DNA. The new thermal capacity installation that exceeded 20% in the last years, for which data was available, was finally assessed with this factor.

The baseline calculation was based on the published OM/BM calculation process issued by the NDRC (China DNA). However, the results indicated in the PDD were slightly lower compared to the values published by the NDRC in August 2007. Since the lower OM/BM emission factors resulted in an overall lower combined margin emission factor (EF_{CM}), the values indicated in the PDD can be considered as more conservative and were therefore accepted for the baseline calculation.

The value for the combined margin emission factor (EF_{CM}) was determined using the weighted average of the EF_{BM} and EF_{OM} using the default values for the factors as described in the methodology (0.75 and 0.25 for wind farms). As per the methodology, the project does not need to consider leakage or project emissions. As a result, the annual emission reductions equal the annual baseline emissions.

In summary, the calculation of the baseline emissions and the emission reductions, respectively, can be considered as correct.

Additionality

Since, additionality is a key component of the validation process. A complete section is being focused on explaining how the project has been accepted as an additional project.

As indicated in the timeline of the project, the project proponent had been aware of CDM at quite early stages in December 20, 2006 (IRL 41) soon after getting the approval to develop wind station farms issued by Dalian City Development and Reform Committee, dated December 18, 2006 (IRL 10). CDM was seriously considered in the board of directors meeting held on August 3, 2007 (IRL

45). Then the owner signed the CDM consulting service contract with CDM Project Office of Liaoning Province on August 9, 2007 (IRL 46). CDM had also been considered in the FSR and the supplementary report in August, 2007 (IRL 6, 7). The evaluation meeting of the FSR and the supplementary report was held by Dalian Development and Reform Commission on June 27, 2007 (IRL 8), in which a decision of approval has been made for the proposed project by experts. The start of the project has been confirmed in August 15, 2007 with the contract for purchase of equipment for the project (IRL 18). Therefore the owner of the proposed project began to do some job of three connections and one levelling assuring on October 16, 2007 (IRL 44). Hence CDM consideration for the project was clearly justifiable.

All the steps of the additionality tool were followed by the proponent and were verified and confirmed by TUV SUD during the validation process. Four project alternatives were identified (Step 1) out of which one option of having other renewable energy power plant with same capacity is ruled out because of non-availability of sufficient biomass and hydro resource potential in the region.

The second option of coal fired power plant was ruled out as the legal regime in the region does not allow a coal fired power plant with less than 135 MW capacity within the grid connected region, in this case, North East China Grid. Further, investment analysis (Step 2) was carried out for the remaining option (proposed project activity without CDM). A simple cost analysis was excluded since the project also generates revenue from the sale of electricity to the grid. The project used the benchmark analysis method (option III) and the assumptions in the analysis were validated.

The input values were from the FSR (IRL 6) in the GSP version of PDD. But in fact, FSR was designed for the hub height 60m. The hub height is 50m for the proposed project. The supplementary report of FSR had been designed for the hub height 50m (IRL 7). The input values have been revised according to the supplementary report of FSR which have been verified and validated by comparing the figures with statistical figures from 74 wind power projects registered and under validation. It seems to be reasonable to make this comparison as CDM projects normally face additional costs that make them financially less attractive than other projects without CDM. The specific investment cost of ca. 8.4 Mio. RMB/MW is lower than the average of 9.4 Mio. RMB/ MW of the statistics. The operational costs are 0.23 Mio. RMB/MW in comparison with 0.16 Mio. RMB/MW average but still within the range of the average deviation. The grid tariff is almost the same as the average (0.555 RMB/kWh versus 0.533 RMB/kWh average). To sum up, it can be concluded that the assumptions are reasonable.

Looking critically at all the assumptions taken in the investment analysis, it was clearly evidenced that the project has lower IRR (6.96%) than the benchmark of 8%. Hence, the project is clearly financially unattractive without CDM benefits for the project proponent.

Furthermore, sensitivity analysis was carried out with different parameters for the proposed project, like fluctuations in total investment, O&M costs, tariff prices and power generation. For all the parameters, a variation of +/- 10% was taken and it was appropriately justified to be reasonable and quite unlikely in the region, while changes up to +/- 5% were acceptable within the benchmark.

The common practise analysis (Step 4) in the region further substantiated that the project is additional since all the 9 identified operational projects in the region since 2002 were in place due to associated CDM activity.

Thus, it has been concluded that the project is additional.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on UNFCCC website by installing a link to TÜV SÜD's own website and invited comments by Parties, stakeholders and non-governmental organisations during a period of 30 days.

The following table presents all key information on this process:

webpage: http://www.netinform.net/KE/Wegweiser/Guide2_1.aspx?ID=4120&Ebene1_ID=26&Ebene2_ID=1249&mode=1	
Starting date of the global stakeholder consultation process: 2007-12-01	
Comment submitted by: none	Issues raised: -
Response by TÜV SÜD: -	

5 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed CDM project activity:

Dalian Tuchengzi Wind Power Project 30 MW

The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board.

An analysis as provided by the applied methodology 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 as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

The validation is based on the information made available to us and the engagement conditions detailed in this report. The validation has been performed using a risk based approach as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

Munich, 2008-08-13



Certification Body "climate and energy"
TÜV SÜD Industrie Service GmbH

Munich, 2008-08-13



Assessment Team Leader

Validation of the CDM Project:
Dalian Tuchengzi Wind Power Project 30 MW



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Annex 1: Validation Protocol

Validation Protocol

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Table 1 Conformity of Project Activity and PDD

CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PDD in GSP	Final PDD
A. General description of project activity					
A.1. Title of the project activity					
A.1.1.	Does the used project title clearly enable to identify the unique CDM activity?	1, 2	This project is titled with the name of the project location and the energy source of the project; therefore, it can be clearly identified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.2.	Are there any indication concerning the revision number and the date of the revision?	1	The available GSP PDD is indicated as version 3, dated on 30/12/2007. <u>Corrective Action Request No.1.</u> Please indicate the version history of the PDD in the revised PDD.	CAR1	<input checked="" type="checkbox"/>
A.1.3.	Is this consistent with the time line of the project's history?	1	The GSP has been started with the version 3.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2. Description of the project activity					
A.2.1.	Is the description delivering a transparent overview of the project activities?	1, 6-12	<p>The description is delivering a transparent overview of the project activities.</p> <p>An overview of the project is described transparently in section A.2 of the PPD. Dalian Tuchengzi Wind Power Project (hereafter referred as the proposed project) is a grid connected renewable energy project. Totally 40 wind turbines with a nominal capacity of 750 KW have been installed, providing a total capacity of 30 MW. With an average annual generation supplied to the grid of 57,764 MWh, the objective of the proposed project is to generate electricity using state-of-the-art wind power generation technology and sell into China Northeast Power Grid (NEPG).</p> <p>The Environmental Impact Assessment of the proposed project has been approved by Liaoning Province Environmental Bureau, dated July 26th, 2007</p> <p>The project has been approved by Dalian City Development and Reform Committee, on Nov., 9th, 2007</p>	CAR2	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
		<p><u>Corrective Action Request No.2.</u></p> <ol style="list-style-type: none"> 1. The annual electricity generation and the net electricity supplied to the grid are inconsistent with the data from the FSR supplementary report. Please clarify this issue in A.2., Table B5-1 and B.7.1 and accordingly revise the emission reduction all over the PDD. 2. The employment opportunities is 18 not 15 according to the FSR. Please correct it. 3. Please include the following information below the Table in A.3.: (*) In accordance with the CDM modalities and procedures, at the time of making the CDM-PDD public at the stage of validation, a Party involved may or may not have provided its <u>approval</u>. At the time of requesting registration, the approval by the Party(ies) involved is required. 4. Please provide the information that "Further details are described in Annex 1 of the PDD". 		
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	1, 2, 6, 7, 8, 9, 11, 12, 13	<p>During the on-site audit numerous proofs for the described assumptions were evidenced. They are summarized in the reference list, Annex 2 to this report.</p> <p>The planning is described in the feasibility study. The following data deliver evidences for the actual situation of the project activity:</p> <ul style="list-style-type: none"> - Feasibility study - EIA and the approval of EIA - Project approval - The letter of examination opinions on the Grid Connection System Feasibility study report 	☑	☑
A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?	1, 2, 6-13	Yes, the information provided by these proofs is consistent with the implementation of the project.	☑	☑

