

VALIDATION REPORT

Carbon Resource Management Ltd.

**Guangdong Taishan
Shangchuandao Island Phase I
Wind Farm Project**

SGS Climate Change Programme

SGS United Kingdom Ltd
SGS House
217-221 London Road
Camberley Surrey
GU15 3EY
United Kingdom

Date of Issue:		Project Number:		
18-08-2009		CDM.VAL2366		
Project Title:				
Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project				
Organisation:		Client:		
SGS United Kingdom Limited		Carbon Resource Management Ltd.		
Publication of PDD for Stakeholders Consultation				
Commenting Period:		From 13/11/2008 to 12/12/2008		
First PDD Version and Date:		Version 1.1 Dated 24/10/2008		
Final PDD Version and Date:		Version 3.1 Dated 18/08/2009		
Summary:				
<p>Carbon Resource Management Ltd. has commissioned SGS to perform the validation of the project: Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project.</p> <p>Methodology Used: ACM0002</p> <p>Version and Date: Version 09 dated 27/02/2009</p> <p>The scope of the validation is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and applicable CDM requirements.</p> <p>The report is based on the assessment of the project design document undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews, follow up actions (e.g site visit, telephone or e-mail interviews) and also the review of the applicable approved methodology and underlying formulae and calculations.</p> <p>The report and the annexed validation describes a total of 10 findings which include:</p> <ul style="list-style-type: none"> • 5 Corrective Action Requests (CARs); • 5 Clarification Requests (CLs); • 0 Forward Action Requests (FARs); and <p>All findings have been closed satisfactorily and the project:</p> <ul style="list-style-type: none"> – <input checked="" type="checkbox"/> Will be recommended to the CDM Executive Board with a request for registration OR – <input type="checkbox"/> Is not recommended for registration because a Negative Validation Opinion is issued. The validation report shall be sent to the CDM Executive Board 				
Subject:		Document Distribution		
CDM Validation				
Validation Team:		<input checked="" type="checkbox"/> No Distribution (without permission from the Client or responsible organisational unit)		
Joe Sun Guozhong – Lead Assessor Michael Wu Shimin – Assessor Yolanda Zheng Yue – Local Assessor Richard Huang – Financial Expert				
Technical Review:		Trainee Technical Reviewer:		
Date: 15-08-2009 and 29-08-2009		N/A		
Name: Elton Chen Wu		<input type="checkbox"/> Limited Distribution		
Authorised Signatory:				
Name: Siddharth Yadav		<input type="checkbox"/> Unrestricted Distribution		
Date: 4 th September 2009				
Revision Number:	Date:			Number of Pages:
0	25-07-2009			74
1	18-08-2009	73		
2	--	--		

Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CERs	Certified Emission Reductions
CL	Clarification Request
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EIA	Environmental Impact Assessment
ERs	Emission Reductions
FSR	Feasibility Study Report
GHG	Greenhouse Gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LOA	Letter of Approval
MoC	Modality of Communications
MP	Monitoring Plan
NGO	Non-government organization
ODA	Official Development Assistance
PDD	Project Design Document
PP	Project Participant
PPA	Power Purchase Agreement
SCPG	South China Power Grid
SGS	Société Générale de Surveillance
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

Table of Content

1. Validation Opinion.....	5
2. Introduction.....	6
2.1 Objective.....	6
2.2 Scope.....	6
2.3 GHG Project Description	6
2.4 The Names and Roles of the Validation Team Members.....	6
3. Methodology	7
3.1 Review of CDM-PDD and Additional Documentation	7
3.2 Use of the Validation Protocol	7
3.3 Findings	7
3.4 Internal Quality Control	8
4. Validation Findings	9
4.1 Approval.....	9
4.2 Participation Requirements.....	9
4.3 Project Design Document including Project Description	9
4.4 Applicability of selected methodology to the project activity	10
4.5 Project Boundary	10
4.6 Baseline Selection and Additionality	11
4.7 Application of Baseline Methodology and Calculation of Emission Factors	17
4.8 Application of Monitoring Methodology and Monitoring Plan	19
4.9 Choice of the Crediting Period.....	20
4.10 Environmental Impacts.....	20
4.11 Local Stakeholder Comments	20
5. Comments by Parties, Stakeholders and NGOs	22
5.1 Description of how and when the PDD was made publicly available.....	22
5.2 Compilation of all comments received.....	22
5.3 Explanation of how comments have been taken into account.....	22
6. List of Persons Interviewed	23
7. Document References.....	24

Annexes:

A.1 Annex 1: Local Assessment	26
A.2 Annex 2: Validation Checklist	28
A.3 Annex 3: Overview of Findings	64
A.4 Annex 4: Team Members Statements of Competency.....	70

1. Validation Opinion

SGS United Kingdom Ltd has been contracted by Carbon Resource Management Ltd. to perform a validation of the project: Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project in the People's Republic of China.

The Validation was performed in accordance with the UNFCCC criteria for the Clean Development Mechanism (CDM), Validation and Verification Manual version 01 and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

By generating electricity with 57 sets of wind turbines with unit capacity of 850kW installed with the total installed capacity of 48.45MW and supplying electricity to the South China Power Grid (SCPG), the project activity will result in reductions of greenhouse gas (GHG) emissions that are real, measurable and give long-term benefits to the mitigation of climate change.

In our opinion, the project meets all relevant UNFCCC, CDM criteria and all relevant host country criteria. The project correctly applies methodology ACM0002 version 09. It is demonstrated that the project 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.

The total emission reductions from the project are estimated to be 603,421t of CO₂e over a 7 year crediting period, averaging 86,203t of CO₂e annually. The emission reduction forecast has been checked and it is deemed likely that the stated amount is achievable given the underlying assumptions do not change.

The project will hence be recommended by SGS for registration with the UNFCCC.

Signed on Behalf of the Validation Body by Authorized Signatory



Signature:

Name: Siddharth Yadav

Date: 4th September 2009

2. Introduction

2.1 Objective

Carbon Resource Management Ltd. has commissioned SGS to perform the validation of the project: Guangdong Taishan Shangchundao Island Phase I Wind Farm Project with regard to the relevant requirements for Clean Development Mechanism (CDM) project activities. The purpose of a validation is to have an independent third party assess the project design. In particular, the project's baseline, the monitoring plan (MP) and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reduction (CER). UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities and related decisions by the COP/MOP and the CDM Executive Board.

2.2 Scope

The scope of the validation is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. SGS has employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

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.

2.3 GHG Project Description

The project developer adopts advanced commercial wind-power technology for the construction of this proposed project activity. A total of 57 turbines with a capacity 850kW will be installed with an aggregate installed capacity of 48.45MW. Based on the wind conditions, and the specifications of the turbines, net generation is expected to be 96,500MWh per year, once the project is fully operational, which is exported to the SCPG. The project activity is expected to be operational for 20 years.

SCPG is dominated by fossil fuel fired power plants. The combined emission factor of the SCPG is 0.8933 tCO₂e/MWh. Emission reductions will be achieved by the implementation of the project activity, displacing an equivalent amount of electricity that would have been supplied by the SCPG in the absence of the project activity. The annual emission reductions from the project activity are estimated to be 86,203tCO₂e over the first crediting period.

The implementation of the project will contribute to the sustainable development of the local community, the host country and the world.

2.4 The Names and Roles of the Validation Team Members

Name	Role	Affiliate
Joe Sun Guozhong	Lead Assessor	SGS China
Michael Wu Shimin	Assessor	SGS China
Richard Huang	Financial Expert	SGS Taiwan
Yolanda Zheng	Local Assessor	SGS China

3. Methodology

3.1 Review of CDM-PDD and Additional Documentation

The validation is performed primarily as a document review of the publicly available project document version 1.1 dated 24/10/2008, the subsequent version 2.0 dated 09/02/2009, version 3.0 dated 15/04/2009 and final version 3.1 dated 18/08/2009¹ (/1/). The assessment is performed by trained assessors using a validation protocol attached as Annex 2, table 2.

The site visit was performed on 30/12/2008 and 31/12/2008. The results are summarized in Annex 1.

Statements in the PDD have been confirmed through review of documents, site view, direct contacts with key stakeholders (including the project developers and resident and government representatives in the host country), etc.

3.2 Use of the Validation Protocol

The validation protocol used for the assessment is designed in accordance with the Validation and Verification Manual, Version 1 dated 28 November 2008. It serves the following purposes:

- it organises, details and clarifies the requirements the project is expected to meet; and
- it documents both how a particular requirement has been validated and the result of the validation (reporting).

The validation protocol consists of several tables. The different columns in these tables are described below.

Checklist Question	Ref ID	Means of Verification (MoV)	Comment	Draft and/or Final Conclusion
The various requirements are linked to checklist questions the project should meet.	Lists any references and sources used in the validation process. Full details are provided in the table at the bottom of the checklist.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or Site Visit (SV), or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CL) is used when the validation team has identified a need for further clarification.

The completed validation protocol for this project is attached as Annex A.1 to this report

3.3 Findings

As an outcome of the validation process, the team can raise different types of findings

A Clarification Request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met

Where a non-conformance arises the Assessor shall raise a **Corrective Action Request (CAR)**. A CAR is issued, where:

¹ The client wrote project document version 1.1 dated 24/10/2008, using ACM0002 version07, the subsequent version 2.0 dated 09/02/2009, using ACM0002 version08 and the version 3.0 dated 15/04/2009 and version 3.1 dated 18/08/2009, using ACM0002 version09. As per paragraph 7 of Annex 12 to the EB43 report (/57/), the revised PDD should not be republished for global stakeholder consultation prior to the submission of a request for registration.

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

The validation process may be halted until this information has been made available to the assessors' satisfaction. Failure to address a CL may result in a CAR. Information or clarifications provided as a result of a CL may also lead to a CAR.

A Forward Action Request (FAR) is raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity. FARs shall not relate to the CDM requirements for registration.

Corrective Action Requests and Clarification Requests are raised in the draft validation protocol and detailed in a separate form (Annex A.3). In this form, the Project Developer is given the opportunity to "close" outstanding CARs and respond to CLs and FARs.

3.4 Internal Quality Control

Following the completion of the assessment process and a recommendation by the Assessment team, all documentation will be forwarded to a Technical Reviewer. The task of the Technical Reviewer is to check that all procedures have been followed and all conclusions are justified. The Technical Reviewer will either accept or reject the recommendation made by the assessment team. Findings can be raised at this stage and client must address them within agreed timeline.