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
A.2.4. Is all information presented consistent with details provided by further chapters of the PDD?	1, 2	There are no contradictions within the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3. Project participants				
A.3.1. Is the form required for the indication of project participants correctly applied?	1, 2, 6,7	The form is correctly applied. In Table 1 and Annex 1 the two parties involved in the project are mentioned: Dalian Tuchengzi Wind Power Co., Ltd. and Marubeni Corporation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?	1, 2, 52, 53	Open Issue Please deliver the LoAs issued by China and Japan together with the MoC to the DOE before raising the request of registration.	Open Issue	<input checked="" type="checkbox"/>
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	1, 2	The information provided is in consistency with further chapters of the PDD. The parties listed in Annex 1 are identical with those listed under A.3.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4. Technical description of the project activity				
A.4.1. Location of the project activity				
A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	1, 2, 6, 7	The proposed project is located in Tuchengzi Town, Wafangdian City, Dalian City, Liaoning Province of China, its geographical coordinates are north latitude 40°01'07.0" and east longitude 121°50'40.9", and its average elevation is 30-150 meters. The distance is 120km between the proposed project and Dalian City. Corrective Action Request No.3. 1. It should be indicated in the PDD from which location the GPS coordinates were taken. 2. It should be indicated the source of the GPS measurement.	CAR3	<input checked="" type="checkbox"/>
A.4.1.2. How is it ensured and/or demonstrated,	1, 2,	The following documents provide the evidence that the project propo-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	3, 6, 7, 8, 9, 11, 12, 13, 14	nents can implement the project at this site (refer to Annex 2 as well): -EIA and the approval of EIA; -Feasibility Study Report and its approval; - The letter of examination opinions on the Grid Connection System Feasibility study report.		
A.4.2. Category(ies) of project activity				
A.4.2.1. To which category(ies) does the project activity belonging to? Is the category correctly identified and indicated?	1, 2	The project falls into scope 1 (Energy industries (renewable/non-renewable sources) as it deals with energy generation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3. Technology to be employed by the project activity				
A.4.3.1. Does the technical design of the project activity reflect current good practices?	1, 2, 6, 7	Yes, the domestically sourced project design is standard wind power technology; therefore it reflects the current good practice to use renewable resources to generate electricity.	<input checked="" type="checkbox"/>	
A.4.3.2. Does the description of the technology to be applied provide sufficient and transparent input/ information to evaluate its impact on the greenhouse gas balance?	1, 2, 6, 7	Yes, totally 40 wind turbines with a nominal capacity of 750 KW have been installed, providing a total capacity of 30 MW. Each turbine will have a 690V-to-10kV transformer, from which a 10kV line will link into the on-site 66kV switchgear at the Xiyang substations established in the proposed project site. By the 66 kV line, the electricity generated by the proposed project is delivered to the NEPG. The wind turbine finally adopted by the proposed project is WD49 - 750kW of Zhejiang Windey Wind Generating Engineering Co., Ltd.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.3. Does the implementation of the project activity require any technology transfer from annex-I-countries to the host country(ies)?	1, 2, 6, 7	No, there is no technology transfer from Annex 1 countries to China, which is the host country.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.4. Is the technology implemented by the project activity environmentally safe?	1, 2, 11,	Yes, this is a wind power project and it is clear that the project activity will not have significant environmental impacts. The EIA of the project is	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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	12	also being approved.		
A.4.3.5. Is the information provided in compliance with actual situation or planning?	1, 2, 4, 5	Yes, the information is in compliance as validated on-site on December 27, 2007.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.6. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	1, 2, 6, 7	The common practice of electricity generation in China is still coal-fired power plant. Therefore, the project definitely would result in a better performance than the common practice.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1, 2, 6, 17, 18, 20	It is not expected that there will be a substitution because the wind turbines and the other equipments will be newly commissioned and installed. The expected life time of the project is under normal circumstances longer than the crediting period.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.8. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	1, 2	To guarantee safe operation during the life time, the operators would be trained to acquire the knowledge on maintenance and operation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.9. Is information available on the demand and requirements for training and maintenance?	1, 2	As confirmed on-site, the start of construction of this project was 16/10/2007. The first wind turbine is expected to be put into commission in March 2008. There is no detailed information available yet on training requirements. <u>Clarification Request No. 1.</u> Please provide the training plan and other training evidences to the audit team.	CR1	<input checked="" type="checkbox"/>
A.4.3.10. Is a schedule available for the implementation of the project and are there any risks for delays?	1, 2, 34	<u>Corrective Action Request No.4.</u> Please add a project time schedule into the revised PDD.	CAR4	<input checked="" type="checkbox"/>
A.4.4. Estimated amount of emission reductions over the chosen crediting period				

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A.4.4.1. Is the form required for the indication of projected emission reductions correctly applied?	1, 2	The project emission reductions are shown in chapter A.4.4 according to the guidelines. <u>Corrective Action Request No.5.</u> "July 1 st , 2008 to June 30 th , 2015" should be "July 1 st , 2008 to June 30 th , 2015" format.	CAR5	
A.4.4.2. Are the figures provided consistent with other data presented in the PDD?	1, 2	The yearly emission reduction is estimated to be 66,192 tCO ₂ e, which is the result of emission factor of the grid times the annual electricity fed to the grid. The same figure is quoted throughout the entire PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.5. Public funding of the project activity				
A.4.5.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	1, 2, 15, 16	There is no public funding from parties (including the Annex 1 countries of the UNFCCC) according to the A.4.4. of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.5.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	1, 2	Yes, the information of public funding is consistent with the information provided in Annex 2, where is also mentioned that no public funding takes place.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B. Application of a baseline and monitoring methodology				
B.1. Title and reference of the approved baseline and monitoring methodology				
B.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	1, 2	Methodology ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources (Version 06, 19 th May, 2006) is clearly indicated.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.1.2. Is the applied version the most recent one and / or is this version still applicable?	1, 2	Version 6 of ACM0002 has been the most recent version at the time of GSP uploading. The additionality tool, version 3 is valid before Aug.13 th , 2008.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.2. Justification of the choice of the methodology and why it is applicable to the project activity															
B.2.1.	Is the applied methodology considered the most appropriate one?	1, 2	<p>The project activity fulfils the criteria of ACM0002:</p> <ul style="list-style-type: none">- The proposed project is a grid-connected zero-emission renewable power generation activity from wind source;- The proposed project is not an activity that involves switching from fossil fuels to renewable energy at the proposed project site.- The power grid (NEPG) which the proposed project is to be connected to is clearly identified and information on the characteristics of this grid is publicly available. <p>Thus, the baseline methodology deems to be the most applicable for this project among the existing approved baseline methodologies.</p> <p><u>Corrective Action Request No.6.</u></p> <p>ACM (Version 06) in the PDD should be ACM0002 (Version 06). Please correct it.</p>	CAR6	<input checked="" type="checkbox"/>										
Fill in the required amount of sub checklists for applicability criteria as given by the methodology applied and comment at least every line answered with “No”															
B.2.2.	Criterion 1: Type of capacity addition by renewable energy	1, 2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	Yes	Compliance verified?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No														
Criterion discussed in the PDD?	Yes														
Compliance provable?	Yes														
Evidences provided in the PDD?	Yes														
Compliance verified?	Yes														
B.2.3.	Criterion 2: Exclusion of fuel switching activities	1, 2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>Yes</td></tr></table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Applicability checklist	Yes / No														
Criterion discussed in the PDD?	Yes														
Compliance provable?	Yes														
Evidences provided in the PDD?	Yes														

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			<table><tr><td>Compliance verified?</td><td>Yes</td></tr></table>		Compliance verified?	Yes										
Compliance verified?	Yes															
B.2.4.	Criterion 3: Defined electricity grid boundaries	1, 2	<table><tr><td>Applicability checklist</td><td>Yes / No</td></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>		Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	Yes	Compliance verified?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No															
Criterion discussed in the PDD?	Yes															
Compliance provable?	Yes															
Evidences provided in the PDD?	Yes															
Compliance verified?	Yes															
B.2.5.	Criterion 4: Approved inclusion in other methodologies (if applied only)	1, 2	NA		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
B.3. Description of the sources and gases included in the project boundary																
B.3.1.	Source: Fugitive Emissions from non-condensable gases (geothermal activities only) Gas(es): CO ₂ , CH ₄ Type: Project Emissions	1, 2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed by the PDD?</td><td>NA</td></tr><tr><td>Inclusion / exclusion justified?</td><td>NA</td></tr><tr><td>Explanation / Justification sufficient?</td><td>NA</td></tr><tr><td>Consistency with monitoring plan?</td><td>NA</td></tr></table>		Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	NA	Inclusion / exclusion justified?	NA	Explanation / Justification sufficient?	NA	Consistency with monitoring plan?	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No															
Source and gas(es) discussed by the PDD?	NA															
Inclusion / exclusion justified?	NA															
Explanation / Justification sufficient?	NA															
Consistency with monitoring plan?	NA															
B.3.2.	Source: Emissions from combustion of fossil fuels (geothermal activities only) Gas(es): CO ₂ Type: Project Emissions	1, 2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed by the PDD?</td><td>NA</td></tr><tr><td>Inclusion / exclusion justified?</td><td>NA</td></tr><tr><td>Explanation / Justification sufficient?</td><td>NA</td></tr><tr><td>Consistency with monitoring plan?</td><td>NA</td></tr></table>		Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	NA	Inclusion / exclusion justified?	NA	Explanation / Justification sufficient?	NA	Consistency with monitoring plan?	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No															
Source and gas(es) discussed by the PDD?	NA															
Inclusion / exclusion justified?	NA															
Explanation / Justification sufficient?	NA															
Consistency with monitoring plan?	NA															

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B.3.3. Source: Emissions from the reservoir (new hydroelectric activities only) Gas(es): CO ₂ , CH ₄ Type: Project Emissions	1, 2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed by the PDD?</td><td>NA</td></tr><tr><td>Inclusion / exclusion justified?</td><td>NA</td></tr><tr><td>Explanation / Justification sufficient?</td><td>NA</td></tr><tr><td>Consistency with monitoring plan?</td><td>NA</td></tr></table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	NA	Inclusion / exclusion justified?	NA	Explanation / Justification sufficient?	NA	Consistency with monitoring plan?	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	NA													
Inclusion / exclusion justified?	NA													
Explanation / Justification sufficient?	NA													
Consistency with monitoring plan?	NA													
B.3.4. Source: Emissions from electricity generation in fossil fuel fired power plants of the project electricity system Gas(es): CO ₂ Type: Baseline Emissions	1, 2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed by the PDD?</td><td>Yes</td></tr><tr><td>Inclusion / exclusion justified?</td><td>Yes</td></tr><tr><td>Explanation / Justification sufficient?</td><td>Yes</td></tr><tr><td>Consistency with monitoring plan?</td><td>Yes</td></tr></table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	Yes	Consistency with monitoring plan?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	Yes													
Inclusion / exclusion justified?	Yes													
Explanation / Justification sufficient?	Yes													
Consistency with monitoring plan?	Yes													
B.3.5. Source: Emissions from electricity generation in fossil fuel fired power plants of any connected electricity system Gas(es): CO ₂ Type: Baseline Emissions	1, 2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed by the PDD?</td><td>NA</td></tr><tr><td>Inclusion / exclusion justified?</td><td>NA</td></tr><tr><td>Explanation / Justification sufficient?</td><td>NA</td></tr><tr><td>Consistency with monitoring plan?</td><td>NA</td></tr></table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	NA	Inclusion / exclusion justified?	NA	Explanation / Justification sufficient?	NA	Consistency with monitoring plan?	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	NA													
Inclusion / exclusion justified?	NA													
Explanation / Justification sufficient?	NA													
Consistency with monitoring plan?	NA													
B.3.6. Source: Emissions from electricity generation in fossil fuel fired power plants of imported electricity Gas(es): CO ₂ Type: Baseline Emissions	1, 2	<u>Corrective Action Request No.7.</u> Please provide information whether NEPG imports electricity from other grids. In the case it does, please include emissions from electricity generation in fossil fuel fired power plants of imported electricity into the project boundary. <table><tr><td>Boundary checklist</td><td>Yes / No</td></tr></table>	Boundary checklist	Yes / No	CAR7	<input checked="" type="checkbox"/>								
Boundary checklist	Yes / No													

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			<table><tr><td>Source and gas(es) discussed by the PDD?</td><td>No</td></tr><tr><td>Inclusion / exclusion justified?</td><td>No</td></tr><tr><td>Explanation / Justification sufficient?</td><td>No</td></tr><tr><td>Consistency with monitoring plan?</td><td>No</td></tr></table>		Source and gas(es) discussed by the PDD?	No	Inclusion / exclusion justified?	No	Explanation / Justification sufficient?	No	Consistency with monitoring plan?	No		
Source and gas(es) discussed by the PDD?	No													
Inclusion / exclusion justified?	No													
Explanation / Justification sufficient?	No													
Consistency with monitoring plan?	No													
B.3.7.	Do the spatial and technological boundaries as verified on-site comply with the discussion provided by the PDD?	1, 2	Referring to the delineation of grid boundaries which is provided by NDRC (China NDA), the project electricity system is defined as the North East China Power Grid, which is also verified by the auditor on site.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
B.4. Description of how the baseline scenario is identified and description of the identified baseline scenario														
B.4.1.	Is it clearly described that the baseline is represented by the combined margin of the grid the activity will be connected to?	1, 2	It's clearly stated in the PDD that the baseline scenario is the “purchase of equivalent amount of electricity output of the proposed project from NEPG” and the baseline emissions factor is represented by the combined margin of the NEPG. <u>Corrective Action Request No.8.</u> The evidence for the benchmark of 8 % and the applicable regulation under 135 MW should be added as footnote in the revised PDD and submitted to the validation team.		CAR8	<input checked="" type="checkbox"/>								
B.4.2.	In case of any modification or retrofit of existing facilities: Is data available to determine the historic production level?	1, 2	NA		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
B.4.3.	In case of any modification or retrofit of existing facilities: Have conservative assumptions been applied in order to estimate the point in time when the existing equipment needs to be replaced?	1, 2	NA		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								

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B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (assessment and demonstration of additionality):				
B.5.1. Is evidence provided, that CDM has been considered seriously in the decision to proceed with the project activity?	1, 2, 6, 7, 8, 16, 41, 44, 45, 46	<p>The supply contract of Dalian Tuchengzi 40×750 KW wind generator units was signed by Dalian New Energy Electric Development Co., Ltd and Zhejiang Yunda Wind Power Generation Engineering Co. on August 15, 2007. Thus, this date has to be considered as project's starting date, as from this date on the proposed project activity is irreversible without big financial losses.</p> <p><u>Corrective Action Request No.9.</u></p> <ol style="list-style-type: none"> 1. Please submit evidence for CDM consideration before August 15, 2007 (date of the supply contract of the wind generator units) to the validation team. 2. Please mention in the PDD the CDM consideration before project's starting date. 	CAR9	<input checked="" type="checkbox"/>
B.5.2. Have realistic and credible alternatives been identified providing comparable outputs or services? (step 1a)	1, 2, 6, 7	<p>The project sponsor is a wind power project developer, the possible alternatives to the project include:</p> <ol style="list-style-type: none"> 1) The coal-fired plant with the same annual electricity output as the proposed project 2) The proposed project activity is undertaken without being registered as a CDM project activity. 3) The other renewable energy power plant with the same annual electricity output as the proposed project. 4) The NEPG as the provider for the same electricity output as the proposed project. 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.3. Is the project activity without CDM included in these alternatives? (step 1a)	1, 2	Yes, it is included as second option, please refer to B. 5.2. of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.4. Is a discussion provided for all identified	1, 2	Yes, the PDD states that, according to a "Notice of the General Office of	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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alternatives concerning the compliance with applicable laws and regulations? (step 1b)			the State Council concerning the Strict Prohibition of the Construction of Thermal Power Units with a Capacity of 135MW or Below, Guo Ban Fa Ming Dian [2002] Document No.6” conventional coal-fired power plants are consistent with regulations although the construction of small-scale power plants with a capacity under 135 MW has been prohibited. The document could be checked and the statement be verified on-site. A thermal power plant with equivalent annual power generation is not in compliance with Chinese relevant laws and regulation. The second and fourth alternative is in compliance with Chinese relevant laws and regulations.		
B.5.5.	In case the PDD argues that specific laws are not enforced in the country or region: Is evidence available concerning that statement? (step 1b)	1, 2	All the laws quoted in the PDD are enforced in this project; therefore, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.6.	In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	2, 3, 35, 47, 48	<p>3 analysis methods are provided according to the additionality tool. Because the proposed project generates economic benefits through the sales of electricity other than CDM revenue, therefore, the Option I (simple cost analysis) can't be taken. Moreover, the Option II (investment comparison analysis) only applies to projects where alternatives should be similar investment projects, however, in this case, the baseline scenario is the North East China Grid; hence, Option II can't be adopted either. Thus, Option III (benchmark analysis) is the only applicable alternative.</p> <p>Here the benchmark IRR quoted from “Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects”. is used. The IRR benchmark is 8%.</p> <p><u>Clarification Request No. 2.</u></p> <p>Please clarify why the value added tax (VAT) is 8.5% in Table B.5-1.</p> <p>Please submit the document for the applied benchmark to the validation</p>	CR2	<input checked="" type="checkbox"/>

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			team.		
B.5.7.	In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?	1, 2	The simple cost analysis is not applicable for the proposed project because the project activity will produce economic returns (from electricity sale to the grid) other than CERs income.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.8.	In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1, 2	The investment comparison analysis is also not applicable for the proposed project because the project investor makes a go-or-no-go decision and the investor has no investment options to compare with.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.9.	In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1, 2, 6, 7, 49	<p>Option III, the benchmark analysis is applied.</p> <p>The IRR is the most suitable financial indicator. A benchmark analysis in which the Internal Rate of Return (IRR) of the project is calculated is performed and compared to a benchmark stated in the Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects, issued by the State Power Corporation of China. This publication provides an 8% Internal Rate of Return (IRR) benchmark as a guideline for investments in the power sector.</p> <p>The Chinese IRR calculation spreadsheet has been verified on-site. The most data used are from the FSR.</p> <p><u>Corrective Action Request No.10.</u></p> <p>Please provide the IRR calculation spreadsheet including the sensitivity analysis in English to the audit team.</p> <p>The input values were from the FSR (IRL 6) in the GSP version of PDD. But in fact, FSR was designed for the hub height 60m. The hub height is 50m for the proposed project. The supplementary report of FSR had been designed for the hub height 50m (IRL 7). Please revise the input values according to the supplementary report of FSR in the revised PDD.</p>	CAR10	<input checked="" type="checkbox"/>
B.5.10.	In case of Option II or Option III: Is the	1, 6	The financial figures are consistent with the ones in Feasibility Study Report.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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calculation of financial figures for this indicator correctly done for all alternatives and the project activity?				
B.5.11. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	1, 6	<u>Corrective Action Request No.11.</u> Please include into the sensitivity analysis the variation of the electricity tariff.	CAR11	<input checked="" type="checkbox"/>
B.5.12. In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	1, 2, 6	According to the PDD the projects faces investment barrier and technological barrier.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.13. In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?	1, 2, 6, 17, 18	<u>Corrective Action Request No.12.</u> 1. The barrier “the price of raw materials such as steel and construction materials is rising and this trend is expected to continue” is not special to the proposed project. 2. It is not clear what is meant with the following statement: “which has higher efficiency and is technically advanced but the bigger turbine option in Liaoning Province China at present.” Please clarify. 3. Some risks have been identified include equipment disrepair, lack of infrastructure for implementation of the advanced technology and lack of qualified service agents. Please clarify whether this would make the project activity technically non feasible. What measures would be implemented should be described in detail and the corresponding evidence should be sent to the audit team. 4. It is indicated that “the proposed project is not likely to attract commercial loan”. But after considering of the CDM, the China Construction Bank has promised to give a loan to the client. Please indicate it clearly.	CAR12 CR3	<input checked="" type="checkbox"/>