4. Validation Findings

4.1 Approval

Two Parties, P.R.China and United Kingdom of Great Britain and Northern Ireland are involved in the project. The host Party P.R.China ratified the Kyoto Protocol on 30/08/2002 and has appointed a DNA. United Kingdom of Great Britain and Northern Ireland ratified the KP on 31/05/2002 and has appointed a DNA. (/27/)

CAR #1 was raised requesting the PP to provide the LOA from UK. The LOA from UK (/21/) has been provided by the project participant lately, wherein, it states that the project assists United Kingdom of Great Britain and Northern Ireland in achieving compliance with its emission reduction commitment under Article 3 of the Kyoto Protocol and is entered into voluntarily. The LOA refers to the precise proposed CDM project activity title in the PDD being submitted for registration. The LOA from UK is unconditional with respect to the aspects mentioned above. The written approval of voluntary participation from the designated national authority (DNA) of United Kingdom of Great Britain and Northern Ireland is in compliance with Marrakech Accords, CDM Modalities §29 and §30 and it has been validated to be in compliance with the requirements set out in paragraphs 45-48 of the VVM (/56/). The authenticity of the LOA from UK has been verified. **CAR #1** is closed.

CAR #2 was raised requesting the PP to provide the LOA from China. The LOA from China (/20/) has been provided by the project participant thereafter, wherein, it states that the project assists P.R.China in achieving sustainable development and is entered into voluntarily. The LOA also refers to the precise proposed CDM project activity title in the PDD being submitted for registration. The LOA from China is unconditional with respect to the aspects mentioned above. The written approval of voluntary participation from the designated national authority (DNA) of P.R.China is in compliance with Marrakech Accords, CDM Modalities §29 and §30, Kyoto Protocol Art.12.2, Marrakech Accords and CDM Modalities §40a. The LOA from China has been validated to be in compliance with the requirements set out in paragraphs 45-48 of the VVM. The authenticity of the LOA from China has been verified. **CAR #2** is closed.

4.2 Participation Requirements

Parties, stakeholders and UNFCCC accredited NGOs have been invited to comment on the validation requirements from 13/11/2008 to 12/12/2008. The PDD and comments have been made publicly available (/28/). Please refer to Section 5 for details.

CAR #4 was raised requesting the PPs to provide MoC for this project. MoC dated 06/03/2009 (/22/) has been submitted. The MoC adopted the latest template for MoC available from the UNFCCC website at the time of the validation and it was filled out in compliance with the Procedures For Modalities Of Communication Between Project Participants And The Executive Board version 01 dated 13/02/2009 (http://cdm.unfccc.int/EB/045/eb45_repan59.pdf); hence **CAR #4** is closed out.

4.3 Project Design Document including Project Description

The purpose of the project activity, type of technology used and the contribution of the project to sustainable development is described in the PDD. The information provides the reader with a clear understanding of the proposed CDM project activity. The Project involves in installation and operation of 57 sets of turbines with a unit capacity of 850kW. The Project will generate greenhouse gas (GHG) emission reductions by avoiding CO₂ emissions from electricity generation by fossil fuel power plants and will contribute to sustainable development of the local community and the host country by reducing green house gases (GHG) emissions.

Through reviewing the FSR (/2/) of the project, the Implementation Schedule of the project, site view and interview with PP, it is validated that the information provided in the PDD is consistent and in compliance with the actual situation/planning.

The table in Section A.3 of the PDD version 3.1 about project participants is correctly applied. CGN Taishanchuandao Wind Power Co., Ltd. and Carbon Resource Management Ltd. are the two project participants for the project at this validation stage. All information provided in Table A.3 in the PDD is consistent with details provided by further chapters of the PDD (in particular Annex 1). Through document review of the LOAs (/20//21/) and interview with the project participants, it has been validated that the two

project participants have been approved by China and UK respectively. The LOAs from the two Parties have been provided and validated.

Version 1.1 of the PDD was found not to be in complete compliance with the CDM-PDD format. **CAR #3** was raised requesting the PP to draft the PDD of the project in conformance with the UNFCCC CDM-PDD format. Version 3.0 of the PDD dated 15/04/2009 (/1/) applied the latest version (03.2) of PDD template (/26/) as Annex 15 of EB25. Hence, **CAR #3** is closed out.

Through desk review of the documents provided by the project participants and interview with the project participants, it has been validated that the project description in the PDD is accurate and complete.

The location of the project activity is provided in Section A.4.1 of the PDD. The Project is located in Jiangmen City, Chuandao Town, Shangchuandao Island, Guangdong Province, P. R. China. The geographical coordinates of the Project is 112°46' 11" (E) to 112°47'08" (E) and 21°34' 50" (N) to 21°39' 03" (N). The information provided on the location of the project activity allows for a clear identification of the project site.

Project participant, CGN Taishanchuandao Wind Power Co., Ltd. possesses ownership and license which allows the implementation of the project at the project site (/12/).

The category of the project activity is correctly identified in Section A.4.2 of the PDD, which is renewable electricity in grid connected applications. The sectoral scope is energy industries. The project activity involves the installation of 57 wind turbines with unit capacity of 850kW. The project design engineering reflects current good practices in China.

The table used for the indication of project emission reductions is correctly applied. Annual emission reductions are provided in PDD section A.4.4, the expected annual emission reduction is 86,203 tCO₂.

The information on public funding of the project activity provided in Section A.4.5 of the PDD conforms to the actual situation and planning as presented by the project participants. The project receives no public funding from Annex I Parties.

The turbine manufacturers will provide on-the-job-training for staff of the proposed wind farm before the start of operation. The project developer already has successful experience on similar wind turbines and has trained staff. **CL #5** was raised requesting PP to provide information related to the maintenance of the equipments. In the Manual of Training, Monitoring & QA/QC of the project dated August 2008, maintenance of the equipments and training plan of the staff has been included (/15//16/). **CL #5** is closed.

4.4 Applicability of selected methodology to the project activity

The project uses the approved consolidated methodology ACM0002 version 09(/25/) which is the methodology most applicable for this project.

The choice of ACM0002 version 09 is correctly justified in section B.2 of the PDD. ACM0002 Version 09 refers to the *Tool for the demonstration and assessment of additionality*, Version 05.2 (/30/) (hereinafter referred to as the Additional Tool) and the *Tool to calculate the emission factor for an electricity system*, Version 01.1 (/31/) (hereinafter referred to as the Emission Factor Tool).

The project is the installation of a wind power plant. The project does not involve switching from fossil fuels to renewable energy at the site of the project activity. The geographical and system boundaries for the electricity grid can be clearly identified and the information on the characteristics of the grid is available. The project is in conformance with all applicability criteria of ACM0002 version 09.

4.5 Project Boundary

The spatial extent of the proposed project boundary includes the proposed project power plant and all power plants connected physically to the electricity system that the proposed project power plant is connected to. South China Power Grid is correctly identified as the grid to which the project is connected in accordance with EB guidance, ACM0002 version 09 and guidance from the DNA of China (/29/). According to *Bulletin on 2009 Baseline Emission Factors for Regional Power Grids in China* issued by China DNA on 02/07/2009, SCPG is composed of Guangdong, Guangxi, Yunnan and Guizhou power grids. All emission sources and gases related to the baseline scenario, project scenario and leakage are clearly identified and described in a complete manner in Section B.3 of the PDD. CO₂ is the main emission source and included in the baseline. In the PDD, CO₂ is included in the baseline emissions; CH₄ and N₂O are not included in the baseline emission. CO₂, CH₄ and N₂O are all not included in the project emission. As a wind farm project without back

up power generation, there is no leakage. All above information has been validated to be in compliance with ACM0002 Version 09.

The project may import electricity from the grid within the project boundary. Monitoring of electricity imported from the grid which is expected to contribute more than 1% of the overall expected average emission reductions not addressed in the methodology is included in the monitoring plan of the PDD. Net electricity supplied to the grid will be used for CERs calculation.

Through document review of the PDD, Feasibility Study Report of the project (/2/) and other documents provided, site visit and interview with the project participants, it has been validated that the identified project boundary and the selected sources and gases is justified.

4.6 Baseline Selection and Additionality

The baseline scenario is identified in Section B.4 of the PDD transparently, which is the equivalent annual electricity supplied by SCPG. As per ACM0002 version 09, if the project activity is the installation of a new grid-connected renewable power plant, the baseline scenario is “electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources”. ACM0002 version 09 is correctly applied in the identification of the baseline scenario.

The choice of the baseline is compatible with publicly available data. Conservativeness is addressed in the way of identifying the baseline. Electricity supply from the operation of grid-connected power plant and by the addition of new generation sources (the baseline scenario) is widely applied in the host country.

4.6.1 Additionality

The latest version (05.2) of the Additionality Tool during validation is used in the discussion on additionality in Section B.5 of the PDD. All steps needed by the Additionality Tool are followed in a transparent manner. The discussion on additionality and the evidences provided are consistent with relevant descriptions in PDD.

As per the Additionality Tool, the following steps are taken for the demonstration of the additionality of the project in section B.5 of the PDD.

Step 1. Identification of alternatives to the proposed project activity consistent with current laws and regulations;

Step 2. Investment Analysis;

Step 3. Barrier Analysis; (Not used)

Step 4. Common Practice Analysis.

As per ACM0002 version 09, the project activity itself is not the baseline scenario. It has been validated that the project activity is additional based on the investment analysis and the common practice analysis for the project. Detailed discussion is in Sections 4.6.3, 4.6.4, 4.6.5 and 4.6.6.

4.6.2 Prior Consideration of the Clean Development Mechanism

In version 1.1 of the PDD, there was no implementation timeline for the project. **CL #6** was raised requesting the PP to provide an implementation timeline of the project.

The project owner considered CDM revenue from the very beginning of project implementation, as mentioned in feasible study report (FSR), “CDM revenue will help to overcome the investment barrier of this project”. Equipment Purchase Agreement is dated 04/06/2008 (/18/), which is the start date of the project activity.

The start date of the project activity is before 02/08/2008, in accordance with paragraphs 98 and 100 of the VVM, assessment of the project participant’s prior consideration of the CDM is performed through document reviews, interviewing the PP and on site visit.

Feasibility Study Report of Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project was completed by East China Investigation and Design Institute in November 2007 (/2/).

Accreditation certificate for East China Investigation and Design Institute issued by the Construction Ministry of the People’s Republic of China dated 20/03/2007 (/4/) is also provided for validation.

Approval of the Feasibility Study Report for Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project was issued by Development and Reform Commission of Guangdong Province on 16/11/2007 (/5/).

Board Meeting Report to make a decision to undertake the project as a proposed CDM project activity dated 20/11/2007 (/24/) has been provided for validation.