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		<p><u>Clarification Request No. 3.</u></p> <p>The PDD states that “Although preferential tariff policy and other incentives with respect to wind power projects are currently in place, financial indicators of grid-connected wind power projects have not fundamentally changed and the loan repayment capability remains weak.” Project participants are requested to evidence that financial indicators of grid-connected wind power projects remain unchanged and the loan repayment capability remains weak.</p>		
B.5.14. In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	1, 2	Yes. The electricity would be provided by fossil fuel fired power plant connected to NEPG if the proposed project activity doesn't exist. This alternative is in compliance with all applicable laws and regulations and is not prevented by the identified barriers.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.15. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	1, 2, 50, 51	<p>For the purpose of analyzing common practice, part of wind farm projects in Liaoning Province, with installed capacity between 20MW and 50MW, and operated after the year 2000 are listed.</p> <p><u>Clarification Request No. 4.</u></p> <p>Please clarify why limit to Liaoning province, 20MW-50MW and after 2000 when choose the similar activities.</p>	CR4	<input checked="" type="checkbox"/>
B.5.16. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the CDM component (step 4b)?	1, 2, 50, 51	All the projects listed in Table B5-3 are seeking support by applying as the CDM project activities, because they also face many barriers and would not have been realized in the absence of CDM benefits. Therefore, the proposed project is not common practice in Liaoning Province.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.17. Is it appropriately explained how the approval of the project activity will help to overcome the economic and financial hurdles or other identified barriers (step 5)?	1, 2	Even though step 5 is not necessary anymore according to version 4 of the additionality tool, the PDD mentions that the revenues from CDM will help to mitigate financial barriers and increase the financial attractiveness of the project.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.6. Emissions reductions				
<i>B.6.1. Explanation of methodological choices</i>				
B.6.1.1. Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	1, 2	<p>The calculation of the emission reduction is applied according to the steps described in ACM0002:</p> <ul style="list-style-type: none"> • Step 1, calculate the baseline emissions; • Step 2, calculate the proposed project GHG emissions; • Step 3, calculate the proposed project leakage; • Step 4, calculate the emission reductions. <p>The ex-ante approach is chosen for the baseline emission calculation.</p> <p><u>Corrective Action Request No.13.</u></p> <ol style="list-style-type: none"> 1. According to IPCC2006, the emission factor of coke should be 29.2tC/TJ, instead of 25.8 in NDRC. This has to be revised. 2. According to IPCC2006, the emission factor of refinery gas should be 15.7tC/TJ, instead of 18.2 in NDRC. This has to be revised. 	CAR13	<input checked="" type="checkbox"/>
B.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	1, 2	<p>The PDD explains the reasons of choosing methodology with following options:</p> <p>(a) Simple OM, or (b) Simple adjusted OM, or (c) Dispatch data analysis OM, or (d) Average OM.</p> <p>The justification is in line with the situation verified on-site.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.3. Are the formulae required for the determination of project emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1, 2	<p>There are no project emissions according to ACM0002 (Version 06) for this kind of project activity. , i.e. PE y =0.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.6.1.4. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1, 2	Yes, the formulae required for the determination of baseline emissions are correctly presented.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.5. Is the choice of options to determine the emissions factor (OM, BM) justified in a suitable and transparent manner?	1, 2	Yes, the choice of options to determine the Emission Factor is fully justified in the PDD. Both dispatch analysis, simple adjusted OM and average OM are excluded and simple OM is identified as suitable calculation method.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.6. In case of alternative weighing factors for the Combined Margin: Is the quantification of the alternative weighing factor justified in a suitable and transparent manner?	1, 2	Not applicable. The default weights for wind power projects in the 6 th version of ACM0002 (OM 0.75 and BM 0.25 respectively) are used.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.7. In case of alternative weighing factors for the Combined Margin: Is the guidance for the PDD concerning the acceptability of alternative weights considered in the discussion?	1, 2	Not applicable. See B.6.1.6.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.8. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1, 2	No leakage is considered in accordance with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.9. Are formulae required for the determination of emission reductions correctly presented?	1, 2	Formulae in the PDD are clearly presented for the determination of the emission reduction. As project emissions and leakage are both zero, the emission reductions are equal to the baseline emissions.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.2. Data and parameters that are available at validation				
B.6.2.1. Is the list of parameters presented in chapter B.6.2 considered to be complete	1, 2	The list of parameters presented in chapter B.6.2 is considered to be complete.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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with regard to the requirements of the applied methodology?																						
B.6.2.2. Is the choice of ex-ante or ex-post vintage of OM and BM factors clearly specified in the PDD?	1, 2	The ex-ante vintage of OM and BM factors is clearly specified in step 1 of B.6.1 in the PDD.	☑	☑																		
Fill in the required amount of sub checklists for monitoring parameter and comment any line answered with “No”																						
B.6.2.3. Parameter Title: Annual electricity supplied to the grid prior to retrofit (applicable only for retrofit and modification activities)	1, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>NA</td></tr><tr><td>Data unit correctly expressed?</td><td>NA</td></tr><tr><td>Appropriate description of parameter?</td><td>NA</td></tr><tr><td>Source clearly referenced?</td><td>NA</td></tr><tr><td>Correct value provided?</td><td>NA</td></tr><tr><td>Has this value been verified?</td><td>NA</td></tr><tr><td>Choice of data correctly justified?</td><td>NA</td></tr><tr><td>Measurement method correctly described?</td><td>NA</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	NA	Data unit correctly expressed?	NA	Appropriate description of parameter?	NA	Source clearly referenced?	NA	Correct value provided?	NA	Has this value been verified?	NA	Choice of data correctly justified?	NA	Measurement method correctly described?	NA	☑	☑
Data Checklist	Yes / No																					
Title in line with methodology?	NA																					
Data unit correctly expressed?	NA																					
Appropriate description of parameter?	NA																					
Source clearly referenced?	NA																					
Correct value provided?	NA																					
Has this value been verified?	NA																					
Choice of data correctly justified?	NA																					
Measurement method correctly described?	NA																					
B.6.2.4. Parameter Title: Emission factor of the grid (EF _{CM} in tCO ₂ /MWh)	1, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	☑	☑
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					

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B.6.2.5. Parameter Title: Operating margin (EF _{OM} in tCO ₂ /MWh) emission factor of the grid		<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.6. Parameter Title: Build margin (EF _{BM} in tCO ₂ /MWh) emission factor of the grid	1, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.7. Parameter Title: fuel consumption of each power source (F, mass or volume unit)		<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						

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		<table><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>		Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes														
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.8. Parameter Title: emission coefficient of each fuel (COEF of grid, in tCO ₂ / mass or volume unit of the fuel)		<table><tr><td>Data Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.9. Parameter Title: electricity generation of each power source (GEN in MWh)	1, 2	<table><tr><td>Data Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table> <p><u>Corrective Action Request No.14.</u> The data source should be clarified with published time and version.</p>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	No	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	CAR14	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	No																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.10. Parameter Title:	1, 2			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		

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surface area of full reservoir level (for new hydroelectric activities only)		<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>NA</td></tr><tr><td>Data unit correctly expressed?</td><td>NA</td></tr><tr><td>Appropriate description of parameter?</td><td>NA</td></tr><tr><td>Source clearly referenced?</td><td>NA</td></tr><tr><td>Correct value provided?</td><td>NA</td></tr><tr><td>Has this value been verified?</td><td>NA</td></tr><tr><td>Choice of data correctly justified?</td><td>NA</td></tr><tr><td>Measurement method correctly described?</td><td>NA</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	NA	Data unit correctly expressed?	NA	Appropriate description of parameter?	NA	Source clearly referenced?	NA	Correct value provided?	NA	Has this value been verified?	NA	Choice of data correctly justified?	NA	Measurement method correctly described?	NA			
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Source clearly referenced?	NA																						
Correct value provided?	NA																						
Has this value been verified?	NA																						
Choice of data correctly justified?	NA																						
Measurement method correctly described?	NA																						
B.6.2.11. Parameter Title: fraction of time with low costs /must run plant at the margin (for simple adjusted OM only)	1, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>NA</td></tr><tr><td>Data unit correctly expressed?</td><td>NA</td></tr><tr><td>Appropriate description of parameter?</td><td>NA</td></tr><tr><td>Source clearly referenced?</td><td>NA</td></tr><tr><td>Correct value provided?</td><td>NA</td></tr><tr><td>Has this value been verified?</td><td>NA</td></tr><tr><td>Choice of data correctly justified?</td><td>NA</td></tr><tr><td>Measurement method correctly described?</td><td>NA</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	NA	Data unit correctly expressed?	NA	Appropriate description of parameter?	NA	Source clearly referenced?	NA	Correct value provided?	NA	Has this value been verified?	NA	Choice of data correctly justified?	NA	Measurement method correctly described?	NA		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	NA																						
Data unit correctly expressed?	NA																						
Appropriate description of parameter?	NA																						
Source clearly referenced?	NA																						
Correct value provided?	NA																						
Has this value been verified?	NA																						
Choice of data correctly justified?	NA																						
Measurement method correctly described?	NA																						
B.6.2.12. Parameter Title: electricity imports from connected grid to the grid (in MWh)	1, 2	See B.3.6. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>CAR 7</td></tr><tr><td>Data unit correctly expressed?</td><td>CAR 7</td></tr><tr><td>Appropriate description of parameter?</td><td>CAR 7</td></tr><tr><td>Source clearly referenced?</td><td>CAR 7</td></tr><tr><td>Correct value provided?</td><td>CAR 7</td></tr><tr><td>Has this value been verified?</td><td>CAR 7</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	CAR 7	Data unit correctly expressed?	CAR 7	Appropriate description of parameter?	CAR 7	Source clearly referenced?	CAR 7	Correct value provided?	CAR 7	Has this value been verified?	CAR 7		CAR 7	<input checked="" type="checkbox"/>				
Data Checklist	Yes / No																						
Title in line with methodology?	CAR 7																						
Data unit correctly expressed?	CAR 7																						
Appropriate description of parameter?	CAR 7																						
Source clearly referenced?	CAR 7																						
Correct value provided?	CAR 7																						
Has this value been verified?	CAR 7																						

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		Choice of data correctly justified?	CAR 7		
		Measurement method correctly described?	CAR 7		
B.6.2.13. Parameter Title: CO ₂ emission coefficient of fuels used in connected grids (COEF of connected grid, in tCO ₂ / mass or volume unit of the fuel)	1, 2	See B.3.6.		CAR 7	☑
		Data Checklist	Yes / No		
		Title in line with methodology?	CAR 7		
		Data unit correctly expressed?	CAR 7		
		Appropriate description of parameter?	CAR 7		
		Source clearly referenced?	CAR 7		
		Correct value provided?	CAR 7		
		Has this value been verified?	CAR 7		
		Choice of data correctly justified?	CAR 7		
		Measurement method correctly described?	CAR 7		
B.6.3. Ex-ante calculation of emission reductions					
B.6.3.1. Is the projection based on the same procedures as used for future monitoring?	1, 2	Yes, it is.		☑	☑
B.6.3.2. Are the GHG calculations documented in a complete and transparent manner?	1, 2	The entire calculation processes is fully demonstrated in B.6.1. and B.6.3. and the data are completely presented in Annex 3 of the PDD.		☑	☑
B.6.3.3. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1, 2	The emission factor of the defined grid and annual emission reductions are consistent with the figures in other chapters of the PDD, for instance with chapter A.4.4 – where the estimated amount of emission reductions is described.		☑	☑
B.6.4. Summary of the ex-ante estimation of emission reductions					
B.6.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1, 2, 6	Yes, according to the PDD, this wind power project results in much fewer GHG emissions than the baseline scenario.		☑	☑

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B.6.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	1, 2	Yes, the table is complete; It includes the emission due to the project activity, baseline emission, leakage emission and the overall emission reduction.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
B.6.4.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1, 2, 34	Yes, the ex ante estimate of emission reductions due to the project is calculated for a first crediting period of 7 years starting with the expected start of the crediting period in July 2008.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
B.6.4.4. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	1, 2	Yes, the data is consistent with other parts of the PDD, e.g. table A.4.4 describing the estimated amount of emission reductions.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
B.7. Application of the monitoring methodology and description of the monitoring plan																				
B.7.1. Data and parameters monitored																				
B.7.1.1. Is the list of parameters presented by chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	1, 2	Because the ex-ante approach is adopted, the net electricity fed to the grid and the electricity use of the project power plant supplied by the grid is required to be monitored. Both parameters have been included in table B.7.1 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
Integrate the required amount of sub-checklists for monitoring parameter and comment on any line answered with “No”																				
B.7.1.2. Parameter Title: Electricity supplied to the grid	1, 2	Corrective Action Request No.15. Regarding the parameter: “Electricity supplied to the grid”: the calibration frequency of the meter should be indicated. <table><tr><td>Monitoring Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	Yes	CAR15	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																			
Title in line with methodology?	Yes																			
Data unit correctly expressed?	Yes																			
Appropriate description of parameter?	Yes																			
Source clearly referenced?	Yes																			
Correct value provided for estimation?	Yes																			
Has this value been verified?	Yes																			
Measurement method correctly described?	Yes																			

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		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
B.7.1.3. Parameter Title: Quantity of steam produced (for geothermal projects only)	1, 2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	NA		
		Data unit correctly expressed?	NA		
		Appropriate description of parameter?	NA		
		Source clearly referenced?	NA		
		Correct value provided for estimation?	NA		
		Has this value been verified?	NA		
		Measurement method correctly described?	NA		
		Correct reference to standards?	NA		
		Indication of accuracy provided?	NA		
		QA/QC procedures described?	NA		
		QA/QC procedures appropriate?	NA		
B.7.1.4. Parameter Title: Fraction of CO ₂ in steam produced (for geothermal projects only)	1, 2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	NA		
		Data unit correctly expressed?	NA		
		Appropriate description of parameter?	NA		
		Source clearly referenced?	NA		
		Correct value provided for estimation?	NA		
		Has this value been verified?	NA		
		Measurement method correctly described?	NA		
		Correct reference to standards?	NA		
		Indication of accuracy provided?	NA		
		QA/QC procedures described?	NA		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PDD in GSP	Final PDD																								
		QA/QC procedures appropriate?	NA																										
B.7.1.5. Parameter Title: Fraction of CH ₄ in steam produced (for geothermal projects only)	1, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>NA</td></tr><tr><td>Data unit correctly expressed?</td><td>NA</td></tr><tr><td>Appropriate description of parameter?</td><td>NA</td></tr><tr><td>Source clearly referenced?</td><td>NA</td></tr><tr><td>Correct value provided for estimation?</td><td>NA</td></tr><tr><td>Has this value been verified?</td><td>NA</td></tr><tr><td>Measurement method correctly described?</td><td>NA</td></tr><tr><td>Correct reference to standards?</td><td>NA</td></tr><tr><td>Indication of accuracy provided?</td><td>NA</td></tr><tr><td>QA/QC procedures described?</td><td>NA</td></tr><tr><td>QA/QC procedures appropriate?</td><td>NA</td></tr></table>		Monitoring Checklist	Yes / No	Title in line with methodology?	NA	Data unit correctly expressed?	NA	Appropriate description of parameter?	NA	Source clearly referenced?	NA	Correct value provided for estimation?	NA	Has this value been verified?	NA	Measurement method correctly described?	NA	Correct reference to standards?	NA	Indication of accuracy provided?	NA	QA/QC procedures described?	NA	QA/QC procedures appropriate?	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																												
Title in line with methodology?	NA																												
Data unit correctly expressed?	NA																												
Appropriate description of parameter?	NA																												
Source clearly referenced?	NA																												
Correct value provided for estimation?	NA																												
Has this value been verified?	NA																												
Measurement method correctly described?	NA																												
Correct reference to standards?	NA																												
Indication of accuracy provided?	NA																												
QA/QC procedures described?	NA																												
QA/QC procedures appropriate?	NA																												
B.7.1.6. Parameter Title: Quantity of steam generated during well testing (for geothermal projects only)	1, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>NA</td></tr><tr><td>Data unit correctly expressed?</td><td>NA</td></tr><tr><td>Appropriate description of parameter?</td><td>NA</td></tr><tr><td>Source clearly referenced?</td><td>NA</td></tr><tr><td>Correct value provided for estimation?</td><td>NA</td></tr><tr><td>Has this value been verified?</td><td>NA</td></tr><tr><td>Measurement method correctly described?</td><td>NA</td></tr><tr><td>Correct reference to standards?</td><td>NA</td></tr><tr><td>Indication of accuracy provided?</td><td>NA</td></tr><tr><td>QA/QC procedures described?</td><td>NA</td></tr><tr><td>QA/QC procedures appropriate?</td><td>NA</td></tr></table>		Monitoring Checklist	Yes / No	Title in line with methodology?	NA	Data unit correctly expressed?	NA	Appropriate description of parameter?	NA	Source clearly referenced?	NA	Correct value provided for estimation?	NA	Has this value been verified?	NA	Measurement method correctly described?	NA	Correct reference to standards?	NA	Indication of accuracy provided?	NA	QA/QC procedures described?	NA	QA/QC procedures appropriate?	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																												
Title in line with methodology?	NA																												
Data unit correctly expressed?	NA																												
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Source clearly referenced?	NA																												
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Measurement method correctly described?	NA																												
Correct reference to standards?	NA																												
Indication of accuracy provided?	NA																												
QA/QC procedures described?	NA																												
QA/QC procedures appropriate?	NA																												

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B.7.1.7. Parameter Title: Fraction of CO ₂ in steam during well testing (for geothermal projects only)	1, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>NA</td></tr><tr><td>Data unit correctly expressed?</td><td>NA</td></tr><tr><td>Appropriate description of parameter?</td><td>NA</td></tr><tr><td>Source clearly referenced?</td><td>NA</td></tr><tr><td>Correct value provided for estimation?</td><td>NA</td></tr><tr><td>Has this value been verified?</td><td>NA</td></tr><tr><td>Measurement method correctly described?</td><td>NA</td></tr><tr><td>Correct reference to standards?</td><td>NA</td></tr><tr><td>Indication of accuracy provided?</td><td>NA</td></tr><tr><td>QA/QC procedures described?</td><td>NA</td></tr><tr><td>QA/QC procedures appropriate?</td><td>NA</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	NA	Data unit correctly expressed?	NA	Appropriate description of parameter?	NA	Source clearly referenced?	NA	Correct value provided for estimation?	NA	Has this value been verified?	NA	Measurement method correctly described?	NA	Correct reference to standards?	NA	Indication of accuracy provided?	NA	QA/QC procedures described?	NA	QA/QC procedures appropriate?	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	NA																											
Data unit correctly expressed?	NA																											
Appropriate description of parameter?	NA																											
Source clearly referenced?	NA																											
Correct value provided for estimation?	NA																											
Has this value been verified?	NA																											
Measurement method correctly described?	NA																											
Correct reference to standards?	NA																											
Indication of accuracy provided?	NA																											
QA/QC procedures described?	NA																											
QA/QC procedures appropriate?	NA																											
B.7.1.8. Parameter Title: Fraction of CH ₄ in steam during well testing (for geothermal projects only)	1, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>NA</td></tr><tr><td>Data unit correctly expressed?</td><td>NA</td></tr><tr><td>Appropriate description of parameter?</td><td>NA</td></tr><tr><td>Source clearly referenced?</td><td>NA</td></tr><tr><td>Correct value provided for estimation?</td><td>NA</td></tr><tr><td>Has this value been verified?</td><td>NA</td></tr><tr><td>Measurement method correctly described?</td><td>NA</td></tr><tr><td>Correct reference to standards?</td><td>NA</td></tr><tr><td>Indication of accuracy provided?</td><td>NA</td></tr><tr><td>QA/QC procedures described?</td><td>NA</td></tr><tr><td>QA/QC procedures appropriate?</td><td>NA</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	NA	Data unit correctly expressed?	NA	Appropriate description of parameter?	NA	Source clearly referenced?	NA	Correct value provided for estimation?	NA	Has this value been verified?	NA	Measurement method correctly described?	NA	Correct reference to standards?	NA	Indication of accuracy provided?	NA	QA/QC procedures described?	NA	QA/QC procedures appropriate?	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	NA																											
Data unit correctly expressed?	NA																											
Appropriate description of parameter?	NA																											
Source clearly referenced?	NA																											
Correct value provided for estimation?	NA																											
Has this value been verified?	NA																											
Measurement method correctly described?	NA																											
Correct reference to standards?	NA																											
Indication of accuracy provided?	NA																											
QA/QC procedures described?	NA																											
QA/QC procedures appropriate?	NA																											

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B.7.1.9. Parameter Title: CO ₂ emission coefficient of fuel used by the geothermal plant (for geothermal projects only)	1, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>NA</td></tr><tr><td>Data unit correctly expressed?</td><td>NA</td></tr><tr><td>Appropriate description of parameter?</td><td>NA</td></tr><tr><td>Source clearly referenced?</td><td>NA</td></tr><tr><td>Correct value provided for estimation?</td><td>NA</td></tr><tr><td>Has this value been verified?</td><td>NA</td></tr><tr><td>Measurement method correctly described?</td><td>NA</td></tr><tr><td>Correct reference to standards?</td><td>NA</td></tr><tr><td>Indication of accuracy provided?</td><td>NA</td></tr><tr><td>QA/QC procedures described?</td><td>NA</td></tr><tr><td>QA/QC procedures appropriate?</td><td>NA</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	NA	Data unit correctly expressed?	NA	Appropriate description of parameter?	NA	Source clearly referenced?	NA	Correct value provided for estimation?	NA	Has this value been verified?	NA	Measurement method correctly described?	NA	Correct reference to standards?	NA	Indication of accuracy provided?	NA	QA/QC procedures described?	NA	QA/QC procedures appropriate?	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	NA																											
Data unit correctly expressed?	NA																											
Appropriate description of parameter?	NA																											
Source clearly referenced?	NA																											
Correct value provided for estimation?	NA																											
Has this value been verified?	NA																											
Measurement method correctly described?	NA																											
Correct reference to standards?	NA																											
Indication of accuracy provided?	NA																											
QA/QC procedures described?	NA																											
QA/QC procedures appropriate?	NA																											
B.7.2. Description of the monitoring plan																												
B.7.2.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?	1, 2	Yes, the operational and management structure is in compliance with the envisioned situation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																								
B.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1, 2	Yes. In order to insure the monitoring plan works effectively and efficiently, the project owner established the processing and managing structure as shown in Chart, which identified the relative staffs and institution for data monitoring. In addition, the Management Group is responsible for the CDM management of the proposed project. The General Manager is in general control and makes key decisions. The Monitoring Person is responsible for reading and calibration of the meter, recording of the readings, and reporting of readings to local electric power company and/or DOE. The Consultation Person is responsible for selecting a CDM consultant company and providing support to its work in developing PDD, selecting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																								