Emission Reductions Purchase Agreement signed between CGN Wind Power Co., Ltd and Carbon Resource management Ltd. relating to the CGN Guangdong Chuandao Phase I Windfarm Project dated 30/04/2008 (/13/) has also been provided for validation.

The wind turbine supply contract was signed between the project owner and the wind turbine supplier on 04/06/2008 (/18/). The validation contract was signed between SGS and CRM on 09/10/2008 (/9/).

The discussion on additionality and the evidence provided is consistent with the starting date of the project. The above evidences have been provided to the assessors and verified. From the timeline of the project and the evidences provided, it is validated that CDM has been seriously considered before the project start date and real actions have been taken to secure CDM status in parallel with the implementation of the proposed project. **CL #6** is closed.

4.6.3 Identification of alternatives

In Sub-step 1a of the PDD, four plausible and credible alternatives available to the proposed project that provide outputs or services comparable to the proposed CDM project activity were identified:

1. The proposed project activity undertaken without being registered as a CDM project activity;
2. Thermal power plant with comparable capacity or electricity generation;
3. Renewable energy plant with comparable capacity or electricity generation;
4. Continuation of the current situation: Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources. Comparable capacity or electricity generation addition is provided by South China Power Grid.

It has been validated that alternative 2 is not in compliance with *Notice on Strictly Prohibiting the Installation of Fuel-fired Generators with the Capacity of 135MW or below* issued by the General Office of the State Council (/39//40/) and it is not a realistic and credible alternative.

It has been validated that because of the financial unattractiveness of solar PV, geothermal, biomass and the lack of hydro in the region where the proposed project activity is located, alternative 3 is not a realistic and credible alternative (/51//52/).

Through investment analysis which is validated below, it is demonstrated in the PDD that alternative 4, continuation of the current situation, is more attractive than the proposed project activity undertaken without being registered as a CDM project activity and therefore considered as the credible and feasible alternative.

4.6.4 Investment analysis

In step 2 of the PDD, investment analysis was used to demonstrate that alternative 1 is not a realistic and credible alternative.

It has been validated that the *Interim Rules on Economic Assessment of Electric Engineering Retrofit Projects* (/35/) is released by the State Power Corporation of China. In this document, the financial benchmark rate of return of Chinese power industry is 8% of the total investment, which has been used widely for Feasibility Studies of power project investments in China, including wind power projects.

The “*Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects*” issued by the State Power Corporation of China, the former state authority to manage relevant power issues including new constructions of power plants, states that the benchmark is based on The Methodology and Parameters for Financial Evaluation of Construction projects (Chapter 1 General, Section 1.1) which is the national criteria in evaluating new construction projects including fossil-fuel-fired plants. The 8% benchmark is applicable to new built as well as retrofit projects. This benchmark IRR has been widely accepted in newly constructed power plants in China, and has also been accepted as the benchmark for registered CDM projects in power sector. The benchmark IRR of 8% is validated to be suitable for the project activity by SGS Assessors in compliance

with paragraph 11 of Guidance on the Assessment of Investment Analysis version 02 (/55/, Annex 45 to the EB41 report).

Consideration of paragraph 54 of EB38:

The parameters and inputs used for IRR calculation (/3/) are from the Feasibility Study Report of the project which is valid and applicable at the time the decision to go ahead with the project was made. In China, FSR is required to be prepared by accredited third party. Assumptions and data sources for the economic evaluation of a project in the approved FSR are required to be based on relevant national standards and criteria.

The FSR dated November 2007 for the proposed CDM project was prepared by East China Investigation and Design Institute (ECIDI), which is an independent third party entity accredited by the relevant national authority to carry out feasibility studies for new projects, including wind farm project, relevant accreditation certificate has been verified. The permission for the FSR of the project was issued by Development and Reform Commission of Guangdong Province on 16/11/2007 which has also been provided and verified. The FSR can be considered as an independent and realistic assessment of the proposed CDM project activity, including the parameters listed therein which are used as input values in the investment analysis of the project.

Following paragraph 54 of EB38 (/53/), SGS assessors performed the following to make sure relevant requirements are fulfilled.

Paragraph 54(a) of EB38: *The FSR has been the basis of the decision to proceed with the investment in the project, i.e. that the period of time between the finalization of the FSR and the investment decision is sufficiently short for the DOE to confirm that it is unlikely in the context of the underlying project activity that the input values would have materially changed.*

The period of time between the finalization of the FSR (November 2007) and the investment decision (04/06/2008, which is the start date of the project on which the equipment purchase agreement was signed) is sufficiently short (less than eight months) for the assessors to confirm that it is not likely in the context of the underlying project activity that the input values would have materially changed. Therefore, SGS can confirm that the results of the FSR were the basis of the decision to proceed with the investment in the project and that the requirements of Paragraph 54(a), EB38 are fulfilled.

Paragraph 54(b) of EB38: *The values used in the PDD and associated annexes are fully consistent with the FSR, and where inconsistencies occur the DOE should validate the appropriateness of the values.*

The input values of parameters used for IRR calculation in version 3.1 of the PDD and IRR spreadsheet are checked against the approved FSR. It has been validated that all the listed input values are from the FSR for the project dated November 2007 and have been consistently applied in all calculation as per the guidance from paragraph 54(b) of EB38 and paragraph 6 of Guidance on the Assessment of Investment Analysis version 02 (Annex 45 to the EB41 report).

Paragraph 54(c) of EB38: *On the basis of its specific local and sectoral expertise, confirmation is provided, by cross-checking or other appropriate manner, that the input values from the FSR are valid and applicable at the time of the investment decision.*

The following has been performed with reference to Guidance on the Assessment of Investment Analysis version 02 (Annex 45 to the EB41 report) to validate if the input values from the FSR are valid and applicable at the time of the investment decision:

i). For fixed values in the IRR calculation:

As discussed above, the input values used for the investment analysis of the project were valid and applicable at the time of the investment decision. In addition, as per further explanation in paragraph 6 of the Guidance on the Assessment of Investment Analysis version 02, no information from a later point should be the basis for the investment decision. The application of fixed values is in line with this guidance.

In summary, given the information available at the time of the investment decision and also considering the latest information on these parameters as well as the applied standard and guideline, it is of SGS opinion that the assumption of fixed input values throughout the 20 year period is plausible and appropriate.

ii). For Power tariff:

The applied tariff of 0.69RMB/kWh (incl. VAT) in version 3.1 of the PDD is taken from the approved FSR. Considering the FSR has been approved by Development and Reform Commission of Guangdong Province, the bus-bar tariff used in the PDD version 3.1 has been accepted by the NDRC and the bus-bar tariff is valid and applicable at the time of the investment decision.

Also, the tariff of 0.69RMB/kWh (incl. VAT) in version 3.1 of the PDD is appropriate as it is above the power price issued Guangdong Price Bureau, Announcement of the electricity tariff of the wind farm (Yuejia [2007] No.294), 21st Dec 2007(/23/).

Therefore, SGS considers that the application of a fixed value for the tariff of 0.69RMB/kWh (incl. VAT) for the IRR calculation as has been done in the PDD version 3.1 is valid and applicable at the time of investment decision.

The sensitivity analysis in the PDD shows that a 10% increase of the on-grid tariff (0.795Yuan/kWh) can make the IRR of the project reach 7.96% without CDM income, lower than the benchmark IRR of 8%. In the near future, the on-grid tariff of wind farm projects is not expected to increase to that extent once the tariff has been approved by the authority based on information from official data source (/41/).

Moreover, the validation team checked the website of the National Development and Reform Commission (NDRC), which is the authority responsible for setting the tariff policy in China. Information from the NDRC, *Notice on the tariff policy for wind power project* (NDRC price [2009] No. 1906) (http://www.ndrc.gov.cn/jgg/jgqk/t20090724_292635.htm) indicates that tariff for wind farm projects is below 0.69RMB/kWh (incl. VAT) which confirms that the tariff applied in the PDD of the project is appropriate and conservative.

iii). For Total Static Investment:

In China, the investment cost per kW for wind power projects is approximately 9,266RMB/kW (http://chinanet.xinhuanet.com/jszb/2007-09/28/content_11276436.htm), and the investment cost per kilowatt of the project is 9,910RMB/kW.

Also, comparison of investment cost per MW is done between the proposed CDM project activity and the first 100 registered CDM wind power projects in China and the comparison results confirm that the investment per MW used in the PDD version 3.1 is within the range of the investment per MW for the registered CDM projects. Table 1 illustrates the comparison of investment per MW between the proposed CDM project activity and the registered CDM projects in Guangdong Province. The relatively higher investment per MW of the proposed CDM project activity is mainly due to the fact that the project is located on an isolated island and the construction materials would be transported to the project site by water, making a higher investment with comparison to projects in the mainland, which is supported by the description in Chapters 8 and 14 of the FSR.

Table 1: Comparison of investment per MW between wind farm projects

Project Title	Investment per MW (Yuan/MW)
Guangdong Nan Ao 26MW Wind Power Project	7950
Shibeishan Wind Power Generation Project in Huilai County, Guangdong Province	7078
Guangdong Nan' ao Huaneng 45.05 MW Wind Power Project	9256
Lufeng Jiadong First Phase Wind Farm Project	8522
Zhuhai Hengqin Island Wind Farm Project	9167

Guangdong Taishan Shangchuandao Island Phase I Wind Farm
Project

9910

Furthermore, the actual investment that has happened so far was provided to SGS by the PP for cross check. The actual contracts which have been signed by the project owner and equipment/service providers provided by the PP including the wind turbine supply contract signed with the wind turbine supplier, Transformer Station Supply Contract signed with China Gezhouba Group, Tower Supply Contract signed with Nanjing Jiangbiao Group (/19/), etc confirmed that the actual value of total static investment is higher than that used in the PDD.

Based on the above information, it is of SGS opinion that the total static investment used in the PDD is valid and appropriate at the time of investment decision.

The discussion about the variation of total static investment in the PDD is reasonable. It is validated that because of the price increase of equipments, raw materials and wage standard in China, the total static investment is not likely to decrease to a degree (decrease by 10.1%) where the IRR can reach the benchmark 8%.

iv). For O & M Cost:

The annual O & M costs mainly include maintenance costs, salary and welfare, material cost and other costs. The annual O & M costs/total static investment of the proposed project activity (2.7%) is compared with that of the first 100 registered CDM wind power projects in China (between 1% to 5%) and found to be appropriate.

Based on the above information, it is of SGS opinion that the Annual O & M cost used in the PDD is valid and applicable at the time of investment decision.