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		CER buyer, and applying for DNA approval.		
B.7.2.3. Does the monitoring plan provide current good monitoring practice?	1, 2	Yes, the monitoring plan includes: 1. Management structure and staff for implementation of monitoring plan 2. Data and Approach for Monitoring, Calibration of Meters & Metering 3. Quality Assurance and Quality Control 4. Data Management System, Verification and Monitoring Results	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.4. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	1, 2	No, there is no further information in Annex 4.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8. Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)				
B.8.1. Is there any indication of a date when the baseline was determined?	1, 2	Yes, the baseline study was completed on October 12th, 2007. <u>Corrective Action Request No.16.</u> The date should be written to dd/mm/yyyy format.	CAR16	<input checked="" type="checkbox"/>
B.8.2. Is this consistent with the time line of the PDD history?	1, 2	Yes, the PDD version is 3.1, which was also finished on 12/10/2007.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.3. Is the information on the person(s) / entity(ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	1, 2	Mr. Jun Guo is one of the persons who completed the application of the baseline study, with contact details in the PDD. Mr. Jun Guo was interviewed in the on-site audit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.4. Is information provided whether this person / entity is also considered a project	1, 2	The persons mentioned above are not project participants.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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participant?				
C. Duration of the project activity / crediting period				
C.1. Duration of the project activity				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	1, 2, 4, 5, 34	<u>Corrective Action Request No.17.</u> The supply contract of Dalian Tuchengzi 40×750 KW wind generator units was signed by Dalian New Energy Electric Development Co., Ltd and Zhejiang Yunda Wind Power Generation Engineering Co. on August 15, 2007. Thus, this date has to be considered as project's starting date, as from this date on the proposed project activity is irreversible without big financial losses. Please revise the project's starting date to August 15, 2007.	CAR17	<input checked="" type="checkbox"/>
C.2. Choice of the crediting period and related information				
C.2.1. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1, 2	The lifetime of the project is 20 years according to the PDD. The renewable crediting period will be used. The first crediting period is 7 years. The starting date of the first crediting period is expected to be 01/07/2008 or the date of registration whichever is later.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D. Environmental impacts				
D.1. Documentation on the analysis of the environmental impacts, including transboundary impacts				
D.1.1. Has the analysis of the environmental impacts of the project activity been sufficiently described?	1, 2, 11, 12	Yes, according to the EIA report, the analysis of the environmental impacts and measures to be taken to mitigate the impacts has been clearly described.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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D.1.2.	Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	1, 2, 11, 12	Yes, the EIA has been approved by the Environmental Protection Bureau of Liaoning Province on July 26, 2007.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.3.	Will the project create any adverse environmental effects?	1, 2, 11, 12	It was checked onsite that the impacts of waste water and sewage, air environment, solid waste, noise are assessed in the EIA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.4.	Were transboundary environmental impacts identified in the analysis?	1, 2, 11, 12	The proposed wind power plant is located within China, and it has no transboundary environmental impacts; therefore this section is not applicable. <u>Corrective Action Request No.18.</u> Please include information in D.1. of the PDD that no transboundary environmental impacts are identified.	CAR18	<input checked="" type="checkbox"/>
D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party					
D.2.1.	Have the identified environmental impacts been addressed in the project design sufficiently?	1, 2, 11, 12	Yes, the identified environmental impacts are addressed in the project design sufficiently.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.2.	Does the project comply with environmental legislation in the host country?	1, 2, 11, 12	Yes, the project complies with the environmental legislation in China.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E. Stakeholders' comments					
E.1. Brief description how comments by local stakeholders have been invited and compiled					
E.1.1.	Have relevant stakeholders been consulted?	1, 2, 21-	Yes, on October 16, 2007, staff from the Dalian Tuchengzi Wind Power Co., Ltd. carried out a survey of the local villagers in the area where the	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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		33, 36	proposed project will be sited.		
E.1.2.	Have appropriate media been used to invite comments by local stakeholders?	1, 2, 36	Corrective Action Request No.19. Information should be provided in the PDD which media have been used to invite stakeholder comments.	CAR19	<input checked="" type="checkbox"/>
E.1.3.	If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	1, 2, 36	There are no regulations/laws in China for carrying out the stakeholder consultation process for this project activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.4.	Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	1, 2, 36	Yes. The process is described in a complete and transparent manner.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.2. Summary of the comments received					
E.2.1.	Is a summary of the stakeholder comments received provided?	1, 2, 36	Yes, the results of public questionnaire have been analyzed clearly in E.2 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.3. Report on how due account was taken of any comments received					
E.3.1.	Has due account been taken of any stakeholder comments received?	1, 2, 36	Yes, given the generally positive (or neutral) nature of the comments received, no corrective action is necessary in response.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F. Annexes 1 - 4					
Annex 1: Contact Information					
F.1.1.	Is the information provided consistent with the one given under section A.3?	1, 2	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.2.	Is the information on all private participants and directly involved Parties pre-	1, 2	Yes. The information of all private participants is presented.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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sented?					
Annex 2: Information regarding public funding					
F.1.3.	Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?	1, 2	No public funding is involved in this project activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.4.	If necessary: Is an affirmation available that any such funding from Annex-I-countries does not result in a diversion of ODA?	1, 2	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Annex 3: Baseline information					
F.1.5.	If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	1, 2	Not all information is consistent with data presented by other sections of the PDD. <u>Corrective Action Request No.20.</u> 1. Page 40 of the PDD refers to the emissions factor of 2004, however it should be the emissions factor of 2005. 2. The EFOM of three years is not consistent to other chapters of the PDD. Please revise the EFOM to = 1,2402 tCO2/MWh.	CAR20	<input checked="" type="checkbox"/>
F.1.6.	Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.7.	Does the additional information substantiate / support statements given in other sections of the PDD?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Annex 4: Monitoring information					
F.1.8.	If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	1, 2	Not applicable as there is no additional background information.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.9.	Is the information provided verifiable? Has sufficient evidence been provided to the validation team?	1, 2	See F.1.8.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.10.	Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	1, 2	See F.1.8.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Table 2 Resolution of Corrective Action and Clarification Requests

Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
<u>Open Issue</u> Please deliver the LoAs issued by China and Japan together with the MoC to the DOE before raising the request of registration.	A.3.2.	The LoAs and the MoC have been delivered to the audit team.	<input checked="" type="checkbox"/> The LoAs issued by China and Japan together with the MoC have been verified by the audit team. So the issue is considered to be solved.
CARs			
<u>Corrective Action Request No.1.</u> Please indicate the version history of the PDD in the revised PDD.	A.1	The version history has been added in the revised PDD.	<input checked="" type="checkbox"/> The version history has been verified by the local auditor in the final PDD.

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<p><u>Corrective Action Request No.2.</u></p> <ol style="list-style-type: none"> 1. The annual electricity generation and the net electricity supplied to the grid are inconsistent with the data from the FSR supplementary report. Please clarify this issue in A.2., Table B5-1 and B.7.1 and accordingly revise the emission reduction all over the PDD. 2. The employment opportunities is 18 not 15 according to the FSR. Please correct it. 3. Please include the following information below the Table in A.3.: (*) In accordance with the CDM modalities and procedures, at the time of making the CDM-PDD public at the stage of validation, a Party involved may or may not have provided its <u>approval</u>. At the time of requesting registration, the approval by the Party(ies) involved is required. 4. Please provide the information that "Further details are described in Annex 1 of the PDD". 	<p>A.2.1.</p>	<p>Regarding issue 1, 2, all the data have been corrected according to the FSR supplementary report all over the PDD.</p> <p>The information of issue 3, 4 mentioned has been added below the Table in A.3 in the revised PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>As verified by the local auditor, the annual electricity generation has been changed to 54,925 MWh and the emission reduction has been accordingly revised in the final PDD.</p> <p>The employment opportunities have been changed to 18.</p> <p>The relevant information has been verified in the final PDD.</p> <p>The issues are considered to be resolved.</p>
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<p><u>Corrective Action Request No.3.</u></p> <p>1. It should be indicated in the PDD from which location the GPS coordinates were taken.</p> <p>2. It should be indicated the source of the GPS measurement.</p>	<p>A.4.1.1.</p>	<p>The location of the project has been specified to seconds in the revised PDD.</p> <p>1 and 2. The information has been added in the revised PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>The location has been revised to north latitude 40°01'07.0" and east longitude 121°50'40.9" in the final PDD.</p> <p>The GPS coordinates were gotten using the GARMIN GPS positioner when the local auditor audited on-site.</p> <p>So the issue is considered to be resolved.</p>
<p><u>Corrective Action Request No.4.</u></p> <p>Please add a project time schedule into the revised PDD.</p>	<p>A.4.3.10.</p>	<p>The project time schedule of the proposed project has been added into the revised PDD.</p> <p>The time of considering of CDM, the FSR, the main equipment purchase agreement and Commissioning have been added into the revised PDD.</p> <p>The table has been added in B.5 of the PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>The time schedule has been verified in B.5 of the final PDD.</p> <p>The relevant evidences have been verified and listed in the IRL.</p>
<p><u>Corrective Action Request No.5.</u></p> <p>"July 1st, 2008 to June 30th, 2015" should be "July 1st, 2008 to June 30th, 2015" format.</p>	<p>A.4.4.1.</p>	<p>The date has been revised as July 1st, 2008 to June 30th, 2015 in the revised PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>This issue has been verified by the local auditor in the updated PDD.</p>
<p><u>Corrective Action Request No.6.</u></p> <p>ACM (Version 06) in the PDD should be ACM0002 (Version 06). Please correct it.</p>	<p>B.2.1.</p>	<p>The ACM (Version 06) in the PDD has been corrected to the ACM0002 (Version 06) in the revised PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>This issue has been verified by the local auditor in the final PDD.</p>