The discussion about the variation of O&M cost in the PDD is reasonable. It is validated that because of the price increase of equipments, raw materials and wage standard in China, the O&M cost is not likely to decrease to a degree (decrease by 48%) where the IRR can reach the benchmark 8%.

v). For Annual Power Generation:

As per page 13 of the PDD, the annual power generation comes from an independent qualified design institute with the highest grade (Grade A), based on statistics of on-site wind measurements and 36 years (1970~2005) of historical wind data in the local area.

Factors affecting annual power supply, such like air density, speed, wind turbine efficiency on the annual theoretical power generation, etc. have been taken into consideration by the professional organization when doing feasibility study and conclusion has been drawn in the approved FSR.

Comparison in annual running hour (which is a proxy of annual power supply and plant load factor) is done between the proposed CDM project activity and the first 100 registered CDM wind power projects in China by the validation team, the comparison results confirm that the annual running hour of the proposed CDM project activity used in the PDD version 3.1 is within the range of the annual running hour for the registered CDM projects. Table 2 illustrates the comparison of annual running hour between the proposed CDM project activity and the registered CDM projects in Guangdong Province.

Following the requirements prescribed in Annex 11 to EB 48 meeting, it is verified that the plant load factor of 22.7% in the PDD has been determined by a third party contracted by the project participant, East China Investigation and Design Institute and the plant load factor was provided to the government while applying the project activity for implementation approval.

Table 2: Comparison of annual running hour between wind farm projects

Project Title	Running Hour
Guangdong Nan Ao 26MW Wind Power Project	2429

Shibeishan Wind Power Generation Project in Huilai County, Guangdong Province	1985
Guangdong Nan'ao Huaneng 45.05 MW Wind Power Project	2241
Lufeng Jiadong First Phase Wind Farm Project	1597
Zhuhai Hengqin Island Wind Farm Project	2278
Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project	1991

Annual output capacity of the proposed project is 96,500MWh (=48.45MW*1991.744Hr), based on above information, it is of SGS opinion that the annual power supply used in the PDD is valid and appropriate at the time of investment decision.

The discussion about the variation of annual power generation in the PDD is reasonable. This parameter is subject to plant load factor (PLF) which is validated as above, so it is validated that the annual power generation is not likely to increase to a degree (increase by 10.4%) where the IRR can reach the benchmark 8%.

The input values of the parameters for IRR calculation, the calculation formulae used in the IRR calculation and the calculation results have been validated to be correct.

Following Annex 45 of EB41 Guidance on the Assessment of Investment Analysis version 02 (/55/), it has been validated that the project IRR calculation of the project reflects the period of expected operation of the underlying project activity (technical lifetime which is 20 years), the fair value of the project activity assets at the end of the assessment period has been included as a cash inflow in the final year, the capital cost of the assets and their depreciation as an expense to the project were not treated both to constitute a double counting of this cost and the cost of financing expenditures (i.e. loan repayments and interest) was not included in the calculation of project IRR in version 3.1 of the PDD and the IRR calculation spreadsheet.

The investment analysis in Sub-step 2c under Section B.5 of the PDD shows that the project IRR of the project is 6.72% without CDM income and 9.59% with CDM income. The sensitivity analysis in Sub-step 2d shows that within a variation of $\pm 10\%$ of the critical parameters (Investment, Tariff, Electricity Generation and O&M costs), the IRR of the project does not exceed the benchmark IRR, and the variation of a critical parameter is not likely to reach a degree where the benchmark IRR can be exceeded. It shows that the conclusion regarding the economic unattractiveness of the project is robust to reasonable variations in the critical assumptions.

4.6.5 Barrier analysis

Barrier analysis is optional as per the Additionality Tool and it was not applied in the PDD.

4.6.6 Common practice analysis

In step 4 of the PDD, common practice analysis was performed for the proposed CDM project activity.

In version 1.1 of the PDD, not enough information was given on the common practice analysis. **CL #7** was raised requesting the PP to further clarify the project is not common practice.

From the China Wind Farm Installed Capacity Statistics 2007 (/42/), February 2008, there are 14 wind farms in Guangdong Province, out of which 5 have been registered as CDM project activities (UNFCCC ref no.: 0299, 1963, 1627, 1338 and 1742).

The proposed project is a large scale project with the installed capacity of 48.45MW, and the project below 15MW belongs to the small scale project. The installed capacity of Nan'ao Dalankou Wind Farm Project, Fu'ao Wind Farm Project, Nanfang Wind Farm Project, Huaneng Wind Farm Project, Haishiwan Wind Farm

Project, Dameisha Wind Farm Project, Xinliaodao Wind Farm Project is not higher than the threshold capacity of 15MW. Therefore, the seven projects are not similar with the proposed project.

Guangdong Shanwei Honghaiwan Wind Farm Project was invested in 2000 with the bank loan support from the Denmark government, so Honghaiwan project is not similar to the proposed project activity.

The Danna Wind Farm Project was invested by the Chinese and the Netherlands joint venture and commissioned in 1998, not similar to the proposed project activity.

From the above analysis, it is concluded that development of this type of project in Guangdong Province is not common practice without CDM support. The description has been presented in the revised PDD. **CL #7** is closed.

4.7 Application of Baseline Methodology and Calculation of Emission Factors

It is validated that ACM0002 version 09 has been correctly applied for determining the project emissions, leakage and the direct calculation of emission reductions in the PDD. All the methodological choices have been explained and correctly justified in Section B.6 of the PDD. Uncertainties in the GHG emissions estimates are properly addressed in the PDD.

Baseline emissions (BE_y)

Baseline emissions are calculated using the below formula:

$$BE_y = (EG_y - EG_{baseline}) * EF_{grid,CM,y}$$

Where,

BE_y Baseline emissions in year y (tCO₂e);

EG_y Electricity supplied by the project activity to the grid (MWh);

$EG_{baseline}$ Baseline electricity supplied to the grid in the case of modified or retrofit facilities (MWh). For this project, this value is taken as zero;

$EF_{grid,CM,y}$ Combined margin CO₂ emission factor for grid connected power generation in year y , calculated using the latest version of the *Tool to calculate the emission factor for an electricity system, Version 01.1*.

The following steps are taken as per the Emission Factor Tool to determine the baseline emission factor.

STEP1. Identify the relevant electric power system

As per the Emission Factor Tool version 01.1, a project electricity system and a connected electricity system shall be defined whereas in version 1.1 of the PDD there are no such definitions. Definition of a project electricity system and connected electricity system is requested. **CAR #8** was raised.

In version 2.0 of the PDD, the project electricity system and connected electricity system have been correctly defined as per the guidance from the Chinese DNA. According to the definition of Chinese DNA, SCPG is the project electricity system, which consists of Guangdong, Guangxi Zhuang Autonomous Region, Yunnan and Guizhou power grids. The Central China Power Grid (CCPG) is the connected electricity system of the SCPG. CCPG consists of Jiangxi Province, Henan Province, Hubei Province, Hunan Province, Sichuan Province and Chongqing Municipality Power Grid. **CAR #8** is closed. The final PDD version 3.1 dated 18/08/2009, using ACM0002 version 09 is consistent with the guidance from the Chinese DNA.

STEP2. Select an operating margin (OM) method

It is validated that the option of simple OM and the ex-ante option with a 3-year generation-weighted average, without requirement to monitor and recalculate the emissions factor during the crediting period were selected for the project in version 3.1 of the PDD.

STEP3. Calculate the operating margin emission factor according to the selected method

It is validated that Simple OM is calculated using option C, based on data on the total net electricity generation of all power plants serving the system and the fuel types and total fuel consumption of the project electricity system. $EF_{grid,om,y}$ is calculated as 0.9987tCO₂e/MWh in version 3.1 of the PDD. This has been verified to be in compliance with the methodology, the Emission Factor Tool and relevant EB guidance (/52/). Data from the China DNA were also checked to confirm that the calculated value of $EF_{grid,om,y}$ is correct.

STEP4. Identify the cohort of power units to be included in the build margin

It is validated that Option (b), the set of power capacity additions in the electricity system that comprise 20% of the system generation (in MWh) and that have been built most recently, is chosen for BM calculation. The build margin emission factor is *ex-ante* determined based on the most recent information available at validation in version 3.1 of the PDD.

STEP5. Calculate the build margin emission factor ($EF_{grid,BM,y}$)

$EF_{grid,BM,y}$ is calculated as 0.5772tCO₂e/MWh in the PDD version 3.1 dated 18/08/2009. This has been verified to be in compliance with the Emission Factor Tool and relevant EB guidance. Data from the China DNA were also checked to confirm that the calculated value of $EF_{grid,bm,y}$ is correct.

STEP6: Calculate the combined margin emissions factor ($EF_{grid,CM,y}$)

It is validated that the baseline emission factor, ie, the combined margin emissions factor is calculated as 0.8933tCO₂e/MWh in version 3.1 of the PDD dated 18/08/2009. It is consistent with the publication of 2009

Baseline Emission Factors for Regional Power Grids in China dated 02/07/2009. $EF_{grid,CM,y}$ is determined *ex-ante* and does not have to be updated during the first crediting period of the project.

In version 1.1 of the PDD, the grid emission factor was based on the latest available data at the time of commencing validation and data vintage can be considered to be appropriate. However, it has been validated that most recent official data which were available to the PP when drafting version 3.1 of the PDD (18/08/2009) have been used in version 3.1 of the PDD. Since the grid emission factor in version 3.1 of the PDD (0.8933tCO₂e/MWh) is more conservative than that in version 1.1 of the PDD (0.9698 tCO₂e/MWh), the

calculation and calculated result of $EF_{grid,CM,y}$ in version 3.1 of the PDD is accepted.

Project emissions (PE_y)

The proposed project is a wind power plant, and there is no backup power generation. Project emissions do not have to be taken into account according to ACM0002 (version 09). $PE_y = 0\text{tCO}_2\text{e}$.

Leakage(L_y)

According to ACM0002 (version 09), the leakage for the proposed project is zero. $L_y = 0\text{tCO}_2\text{e}$.

Emission Reductions (ER_y)

Emission reductions are calculated using the below formula:

$$ER_y = BE_y - PE_y - L_y$$

It is validated that data provided for the *ex-ante* estimation of CERs in Sections B.6.2 and B.6.3 of the PDD version 3.1 dated 18/08/2009 are in compliance with ACM0002 version 09. The original data used for the calculation of the grid emission factor used for the *ex-ante* estimation of CERs are from Official sources like China Energy Statistical Yearbook (/33/), China Electric Power Yearbook (/34/), and IPCC (/32/). The calculation of grid emission factor is in compliance with the Emission Factor Tool and relevant EB guidance and the estimated annual power generation is from the FSR of the project.

It is validated that ACM0002 version 09 has been applied exactly as defined for determining emission reductions. The PDD clearly stated which equations will be used in calculating emission reductions. All the required steps and calculations have been followed as per ACM0002 version 09. The PDD documents how

each equation is applied in a manner that enables readers to reproduce the calculation. Conservative assumptions have been used to calculate emission reductions.

The project of emission reductions is based on estimated annual electricity generation in the Feasibility Study Report (FSR) and official data source for baseline emission factor. The project is based on same procedures as to be used for later monitoring. The calculation of ERs is not expected to change for the first crediting period. It is validated that the formulae used to calculate emission reductions are correct and in compliance with ACM0002 Version 09.

As a wind farm project, the project emission is zero. The table required for the indication of projected emission reductions is correctly applied in Section B.6.4 of the PDD. It is validated that the project of emission reductions is in line with the envisioned time schedule for the project's implementation and the indicated crediting period.

4.8 Application of Monitoring Methodology and Monitoring Plan

ACM0002 version 09 provides a consistent approach in the context of all parameters to be monitored and further information provided by the PDD. Parameters that need to be monitored (EGy, EGexport,y and EGimport,y) are listed in the PDD version 3.1 as per ACM0002 version 09. All parameters and data that are available at validation as listed in Section B.6.2 are consistent with ACM0002 version 09. It is validated that ACM0002 version 09 applies consistently for the choice of the option selected for monitoring baseline emissions in the PDD.

Grid emission factor is determined ex-ante as per ACM0002 version 09 and will be fixed during the first crediting period. The value of grid emission factor in the PDD version 3.1 is appropriately assessed and correct.

The monitoring plan provides for the collection and archiving of EGy, EGexport,y and EGimport,y. It is possible to determine EGy, EGexport,y and EGimport,y with accuracy. As a wind farm project, the project emission is zero. There are no GHG indicators needed for project emission. The information given for the monitoring of EGy, EGexport,y and EGimport,y is sufficient to ensure the verification of a proper implementation of the monitoring plan.

In the monitoring plan, EGexport,y and EGimport,y will be measured by the main meter installed at substation to the power grid. EGy will be calculated by deducting EGimport,y from EGexport,y. The readings of electricity meters will be hourly measured and monthly recorded. In case the project shares the same transformer with other projects, EGy will be determined using an approach defined in Section B.7.2 of the monitoring plan in the PDD. Data will be archived for 2 years following the end of the crediting period by the main meter of electronic and paper backup. Uncertainty level of the main meter will not exceed 0.5%. Calibration of the main meter will be carried out once per year by a qualified calibration organization in accordance with industry standards. Sales receipts are used for double check purpose.

It is validated that the monitoring approach is in line with current good practice and the monitoring plan ensures the verifiability of data quality and correctness and the delivery of high quality data. The formulae used to determine project's emission reductions ($PE_y=0$) is clearly indicated and in compliance with ACM0002 version 09.

CL #9 was raised asking PP to further clarify how the data will be collected and internally audited. The PP clarified that by providing the Manual of Training, Monitoring & QA/QC of the project dated August 2008, a detailed responsibility description of each CDM management department has been included. **CL #9** is closed. Day-to-day records handling procedures have been identified in the PDD.

The authority and responsibility of project management is clearly described in the monitoring plan in Section B.7.2 of the PDD. Monitoring staff will collect the information and data required by the Monitoring Plan. Auditing staff will check the calculation results of the net electricity generation each month. Technology department and CDM monitoring director will do cross-checking.

The authority and responsibility for registration, monitoring, measurement and reporting is clearly described in the PDD. Procedures for training of monitoring staff are identified in the monitoring plan and the training plan of the project (/15/).

The monitoring plan addresses the unique feature of the proposed CDM project activity and it describes all measures to be implemented for monitoring EGy, EGexport,y and EGimport,y. QA/QC procedures are

described in the PDD. The monitoring plan provides information on the measuring equipment used to measure EGexport,y and EGimport,y and its positioning.

Procedures for maintenance of monitoring equipment and installations are identified in the maintenance plan of the project. Day-to-day records handling procedures, internal audit procedures and project performance review procedures are identified in Section B.7.2 of the PDD. Emergency plan has been prepared for the project.

During the validation process, through document review of the monitoring plan in the PDD against the methodology applied and interview with the project participants, it has been validated that the monitoring plan is in compliance with the methodology applied and the project participants are capable of implementing the monitoring plan.

It is validated that the date for completion of the baseline methodology has been provided in Section B.8 of the PDD version 3.1 and it is in consistency with the time line of the PDD history. All data required for the baseline determination are provided in a complete manner by Annex 3 of the PDD.

4.9 Choice of the Crediting Period

The start date of the project and operational lifetime of the project are clearly defined in Section C.1 of the PDD and they are reasonable. The starting date of the project is 04/06/2008 which is determined in accordance with definition specified in Glossary of CDM terms version 04. The operational lifetime of the project is 20 years. The assumed crediting time of the project is clearly defined and reasonable. The first crediting period of the project is 7 years. The choice of the crediting period is reasonable.

4.10 Environmental Impacts

There are regulations in China that require an EIA for the project activity to be performed. It is validated that an EIA of the project activity (/6/) has been carried out by East China Investigation and Design Institute, which is accredited by the State Environmental Protection Administration of the People's Republic of China (now known as the ministry of Environmental Protection of the People's Republic of China) (/7/). The EIA has been approved by EPA of Guangdong Province (/8/). The EIA shows that the project complies with environmental legislations in the People's Republic of China.

Major content of the EIA has been presented in the PDD which include noise, solid waste and waste water. Trans-boundary environmental impacts have been considered in the analysis in the EIA. As stated in the EIA, the project creates no adverse environmental effects and there are no identified environmental impacts from the project.

4.11 Local Stakeholder Comments

Stakeholder consultation process is not required by regulations and laws in China. A stakeholder consultation process for the project activity has been performed as per CDM rules (/10//11/).

In version 1.1 of the PDD, detailed information about how the stakeholder process has been performed was not included. **CL #10** was raised requesting the PP to further clarify how the local stakeholder consultation was conducted, such as who were included in the stakeholder consultation process and whether appropriate media was used to invite local stakeholders.

In October, 2007, the project developer sent out questionnaires to the stakeholders in the directly affected area, requesting comments on the proposed project construction. As there are few people living around the wind farm project site, the stakeholders were noticed in person and 40 copies of questionnaire were distributed, and 40 copies of questionnaire were returned. The age of the participating stakeholders was in the range of 26 to 70 years old, including 35 local residents and 5 government officers of Chuandao Town and Taishan County. The events mentioned above have been added in the revised PDD. And the questionnaires have been provided to the DOE.

Stakeholder consultation questionnaires for the project have been provided and validated. Information about how the stakeholder consultation was conducted has been provided in the PDD. **CL #10** is closed.

There is a summary of the stakeholder comments received in Section E.2 of the PDD. All of the stakeholders thought the project would have many advantages and they all support the project. It is validated that



according to comments from the stakeholders, it is not necessary to adjust the design, construction or operation of the proposed project.

.

5. Comments by Parties, Stakeholders and NGOs

In accordance with sub-paragraphs 40 (b) and (c) of the CDM modalities and procedures, the project design document of a proposed CDM project activity shall be made publicly available and the DOE shall invite comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available. This chapter describes this process for this project.

5.1 Description of how and when the PDD was made publicly available

The Project Design Document for this project was made available on the UNFCCC website <http://cdm.unfccc.int/Projects/Validation/DB/KTDGTS8UZZPV7KCUBFZW5BZO5RDCTN/view.html> and was open for comments from 13-11-2008 until 12-12-2008. Comments were invited through the UNFCCC CDM homepage

5.2 Compilation of all comments received

Comment Number	Date Received	Submitter	Comment
0			

5.3 Explanation of how comments have been taken into account

No comments were received.

6. List of Persons Interviewed

Date	Name	Position	Short Description of Subject Discussed
29/12/2008	Zhu Qiyang	CRM	PDD, Materials need to be provided for validation, etc.
29/12/2008	Qi Ying	CGN Taishanchuandao Wind Power Co., Ltd.	Legality of the project, Status of the project, Materials need to be provided for validation, etc.
29/12/2008	Quan Engui	CGN Taishanchuandao Wind Power Co., Ltd.	Legality of the project, Status of the project, Materials need to be provided for validation, etc.
29/12/2008	Li Min	CGN Taishanchuandao Wind Power Co., Ltd.	Legality of the project, Status of the project, Materials need to be provided for validation, etc.
29/12/2008	Tan Chunyin	Taishan City	Stakeholder consultation, the local government's attitude toward the project, etc.
29/12/2008	Wang Huanzhang	EPA of Taishan City	Stakeholder consultation, the local EPA's attitude toward the project, etc.
29/12/2008	Huang Jianhong	Local resident	Stakeholder consultation, the local residents' attitude toward the project, etc.
29/12/2008	Lin Jianbin	Local resident	Stakeholder consultation, the local residents' attitude toward the project, etc.
29/12/2008	Liang Dainiu	Local resident	Stakeholder consultation, the local residents' attitude toward the project, etc.
29/12/2008	Li Aibo	Local Government	Stakeholder consultation, the local residents' attitude toward the project, etc.
29/12/2008	Liang Qingyan	CGN Taishanchuandao Wind Power Co., Ltd.	Stakeholder consultation, the local residents' attitude toward the project, etc.