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<p><u>Corrective Action Request No.7.</u> Please provide information whether NEPG imports electricity from other grids. In the case it does, please include emissions from electricity generation in fossil fuel fired power plants of imported electricity into the project boundary.</p>	B.3.6.	<p>According to the China's Regional Grid Baseline Emission Factors Renewed, China's grid baseline OM calculation progress (Chinese Version) from Office of National Coordination Committee on Climate Change of China National Development and Reform Commission, NEPG exported electricity to North China Power Grid 23,423,000MWh in 2005. http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File1358.xls So, NEPG does not import electricity from other grids.</p>	<p><input checked="" type="checkbox"/> This issue has been verified by the local auditor.</p>
<p><u>Corrective Action Request No.8.</u> The evidence for the benchmark of 8 % and the applicable regulation under 135 MW should be added as footnote in the revised PDD and submitted to the validation team.</p>	B.4.1.	<p>The evidence for the benchmark of 8% and the applicable regulation under 135 MW had been added as footnote in the revised PDD and they were submitted to the validation team with this paper.</p>	<p><input checked="" type="checkbox"/> The issues and the evidences have been verified by the local auditor in the final PDD.</p>
<p><u>Corrective Action Request No.9.</u> 1. Please submit evidence for CDM consideration before August 15, 2007 (date of the supply contract of the wind generator units) to the validation team. 2. Please mention in the PDD the CDM consideration before project's starting date.</p>	B.5.1.	<p>1. The evidence for CDM consideration "The requirements for preparing of the development of the Tuchengzi Wind Power Project" dated Dec. 20, 2006 is submitted in annex. CDM has also been considered in the FSR in August, 2007. 2. The CDM consideration before project's starting date has been mentioned in the revised PDD.</p>	<p><input checked="" type="checkbox"/> The hardcopy and the translation of the evidence have been verified by the local auditor. The description of the CDM consideration has been verified in the final PDD (IRL 45, 46). The issues are considered to be resolved.</p>

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<p><u>Corrective Action Request No.10.</u></p> <p>Please provide the IRR calculation spreadsheet including the sensitivity analysis in English to the audit team.</p> <p>The input values were from the FSR (IRL 6) in the GSP version of PDD. But in fact, FSR was designed for the hub height 60m. The hub height is 50m for the proposed project. The supplementary report of FSR had been designed for the hub height 50m (IRL 7). Please revise the input values according to the supplementary report of FSR in the revised PDD.</p>	<p>B.5.9.</p>	<p>The IRR calculation spreadsheet is in the Annex 1.</p> <p>The data used have been revised according to the data from the supplementary report of FSR in the final PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>The English version of IRR calculation spreadsheet has been verified by the local auditor (IRL 49).</p> <p>The data have checked and verified by the local auditor.</p> <p>So the issues are considered to be resolved.</p>
<p><u>Corrective Action Request No.11.</u></p> <p>Please include into the sensitivity analysis the variation of the electricity tariff.</p>	<p>B.5.11.</p>	<p>The sensitivity analysis the variation of the electricity tariff has been included in the revised PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>The variation of the electricity tariff has been verified in the IRR calculation spreadsheet by the local auditor.</p>

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<p><u>Corrective Action Request No.12.</u></p> <ol style="list-style-type: none"> 1. The barrier “the price of raw materials such as steel and construction materials is rising and this trend is expected to continue” is not special to the proposed project. 2. It is not clear what is meant with the following statement: “which has higher efficiency and is technically advanced but the bigger turbine option in Liaoning Province China at present” Please clarify. 3. Some risks have been identified include equipment disrepair, lack of infrastructure for implementation of the advanced technology and lack of qualified service agents. Please clarify whether this would make the project activity technically non feasible. What measures would be implemented should be described in detail and the corresponding evidence should be sent to the audit team. 4. It is indicated that “the proposed project is not likely to attract commercial loan”. But after considering of the CDM, the China Construction Bank has promised to give a loan to the client. Please indicate it clearly. 	<p>B.5.13.</p>	<p>All the issues are from the barrier analysis. We think the financial analysis is enough to prove the additionality of the proposed project. So the barrier analysis has been deleted in the final PDD.</p>	<p><input checked="" type="checkbox"/> The issue has been verified in the final PDD by the local auditor which is considered to be resolved.</p>
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<p><u>Corrective Action Request No.13.</u></p> <p>1. According to IPCC2006, the emission factor of coke should be 29.2tC/TJ, instead of 25.8 in NDRC. This has to be revised.</p> <p>2. According to IPCC2006, the emission factor of refinery gas should be 15.7tC/TJ, instead of 18.2 in NDRC. This has to be revised.</p>	B.6.1.1.	These data have been corrected according to IPCC2006 and the calculated OM factor correcting as 1.2402 tCO2/MWh in the revised PDD.	<p><input checked="" type="checkbox"/></p> <p>This issue has been verified by the local auditor in the final PDD.</p>
<p><u>Corrective Action Request No.14.</u></p> <p>The data source should be clarified with published time and version.</p>	B.6.2.9.	<p>According to Notification on China's Regional Grid Baseline Emission Factors (Renewed 9th August 2007) of Chinese National Development and Reform Commission, the adopted data of installed capacity of China Northeast Power Grid come from the date of The State Electric Industry Yearbook 1999, 2000 and 2006.</p> <p>http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File1374.pdf</p>	<p><input checked="" type="checkbox"/></p> <p>This issue has been verified by the local auditor in the final PDD.</p>
<p><u>Corrective Action Request No.15.</u></p> <p>Regarding the parameter: "Electricity supplied to the grid": the calibration frequency of the meter should be indicated.</p>	B.7.1.2.	<p>The calibration frequency of the meter is once time of half a year which has been added in the revised PDD.</p> <p>The calibration frequency had been added in B.7.1 in the revised PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>The metering equipment are calibrated and checked half a year one time which has been verified by the local auditor in the final PDD.</p>
<p><u>Corrective Action Request No.16.</u></p> <p>The date should be written to dd/mm/yyyy format.</p>	B.8.1.	<p>The format of date has been written to d/m/y in the revised PDD.</p> <p>The date has been corrected as 12/10/2007 in the revised PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>This issue has been verified by the local auditor in the final PDD.</p>
<p><u>Corrective Action Request No.17.</u></p> <p>The supply contract of Dalian Tuchengzi 40×750 KW wind generator units was signed by Dalian New Energy Electric Development Co., Ltd and Zhejiang Yunda Wind Power Generation Engineering Co. on August 15, 2007. Thus, this date has to be considered as project's starting date, as from this date on the proposed</p>	C.1.1.	The project's starting date has been revised to 15/08/2007 in the revised PDD.	<p><input checked="" type="checkbox"/></p> <p>This issue has been verified by the local auditor in the final PDD.</p> <p>The Report for Construction Start, dated Oct. 8th, 2007 has also been verified.</p> <p>The issue is considered to be</p>

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project activity is irreversible without big financial losses. Please revise the project's starting date to August 15, 2007.			solved.
<u>Corrective Action Request No.18.</u> Please include information in D.1. of the PDD that no transboundary environmental impacts are identified.	D.1.4.	The information of no transboundary environmental impacts has been added in the revised PDD.	<input checked="" type="checkbox"/> This issue has been verified by the local auditor in the final PDD.
<u>Corrective Action Request No.19.</u> Information should be provided in the PDD which media have been used to invite stakeholder comments.	E.1.2.	The information has been added in the PDD. The local villagers were called together by the village head of the local village to have a survey for the proposed project.	<input checked="" type="checkbox"/> This issue has been verified by the local auditor in the final PDD.
<u>Corrective Action Request No.20.</u> 1. Page 40 of the PDD refers to the emissions factor of 2004, however it should be the emissions factor of 2005. 2. The EF _{OM} of three years is not consistent to other chapters of the PDD. Please revise the EF _{OM} to = 1,2402 tCO ₂ /MWh.	F.1.5.	1. It has been corrected in the revised PDD. 2. The EF _{OM} has been revised to 1.2402tCO ₂ /MWh.	<input checked="" type="checkbox"/> The issues have been verified by the local auditor in the final PDD.
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<u>Clarification Request No. 1.</u> Please provide the training plan and other training evidences to the audit team.	A.4.3.9.	The training plan has been provided to DOE.	<input checked="" type="checkbox"/> The training plan in The Purchase Contract of Wind Power Turbine WD-750Kw, Contract number: TL/WD200707020, dated Aug. 15th, 2007 (IRL 17) which has been verified by the local auditor.
<u>Clarification Request No. 2.</u> Please clarify why the value added tax (VAT) is 8.5% in Table B.5-1.	B.5.6.	According to the Liubian Han [2003] No.10, the Notification Concerning the Determination of the Value Added Tax of wind power generation issued by the State Tax Bureau of Dalian City.	<input checked="" type="checkbox"/> The evidences have been verified by the local auditor. Please refer to IRL No. 35: The inform of speci-

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<p>Please submit the document for the applied benchmark to the validation team.</p>		<p>Act in accordance with <<State Financial Ministry and State General Tax Bureau about the Notification on the Value Added Tax Policies of Part Natural Resources and The other Products Comprehensive Utilization >>, the value added tax of wind power generation should be the 17%, and being imposed exactly by a half of rate taxation.</p> <p>The document for the applied benchmark has been delivered to the validation team.</p>	<p>ifying the paid value added taxes for wind power, issued by Dalian City Bureau of State Taxatio, dated Sep. 1st, 2003</p>
<p><u>Clarification Request No. 3.</u></p> <p>The PDD states that “Although preferential tariff policy and other incentives with respect to wind power projects are currently in place, financial indicators of grid-connected wind power projects have not fundamentally changed and the loan repayment capability remains weak.” Project participants are requested to evidence that financial indicators of grid-connected wind power projects remain unchanged and the loan repayment capability remains weak.</p>	<p>B.5.13.</p>	<p>The preferential tariff policy of grid-connected wind power projects is to compare with the coal-fired plant in place, but the IRR of the grid-connected wind power projects is still lower than the benchmark IRR. This means grid-connected wind power projects have not fundamentally changed and the loan repayment capability remains weak. Without CDM, grid-connected wind power projects in Liaoning province including the proposed project are not likely to happen.</p> <p>After careful consideration, the barrier analysis is cancelled in the final PDD, because some barriers are not special to the project and the additionality has been proved through the investment analysis of the proposed project.</p>	<p><input checked="" type="checkbox"/></p> <p>The issue has been verified in the final PDD by the local auditor which is considered to be resolved.</p>
<p><u>Clarification Request No. 4.</u></p> <p>Please clarify why limit to Liaoning province, 20MW-50MW and after 2000 when choose the similar activities.</p>	<p>B.5.15.</p>	<p>For the purpose of analyzing common practice, all the wind farm projects in Northeast of China, with installed capacity between 20MW to 45MW, and operated after the year 2002 have been listed in the final PDD.</p>	<p><input checked="" type="checkbox"/></p> <p>The issue has been verified in the final PDD by the local auditor (IRL 50, 51) which is considered to be resolved.</p>