7. Document References

Category 1 Documents (documents provided by the Client that relate directly to the GHG components of the project, (i.e. the CDM Project Design Document, confirmation by the host Party on contribution to sustainable development and written approval of voluntary participation from the designated national authority):

- /1/ PDD version 1.1 dated 24/10/2008 for GSP, PDD version 2.0 dated 09/02/2009, PDD version 3.0 dated 15/04/2009 and version 3.1 for registration request dated 18/08/2009
- /2/ Feasibility Study Report of Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project issued by East China Investigation and Design Institute dated November 2007
- /3/ IRR calculation spreadsheet for the project
- /4/ Accreditation certificate for East China Investigation and Design Institute (ECIDI) issued Construction Ministry of the People's Republic of China
- /5/ Approval of Taishan Shangchuandao Island Phase I Wind Farm Project issued by Development and Reform Commission of Guangdong Province dated 16/11/2007
- /6/ Construction Project EIA Report issued by East China Investigation and Design Institute dated March 2006
- /7/ The accreditation certificate for East China Investigation and Design Institute issued by State Environmental Protection Administration of the People's Republic of China dated 20 December 2004 (Certificate No.: SEIA Certificate Jia Zi No. 2001)
- /8/ The approval of Construction Project EIA Report of the project issued by EPA of Guangdong Province dated 31/05/2006
- /9/ The service agreement signed between the project owner and SGS dated 09/10/2008
- /10/ The stakeholder consultation survey questionnaires
- /11/ The attendance list of the stakeholder representatives
- /12/ The business license of the project owner issued by the Industry and Commerce Administration Management Bureau of Jiangmen City valid from 15/01/2008 to 15/01/2038
- /13/ The ERPA signed between the project owner and the buyer dated 30/04/2008
- /14/ The Implementation Schedule of the project
- /15/ The training plan of the project
- /16/ The maintenance plan of the project
- /17/ Emergency plan of the project
- /18/ The wind turbine supply contract signed between the project owner and the wind turbine supplier dated 04/06/2008
- /19/ Tower Supply Contract signed with Nanjing Jiangbiao Group
- /20/ The LOA from the People's Republic of China dated December 2008
- /21/ The LOA from the United Kingdom of Great Britain and Northern Ireland dated 24/02/2009
- /22/ MoC for the project dated 06/03/2009
- /23/ Guangdong Price Bureau, Announcement of the electricity tariff of the wind farm (Yuejia [2007] No.294), 21 Dec 2007
- /24/ Board Meeting Report to make a decision to undertake the project as a proposed CDM project activity dated 20/11/2007

Category 2 Documents (background documents used to check project assumptions and confirm the validity of information given in the Category 1 documents and in validation interviews):

- /25/ ACM0002 version 09 dated 27/02/2009
- /26/ Guidelines For Completing The Project Design Document (CDM-PDD) And The Proposed New Baseline And Monitoring Methodologies (CDM-NM) Version 07
- /27/ http://unfccc.int/files/essential_background/kyoto_protocol/status_of_ratification/application/pdf/kpstats.pdf

- /28/ <http://cdm.unfccc.int/Projects/Validation/DB/KTDGTS8UZZPV7KCUBFW5BZO5RDCTN/view.html>
- /29/ <http://cdm.ccchina.gov.cn>
- /30/ Tool for the demonstration and assessment of additionality, version 05.2
- /31/ Tool to calculate the emission factor for an electricity system, version 01.1
- /32/ 2006 IPCC Guidelines for National Greenhouse Gas Inventories
- /33/ China Energy Statistical Yearbook
- /34/ China Electric Power Yearbook
- /35/ Interim Rules on Economic Assessment of Electric Engineering Retrofit Projects (Ref no.: GuoDian Fa [2002](263))
- /36/ Page 54, China Solar PV Report 2007, China Environment Science Press
- /37/ Page 6 of Overview of Chinese Renewable Energy Development, NDRC/GEF/World Bank China Renewable Energy Development Project, May 2004.
- /38/ <http://finance.21cn.com/news/cydt/2007/06/28/3319602.shtml>
- /39/ Notice on Strictly Prohibiting the Installation of Fuel-fired Generators with the Capacity of 135MW or below issued by the General Office of the State Council, Decree No. 2002-6
- /40/ http://www.gov.cn/gongbao/content/2002/content_61480.htm
- /41/ <http://politics.people.com.cn/GB/5752740.html>
- /42/ "Statistics of domestic wind farm installation capacity in 2007", Shi Pengfei, available from <http://www.xjwind.com/cn/UploadFiles/200851412232316.pdf>
- /43/ <http://cdm.unfccc.int/Projects/DB/DNV-CUK1203852135.01/view>
- /44/ <http://cdm.unfccc.int/Projects/DB/BVQI1189424843.32/view>
- /45/ <http://cdm.unfccc.int/Projects/DB/TUEV-SUED1217248156.51/view>
- /46/ <http://cdm.unfccc.int/Projects/DB/BVQI1189424843.32/view>
- /47/ <http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1144397841.66/view>
- /48/ <http://cdm.unfccc.int/Projects/DB/TUEV-SUED1205492047.65/view>
- /49/ <http://cdm.unfccc.int/Projects/Validation/DB/QDZRX42QWXSNNHXPBBXGL7WU45FJ91Z/view.html>
- /50/ <http://cdm.unfccc.int/Projects/Validation/DB/YW6WC2XP2KR4D1RO19ZFODPPDH2DAU/view.html>
- /51/ <http://www.asksolar.com/culture/2005/0410/255.html>
- /52/ http://www.ndrc.gov.cn/xwfb/t20050708_28096.htm
- /53/ EB38 report dated 14/03/2008
- /54/ Annex 35 to EB39 report dated 16/05/2008
- /55/ EB41 report dated 02/08/2008
- /56/ Validation and Verification Manual Version 01 dated 28/11/2008
- /57/ Annex 12 to EB43 report dated 24/10/2008

- oOo -

A.1 Annex 1: Local Assessment

This checklist is designed to provide confirmation of in-country data and information provided in the Project Design Document for Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project.

It serves as a “**reality check**” on the project that is completed by a local assessor from SGS China.

Issue	Findings	Source/Mean of Verification	Further Action / Clarification / Information Required?
1. Evidence of the legality of the project.	Relevant evidences have been provided to show the legality of the project. No findings were raised in this regard.	Plant design, implementation plan, feasibility study report (FSR), business license, official permit, etc	No
2. Interview with local stakeholders and realize actual status of the project activity	List of the stakeholders who attended the initial stakeholder consultation has been provided to SGS assessors. Two representatives of the stakeholders have been phone interviewed. No findings were raised in this regard.	Official representatives from concerned local governments, like the EPA and representatives of local residences need to attend the site visit.	No
3. In regard to the Stakeholder's comments mentioned in PDD, please provide the contact details of those who attended the meeting.	Minutes of the stakeholder consultation have been provided. Questionnaires that were sent to the stakeholders have been provided. The stakeholder consultation reports have also been provided. No findings were raised in this regard.	Minutes, questionnaires and other documentation available for the process. Need to Interview sample of stakeholders mentioned and confirm the text adequately reflects what has been discussed during site visit.	No
4. Verify the Environmental Impact Assessment and its approval.	The EIA for the project and the approval for the EIA have been provided to and verified by SGS assessors.	Provide copy of EIA and approval.	No

Issue	Findings	Source/Mean of Verification	Further Action / Clarification / Information Required?
5. Additionality of the project	<p>The FSR and approval for the FSR have been provided to and verified by SGS assessors.</p> <p>The Spreadsheet for IRR calculation has been provided.</p> <p>Evidence that the incentive from the carbon credits income was seriously considered in the decision to proceed with the project activity was provided, such as the FSR of the project, email communications between the project owner and the carbon credits buyer, etc.</p> <p>The common practice analysis for the project has been performed to the satisfaction of the lead assessor.</p> <p>No findings were raised in this regard.</p>	<p>Supporting document used in the investment analysis as well as all data sources of parameters or assumptions used in PDD.</p> <p>A spreadsheet for IRR calculation for the project.</p> <p>Evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity</p> <p>Clarify how other activities similar to the proposed project activity are identified</p>	No
6. Application of methodology	<p>Required parameters that will be monitored as per the applied methodology have been added in the PDD version 3.1.</p> <p>Training plan, maintenance plan, operational manual and etc have been provided.</p> <p>No findings were raised in this regard.</p>	<p>Evidence that required parameters will be monitored as per the applied methodology, QA/QC procedures will be in place, Training plan, maintenance plan, Spreadsheet for CERs calculation</p>	No

A.2 Annex 2: Validation Checklist

Table 1 Participation Requirements for Clean Development Mechanism (CDM) Project Activities (Ref PDD, Letters of Approval and UNFCCC website)

Requirement	Reference	Comments	Conclusion/C ARs/ CLs
<p>1. All Parties involved have approved the project activity</p> <p>1.1. Has the DNA of each Party involved in the proposed CDM project activity in section A.3 of the PDD provided a written letter of approval which confirms</p> <p>1.1.1. The country is a Party to the Kyoto Protocol</p> <p>1.1.2. Participation is Voluntary</p> <p>1.1.3. The Host Party confirming that the proposed CDM project activity contributes to sustainable development of the country Non-Annex 1 Party shall submit a letter of approval</p> <p>1.1.4. It refers to the precise proposed CDM project activity title in the PDD being submitted for registration</p>	<p>Annex 3, Clean Development Mechanism, Validation and Verification Manual, Version 01 (from this point forwarded referenced as VVM) - 49a-d /54a-b/125</p> <p>Paragraph 37 CDM Modalities and procedures</p>	<p>Yes</p> <p>The host Party P.R.China has ratified the Kyoto Protocol on 30/08/2002 and has appointed a DNA.</p> <p>United Kingdom of Great Britain and Northern Island ratified the KP on 31/05/2002 and has appointed a DNA.</p> <p>Refer to http://unfccc.int/files/essential_background/kyoto_protocol/status_of_ratification/application/pdf/kp_stats.pdf</p>	OK

Requirement	Reference	Comments	Conclusion/C ARs/ CLs
1.2. The letter/s of approval are unconditional with respect to 1.1.1 to 1.1.4 above	VVM Para. 49/54	<p>LOA from UK to be provided by PP</p> <p>CAR #1 was raised requesting the PP to provide the LOA from UK.</p> <p>The LOA from UK has been provided by the project participant lately, wherein, it states that the project assists United Kingdom of Great Britain and Northern Ireland in achieving compliance with its emission reduction commitment under Article 3 of the Kyoto Protocol and is entered into voluntarily. The LOA refers to the precise proposed CDM project activity title in the PDD being submitted for registration. The LOA from UK is unconditional with respect to the aspects mentioned above. The written approval of voluntary participation from the designated national authority (DNA) of United Kingdom of Great Britain and Northern Ireland is in compliance with Marrakech Accords, CDM Modalities §29 and §30 and it has been validated to be in compliance with the requirements set out in paragraphs 45-48 of the VVM. The authenticity of the LOA from UK has been verified. CAR #1 is closed.</p>	<p>CAR #1</p> <p>OK</p>

Requirement	Reference	Comments	Conclusion/CARs/CLs
2. The project shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof, and be entered into voluntarily	VVM Para. 54 Marrakech Accords, CDM Modalities §29 and §30 Kyoto Protocol Art. 12.2, Marrakech Accords, CDM Modalities §40a	CAR #2 was raised requesting the PP to provide the LOA from China. LOA From China to be provided by PP The LOA from China has been provided by the project participant. The project assists P.R.China in achieving sustainable development and is entered into voluntarily. The LOA refers to the precise proposed CDM project activity title in the PDD being submitted for registration. The LOA from China is unconditional with respect to the aspects mentioned above. The written approval of voluntary participation from the designated national authority (DNA) of P.R.China is in compliance with Marrakech Accords, CDM Modalities §29 and §30, Kyoto Protocol Art. 12.2, Marrakech Accords and CDM Modalities §40a. The LOA from China has been validated to be in compliance with the requirements set out in paragraphs 45-48 of the VVM. CAR #2 is closed.	CAR #2 OK

Requirement	Reference	Comments	Conclusion/CARs/CLs
3. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for a minimum of 30 days, and the project design document and comments have been made publicly available	VVM Para. 128 Marrakech Accords, CDM Modalities, §40	Yes The parties, stakeholders and UNFCCC accredited NGOs have been invited to comment on the validation requirements for a minimum of 30 days, and the project design document and comments have been made publicly available. PDD has been made publicly available from 13/11/2008 to 12/12/2008 and comments were invited through the UNFCCC website, http://cdm.unfccc.int/Projects/Validation/DB/KTDGTS8UZZPV7KCUBFZW5BZO5RDCTN/view.html Number of comments received: 0	OK
4. The project design document is in accordance with the applicable CDM requirements for completing PDDs.	VVM Para. 57 Marrakech Accords, CDM Modalities, Appendix B, EB Decisions	No The CDM-PDD format was modified in version 1.1 of the PDD. No page number was marked and UNFCCC logo in the page header has been moved. CAR #3 was raised requesting the PPs to modify the PD in conformance with the UNFCCC CDM-PDD format. In the PDD version 2.0 dated 09/02/2009, the right template of CDM-PDD has been used. CAR #3 is closed.	CAR #3 OK

Requirement	Reference	Comments	Conclusion/C ARs/ CLs
		<p>CAR #4 was raised requesting the PPs to provide a MoC for the project.</p> <p>The MoC for the project dated 06/03/2009 has been provided. The MOC adopted the latest template for MOC available from the UNFCCC website at the time of the validation and it was filled out in compliance with the PROCEDURES FOR MODALITIES OF COMMUNICATION BETWEEN PROJECT PARTICIPANTS AND THE EXECUTIVE BOARD version 01 dated 13/02/2009:</p> <ul style="list-style-type: none"> a) The MOC includes the title of the project, which is the same as that in the PDD and LOAs; b) The MOC includes the date of Submission which is 06/03/2009; c) The MOC lists the two project participants which is the same as that in the PDD; d) Clear designation of focal point for each scope of authority is in the MOC; e) Contact details and specimen signature of each focal point and signing authority are included in the MOC; <p>Signatures of all project participants confirming their agreement to the terms of the statement of modalities of communication are in section 3 of the MOC.</p> <p>CAR #4 is closed out.</p>	<p>CAR #4</p> <p>OK</p>