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Annex 2: Information Reference List

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Reference No.	Document or Type of Information
1.	Project Design Document for CDM project “Dalian Tuchengzi Wind Power Project 30MW”, version 03.1, submitted on 30 th Nov. 2007
2.	Approved consolidated baseline methodology AM0002/Version 6
3.	Tool for the demonstration and assessment of additionality, version 03
4.	Participant list of on-site interview, signed on 27 th December, 2007
5.	<p>On-site interviews at the project site at Tuchengzi Town, Wafangdian City, Dalian City, Liaoning Province of China, P. R. China, conducted on 27th December, 2007 by audit team from TÜV-SÜD.</p> <p>Validation team:</p> <p>Ms. Li Xuemei CDM Auditor, TÜV SÜD China Guangzhou Branch</p> <p>Interviewed persons:</p> <p>Mr. Li Chao General Manager, Dalian Tuchengzi Wind Power Co., Ltd.</p> <p>Mr. Lai Tianyu Vice General Manager, Dalian Tuchengzi Wind Power Co., Ltd.</p> <p>Mr. Liang Hui Vice General Manager, Dalian Tuchengzi Wind Power Co., Ltd.</p> <p>Mr. Guo Jun CDM Project Office of Liaoning Province.</p>
6.	“Feasibility Study Report of Dalian Tuchengzi Daoli Wind Power Project”, issued by Liaoning Electric Power Survey & Design Institute, dated Aug. 2007
7.	“Feasibility Study Report (supplementary report) of Dalian Tuchengzi Daoli Wind Power Project”, issued by Liaoning Electric Power Survey & Design Institute, dated Aug. 2007

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Reference No.	Document or Type of Information
8.	The evaluation opinions on the FSR from the experts in the evaluation meeting, dated June, 27 th , 2007
9.	“Approval of Dalian Tuchengzi Daoli Wind Power Project”, issued by Dalian City Development and Reform Committee, file No., Da Fa Gai Neng Yuan Zi[2007]583#, dated Nov., 9 th , 2007
10.	“Approval of agreeing to give the exploitation right of Daoli Wind Power Project to Dalian New Energy Electric Development Co., Ltd, issued by Dalian City Development and Reform Committee, file No., D a Fa Gai Neng Yuan Zi[2006]621#, dated Dec. 18 th , 2006
11.	“Environmental Impact Assessment Table of Dalian Tuchengzi Daoli Wind Power Project”, issued by Dalian City Environmental Protection General Company, dated Mar. 2 th , 2007
12.	The approval of the EIA, issued by Liaoning Province Environmental Bureau, dated July 26 th , 2007
13.	The letter of examination opinions on the Grid Connection System Feasibility study report, issued by Liaoning Province Electric Power Co., Ltd, dated Dec. 20 th , 2006
14.	The letter of undertaking of the grid connection tariff of Dalian Tuchengzi Daoli Wind Power Project, issued by Liaoning Price Bureau, file No., Liao Jia Han 20#(2006), dated Mar. 20 th , 2006
15.	The undertaking of investment on Tuchengzi Wind Power Project, issued by Dalian Huixin Venture Investment Co., Ltd, file No., Da Hui Chuan Zi[2007]1#, dated Oct. 11 th , 2007
16.	The loan undertaking from China Construction Bank, issued by China Construction Bank Dalian City Branch, file No., Yi Cheng Bian Hao 16#(2007), dated Oct. 11 th , 2007 (considering of CDM)
17.	The supply contract of Dalian Tuchengzi 40×750 KW wind generator units, signed by Dalian New Energy Electric Development Co., Ltd and Zhejiang Yunda Wind Power Generation Engineering Co., Ltd, file No., TL/WD 200707020, dated Aug. 15 th , 2007.

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Reference No.	Document or Type of Information
18.	The supply agreement explanation of Dalian Tuchengzi 40×750 KW wind generator units, signed by Dalian New Energy Electric Development Co., Ltd and Zhejiang Yunda Wind Power Generation Engineering Co., Ltd, file No., TL/WD 200707020, dated Aug. 15 th , 2007
19.	The contract alteration letter, the original needed party: Dalian New Energy Electric Development Co., Ltd, the new needed party: Dalian Tuchengzi Wind Power Co., Ltd., the supplier: Zhejiang Yunda Wind Power Generation Engineering Co., Ltd, dated Oct. 23 rd , 2007
20.	The delivery plan of Dalian 40×750 KW Wind Power Project, issued by Zhejiang Yunda Wind Power Generation Engineering Co., Ltd, dated Oct. 23 th , 2007
21.	The application for the construction filed of Dalian Tuchengzi Daoli Wind Power Project, issued by Dalian New Energy Electric Development Co., Ltd, file No., Xin Dian Zi [2005]1#, dated Sep. 7 th , 2005
22.	The hearing of witnesses meeting of Dalian Tuchengzi Daoli Wind Power Project, issued by Wafangdian City Environmental Protection Bureau and Wafangdian City Tucheng Town People's Government, dated April 2 th , 2007 The participants list
23.	The sketch map of the programming land use of Dalian Tuchengzi Daoli Wind Power Project
24.	The reply to the prejudication opinions on the land use of Dalian Tuchengzi Daoli Wind Power Project, issued by Dalian City National Soil Resource and House Bureau, file No., Da Guo Tu Fang Wu Yu Shen Zi [2007]2#, dated Aug. 22 th , 2007
25.	The contract, signed by Wafangdian City Tucheng Town People's Government and Dalian New Energy Electric Development Co., Ltd, dated Oct. 18 th , 2006
26.	The letter of agreeing that Dalian New Energy Electric Development Co., Ltd constructs wind power project in Wafangdian City

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Reference No.	Document or Type of Information
	Tucheng Town Daoli, issued by Wafangdian City Tucheng Town People's Government, dated Sep. 8 th , 2005
27.	The land use permit of Liaoning province village and small town, issued by Wafangdian City Village and Small town Office, dated Mar. 13 th , 2007
28.	The letter of forbidding approval any construction projects near to the wind generator, issued by Wafangdian City Planning Bureau, dated April 18 th , 2007
29.	The letter of forbidding approval and construction house sites near to the wind generator, issued by Wafangdian City Tucheng Town People's Government, file No., Tu Zheng Fa 13# (2007), dated April 9 th , 2007
30.	Application for alteration the construction unit of Wafangdian City Tuchengzi Town Daoli Wind Power Project, the exploitation right attained by Dalian New Energy Electric Development Co., Ltd which would be finished by newly built Dalian Tuchengzi Wind Power Co., Ltd., issued by Dalian New Energy Electric Development Co., Ltd, file No., Da Xin Neng zi 12#(2007), dated Aug. 29 th , 2007,
31.	The explanation of the Wafangdian City Tucheng Town soil resource use compensation agreement, issued by Tucheng Town People's Government, dated Oct. 12 th , 2007
32.	The Wafangdian City Tucheng Town soil resource use compensation agreement, signed by Wafangdian City Tucheng Town People's Government and Dalian Tuchengzi Wind Power Co., Ltd., dated Oct. 12 th , 2007
33.	The soil resource compensation agreement, signed by Wafangdian City Tucheng Town Wangwaizi Village Commission and Dalian Tuchengzi Wind Power Co., Ltd., dated Oct. 12 th , 2007
34.	The arrangement schedule of Daoli Wind Power Project, dated Aug. 2007
35.	The inform of specifying the paid value added taxes for wind power, issued by Dalian City Bureau of State Taxation, dated Sep. 1 st , 2003
36.	The sample of the questionnaires, dated Oct. 16 th , 2007

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Reference No.	Document or Type of Information
37.	The CER purchase contract, signed by dated Nov. 29 th , 2007
38.	The IRR spreadsheet in English, submitted on Jan. 15 th , 2008
39.	The updated version of the PDD, dated Dec. 30 th , 2007, submitted on Jan. 15 th , 2008
40.	The training plan in The Purchase Contract of Wind Power Turbine WD-750Kw, Contract number: TL/WD200707020, dated Aug. 15 th , 2007
41.	The requirements for preparing of the development of the Tuchengzi Wind Power Project, issued by Dalian New Energy Electric Development Co., Ltd, dated Dec. 20 th , 2006
42.	The final IRR spreadsheet, submitted on May 4 th , 2008
43.	The final PDD, submitted on May 4 th , 2008
44.	The Report for Construction Start, dated Oct. 8 th , 2007 , the construction starting date Oct. 16 th , 2007
45.	The board decision, dated Aug. 3 th , 2007
46.	The CDM consulting service contract with CDM Project Office of Liaoning Province, dated Aug. 9 th , 2007
47.	Evidence for benchmark 8%, the National Development and Reform Commission office concerning print and distribute wind-farm project's preliminary work concerning provision of notice, file No., Fagaiban Nengyuan [2005]889#, issued by National Development and Reform commission.
48.	Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects, issued by the Operation Department of Power Generation and Power Transmission of the State Power Corporation of China
49.	IRR calculation with hub height 50m, submitted on June 25 th , 2008
50.	Implementation on Review and Appraisal of Chinese Renewable Energy Law, issued by Institute of Energy of Chinese National Development and Reform Commission, dated 2006
51.	http://tech.gansudaily.com.cn/system/2006/07/13/010076655.shtml
52.	LoAs of China and Japan
53.	MoC