Table 2 PDD

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
A. General Description of Project Activity				
A.1. Project Title				
A.1.1. Does the used project title clearly enable the reader to identify the unique CDM activity?	VVM Para.56 Guidelines for completing a CDM-PDD (PDD) section A.1	DR	The title of the project Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project clearly enables to identify the unique CDM activity.	OK
A.1.2. Is there an indication of a revision number and the date of the revision?	VVM Para.56 PDD section A.1	DR	Yes. The current version number (1.1) of the document which is used for GSP comment is in the PDD section A.1. and this version is dated 24/10/2008	OK
A.2. Description of the Project Activity				
A.2.1. Does the description of the proposed CDM project activity as contained in the PDD sufficiently cover all relevant elements accurately?	VVM Para.59 PDD section A.2 see also A.4, A.4.3 and B.3	DR	Yes, the purpose of the project activity, type of technology used and the contribution of the project to sustainable development is described in the PDD.	OK
A.2.2. Does the information provide the reader with a clear understanding of the proposed CDM activity?	VVM Para.60 PDD section A.2 see also A.4, A.4.3 and B.3	DR	Yes, the information provides the reader with a clear understanding of the proposed CDM project activity. The Project involved in installation and operation of 57 wind turbines, each with a capacity of 850kW. The total installed capacity is 48.45MW. The Project will generate greenhouse gas (GHG) emission reductions by avoiding CO ₂ emissions from electricity generation by fossil fuel power plants and will contribute to sustainable development of the local community and the host country by reducing greenhouse gases (GHG) emissions.	OK
A.2.3. Is all information provided	VVM Para.64	DR,	Pending site visit	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
consistent and in compliance with the actual situation or planning?	PDD section A.2 see also A.4, A.4.3 and B.3	SV,I	Yes, the information provided in the PDD is in compliance with the actual situation/planning of the project	
A.2.4. Is all information provided consistent with details provided in further chapters of the PDD?	VVM Para.64 PDD section A.2	DR,S V,I	Pending site visit Yes, the information provided is consistent with the details provided in further chapters of the PDD.	OK
A.3. Project Participants				
A.3.1. Is the table required for the indication of project participants correctly applied?	VVM Para. 51 PDD section A.3	DR	Yes. The table in A.3 of the PDD is correctly applied. CGN Taishanchuandao Wind Power Co. Ltd. is the project owner and Carbon Resource Management Ltd. is the buyer.	OK
A.3.2. Is all information provided in consistency with details provided by further chapters of the PDD (in particular Annex 1)?	VVM Para. 51 PDD section A.3	DR	Yes. All information provided is in consistency with details provided by further chapters of the PDD.	OK
A.4. Technical Description of the Project Activity				
A.4.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)? Are the latitude and longitude of the site indicated (decimal points)	VVM Para.64 PDD section A.4	DR	Yes. The information provided in the PDD section A.4.1.4 on the location of the project activity allows for a clear identification of the site.	OK
A.4.2. Does the proposed CDM project activity involve the alteration of existing	VVM Para.64 PDD section A.4	DR	No, the project activity is a new project and does not involve the alteration of existing installations or processes.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
installations or process?				
A.4.3. Do the project participants possess ownership or licenses which will allow the implementation of the project at that site / those sites?	VVM Para.64 PDD section A.4	DR, SV,I	Pending site visit The license is to be provided. The license of the project owner issued by the Industry and Commerce Administration 15/01/2008 to 15/01/2038 has been provided.	OK
A.4.4. Is the category(ies) of the project activity correctly identified?	VVM Para.64 PDD section A.4	DR	Yes. The category of the project activity is correctly identified. Category: Renewable electricity in grid connected applications Sectoral Scope: 1 Energy industries	OK
A.4.5. Is all information provided in compliance with actual situation or planning as available by the project participants?	VVM Para.64 PDD section A.4	DR, SV,I	Pending site visit Yes, the information provided is in compliance with the actual situation/planning provided by the project participants. The turbine manufacturers will provide on-the-job-training for staff of the proposed wind farm before the start of operation. The project developer already has successful experience on similar wind turbines and has trained staff. CL #5 was raised requesting PP to provide information related to the maintenance of the equipments. In the Manual of Training, Monitoring & QA/QC of the project dated August 2008, maintenance of the equipments and training plan of the staff has been included. CL #5 is closed	CL #5 OK
A.4.6. Is the table required for the indication of projected emission reductions correctly applied?	VVM Para.64 PDD section A.4	DR	Yes. The table used for the indication of projected emission reductions is correctly applied. Annual emission reductions are provided in PDD section A.4.4, the expected annual emission reduction is 86,203 tCO ₂ e.	OK
A.5. Public Funding				
A.5.1. Does the information on public funding provided conform to the actual situation or planning as	VVM Para.64 PDD section A.4	DR, SV,I	Pending site visit The project receives no public funding	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
presented by the project participants?				
A.5.2. Is all information provided consistent with details provided by further chapters of the PDD (in particular annex 2)?	PDD section A.4.5	DR	Pending site visit Yes, all information provided is in consistency with details provided in Annex 2 of the PDD.	OK
A.5.3. In case of public funding from Annex I Parties is it confirmed that such funding does not result in a diversion of official development assistance	PDD section A.4.5	DR, SV, I	The project receives no public funding from Annex I Parties.	OK
B. Baseline and Monitoring Methodology				
B.1. Choice and Applicability				
B.1.1. Is the baseline methodology previously approved by the CDM Methodology Panel?	VVM Para.68 PDD section B.1	DR	Yes. The project uses the approved consolidated methodology ACM0002 version 09.	OK
B.1.2. Has the methodology (incl. the tools) been altered from the original version as referenced in the PDD?	VVM Para.69 PDD section B (B.1-B.2)	DR	Yes. ACM0002 version 07 was used in version 1.1, and ACM0002 version 09 was used in final version of the PDD Version 3.1. From the UN website, ACM0002 version 09 is valid from 27/02/2009 onwards.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.1.3. Is the selected approved methodology applicable to the project activity in the PDD?	VVM Para.75/66a/68/73 PDD section B (B.1-B.2)	DR	Yes. ACM0002 is the methodology most applicable for this project.	OK
B.1.4. Is the discussion in the PDD in conformance with all applicability criteria of the applied methodology?	VVM Para.75/66b/68 PDD section B (B.1-B.2)	DR	Yes. The choice of ACM0002 is correctly justified in section B of the PDD. The project is in conformance with all applicability criteria of ACM0002 version 09. The project involves electricity capacity additions to the grid from wind power resources; and the project does not involve switching from fossil fuels to renewable energy at the site of the project activity; and the geographic and system boundaries of the SCPG can be clearly identified and information on the characteristics of the grid is public available.	OK
B.2. Project Boundary				
B.2.1. Are all emission sources and gases related to the baseline scenario, project scenario and leakage clearly identified and described in a complete and transparent manner? Is there information on GHG emissions in proposed CDM project activity boundary as a result of the implementation of the proposed CDM project activity which are expected to contribute more than	VVM Para.79/76 /67a PDD section B.3	DR	Yes. All emission sources and gases related to the baseline scenario, project scenario and leakage are clearly identified and described in a complete manner in Section B of the PDD CO ₂ is the main emission source and included in the baseline.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology.				
B.2.2. In case of grid connected electricity projects: Is the relevant grid correctly identified in accordance with the tool to calculate emission factor of electricity system (wherever applicable) and the underlying methodology?	VVM Para.79 PDD section B.3	DR	Yes. South China Power Grid is correctly identified in accordance with EB guidance, ACM0002 version 09 and guidance from DNA of China.	OK
B.2.3. Does the project boundary include the physical delineation of the proposed CDM project activity?	VVM Para.78/79 PDD section B.3 also see section A.4.3	DR	Yes. The project boundary includes the physical delineation of the proposed CDM project activity. The spatial extent of the proposed project boundary includes the proposed project power plant and all power plants connected physically to NCPG that the proposed project power plant is connected to. CO ₂ is included in the baseline emission, CH ₄ and N ₂ O are not included in the baseline emission. CO ₂ , CH ₄ and N ₂ O are all not included in the project emission. As a wind farm project, there is no leakage. All above information has been validated to be in compliance with ACM0002 Version 09.	OK
B.2.4. Are the project's geographical boundaries and the project's system boundaries (components and facilities used to mitigate GHGs) clearly defined?	VVM Para.76/79 PDD section B.3 also see section A.4.3	DR	Yes. The project's spatial boundaries are clearly defined in Section B.3 of the PDD. The spatial extend of the project boundary includes the project site and all power plants connected to SCPG. SCPG is an electricity system which is defined by the spatial extent of the power plants that can be dispatched without significant transmission constrains. According the boundary definitions of the Chinese DNA, SCPG consists of Guangdong, Guangxi, Yunnan and Guizhou power grids.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.3. Identification of the Baseline Scenario				
B.3.1. Does the PDD discuss the identification of the most likely baseline scenario? Does the PDD follow the steps to determine the baseline scenario required by the methodology and is the application of the methodology and the discussion and determination of the chosen baseline transparent?	VVM Para.67b.80/82/86 PDD Section B.4/B.5	DR	Yes. The baseline scenario is identified in the PDD transparently as per ACM0002 version 09. As per ACM0002 version 09, the baseline scenario is electricity supply from grid. Electricity supply from grid has been identified as the baseline scenario as per ACM0002 version 09.	OK
B.3.2. Are all tools/procedures in the methodology correctly applied to identify the most reasonable baseline scenario? This includes all potential realistic and credible baseline scenarios in the discussion taking into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	VVM Para.81/82/86a- d/83/84 PDD Section B.4/B.5	DR	Yes. The baseline scenario is identified in the PDD transparently as per ACM0002 version 09. As per ACM0002 version 09, the baseline scenario is electricity supply from grid. Electricity supply from grid has been identified as the baseline scenario as per ACM0002 version 09.	OK
B.3.3. Is the choice of the baseline compatible with the available data?	VVM Para.86b- c/95 PDD Section B.4/B.5	DR	Yes. The choice of the baseline is compatible with available data. Electricity supply from Grid (the baseline) is widely applied in the host country.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.3.4. Is conservativeness addressed in the way of identifying the baseline?	VVM Para.90 PDD Section B.4/B.5	DR	Yes. Conservativeness is addressed in the way of identifying the baseline. Electricity supply from Grid (the baseline) is widely applied in the host country.	OK
B.3.5. Does the selected baseline represent the most likely scenario among other possible and/or discussed scenarios?	VVM Para.90/91 PDD Section B.4/B.5	DR	Yes. Electricity supply from Grid (the baseline) is widely applied for wind farm projects in the host country.	OK
B.3.6. Is there a verifiable description of the baseline scenario? Does this include a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed CDM project activity?	VVM Para.86e/85 PDD Section B.4/B.5	DR	Yes. The baseline scenario is identified in the PDD transparently as per ACM0002 version 09 and it is verifiable. As per ACM0002 version 09, the baseline scenario is electricity supply from grid. Electricity supply from grid has been identified as the baseline scenario as per ACM0002 version 09.	OK
B.4. Additionality				
B.4.1. Does the PDD clearly demonstrate the additionality using the approach as specified in the methodology and by following all the required steps?	VVM Para.67d/95 PDD Section B.1/B.4/B.5	DR	Please refer to B.4.2	OK
B.4.2. In case of using the additionality tool: Is the 'Additionality Tool'	PDD Section B.1/B.4/B.5	DR	Yes. The latest version (05.2) of the Additionality Tool is used. All steps are followed in a transparent manner. As per the Tool for the demonstration and assessment of additionality, the following	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
used in the PDD latest version? If an earlier version has been used, do the changes impact the discussion in the PDD? Are all steps followed in a transparent manner?			steps are taken for the demonstration of the additionality of the project in section B.5 of the PDD. Step 1. Identification of alternatives to the proposed project activity consistent with current laws and regulations; Step 2. Investment Analysis; Step 3. Barrier Analysis;(Not used) Step 4. Common Practice Analysis.	
B.4.3. Has all information been backed up with references, sources and certification? Is the data presented credible and reliable with complete transparency to all available data and documentation?	VVM Para.93/91 PDD Section B	DR	Yes. the sources and references(2006 IPCC guidelines for National Greenhouse Gas Inventories, China Energy Statistical Yearbook, China Energy Statistical Yearbook, China DNA website,etc) used in the project emission, baseline emission, leakage are listed in Section B.6.1 of the PDD. All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD; Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable; the identified baseline scenario is in compliance with ACM0002 Version 09; Relevant national and/or sectoral policies and circumstances (the website of China DNA) are considered and listed in the PDD; The approved baseline methodology (ACM0002 version 09) has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario (Supply of equivalent annual electricity output by SCPG) reasonably represents what would occur in the absence of the proposed CDM project activity	OK
B.4.4. Is the discussion on additionality and the evidence provided consistent with the starting date of the project? If the project activity start date is prior to the validation is it discussed	VVM Para.102b PDD Section B.	DR,I	In version 1.1 of the PDD, there was no implementation timeline for the project. CL #6 was raised requesting the PP to provide an implementation timeline of the project. The project owner considered CDM revenue from the very beginning of project implementation, as mentioned in feasible study report (FSR), "CDM revenue will help to overcome the investment barrier of this project". Equipment Purchase Agreement dated 04/06/2008, which is the start date of the project activity. The start date of the project activity is before 02/08/2008, in accordance with	CL #6 OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
how the CDM was taken into account in the decision to go ahead with the project activity			<p>paragraphs 98 and 100 of the VVM, assessment of the project participant's prior consideration of the CDM through document reviews.</p> <p>Feasibility Study Report of Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project issued by East China Investigation and Design Institute dated November 2007</p> <p>Accreditation certificate for East China Investigation and Design Institute issued by the National Development and Reform Commission of the People's Republic of China dated 20/03/2007</p> <p>Approval of Jiangmen Taishan Shangchuandao Island Phase I Wind Farm Project issued by Development and Reform Commission of Guangdong Province dated 16/11/2007</p> <p>Board Meeting Report to make a decision to undertake the project as a proposed CDM project activity dated 20/11/2007</p> <p>Emission Reductions Purchase Agreement relating to the CGN Guangdong Chuandao Phase I Windfarm Project dated 30/04/2008</p> <p>The wind turbine supply contract was signed between the project owner and the wind turbine supplier on 04/06/2008</p> <p>The validation contract signed between SGS and CRM dated 09/10/2008.</p> <p>The discussion on additionality and the evidence provided is consistent with the starting date of the project.</p> <p>The above evidences have been provided to the assessors and verified. From the timeline of the project and the evidences provided, CDM has been seriously considered before the project start date and real actions have been taken to secure CDM status in parallel with the proposed project. CL #6 is closed.</p>	
B.4.5. If an investment analysis has been used, has it been shown that the proposed project activity is economically or financially less attractive than at least one other alternative without the revenue from	VVM Para. 106, 107, 109 112a-c PDD Section B.5	DR	Yes. With reference to Interim Rules on Economic Assessment of Electric Engineering Retrofit Projects released by the State Power Corporation of China, the financial benchmark rate of return of Chinese power industry is 8% of the total investment, which has been used widely for Feasibility Studies of power project investments in China, including wind power project. The "Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects" issued by the State Power Corporation of China, the former state authority to manage relevant power issues including new constructions of power plants, states that the benchmark is based on The Methodology and Parameters	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
the sale of CERs?			<p>for Financial Evaluation of Construction projects (Chapter 1 General, Section 1.1) which is the national criteria in evaluating new construction projects including fossil-fuel-fired plants. The 8% benchmark is applicable to new build as well as retrofit projects. This benchmark has been widely accepted in newly constructed power plants in China, and has also been accepted as the benchmark for registered CDM projects in power sector. The benchmark of 8% is validated to be suitable for the project activity by SGS Assessors.</p> <p>It has been demonstrated that the proposed project activity is below the benchmark IRR of 8% without the CERs revenue. Without CERs revenue, the IRR of the project is 6.72%. Sensitivity analysis for the project has been performed with a variation of 10% of the static total investment, annual O&M cost, tariff and annual electricity supply. The sensitivity analysis confirms the conclusion regarding the economic unattractiveness of the project is robust to reasonable variations in the critical assumptions.</p> <p>Following paragraph 54(a) of EB38, it has been validated that the period of time between the finalization of the FSR (16/11/2007) and the investment decision (04/06/2008, which is the start date of the project) is sufficiently short for the assessors to confirm that it is not likely that the context of the underlying project activity that the input values would have materially changed. The input values of parameters used for IRR calculation in version 2.0 of the PDD and IRR spreadsheet are checked against the FSR which is dated before the date when the approval for the FSR was issued by related authority. It has been validated that all the listed input values are from the FSR for the project dated November, 2007 and have been consistently applied in all calculation as per the guidance from paragraph 54(b) of EB38 and paragraph 6 of the Annex 35 to EB39 report. In line with paragraph 54 of EB38, it has been validated that the input values from the FSR are valid and applicable at the time of the investment decision.</p> <p>In accordance with paragraph 54(c) of EB38, SGS assessors compared the total static investment, annual O & M costs, tariff and annual running hour of the proposed CDM project activity with other projects in Guangdong Province and found that the parameters of the proposed CDM project activity are comparable with those of the other projects and the input values from the FSR are valid and applicable at the time of the investment decision.</p>	

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.4.6. If a benchmark is used, is it ensured that it is selected in accordance with the requirements of the tool /methodology and it represents standard returns in the market (not linked to the subjective profitability expectation or risk profile of a particular project developer).	VVM Para. 110 PDD Section B.5	DR	Please refer to Section B.4.5.	OK
B.4.7. If a barrier analysis has been used, has it been shown that the proposed project activity faces barriers that prevent the implementation of this type of proposed project activity but would not have prevented the implementation of at least one of the alternatives?	VVM Para. 114 115a-b/116 PDD Section B.5	DR	Not applicable. Barrier analysis was not applied in the PDD.	OK
B.4.8. Is the discussion on additionality consistent with the identification of all plausible and credible baseline scenarios?	VVM Para. 105 PDD Section B.5	DR	Yes, the discussion on additionality is consistent with the identification of all plausible and credible baseline scenarios. The IRR of the project is below the benchmark IRR of 8% without CERs income and financially unattractive to the investor with CERs income.	OK
B.4.9. Do the identified baseline scenarios include technologies and practices that include outputs or services comparable with	VVM Para. 105 PDD Section A.4.3/B.5	DR	Yes, the identified baseline scenario (Supply of equivalent annual electricity output by SCPG) includes technologies and practices that include outputs or services comparable with the proposed CDM project activity and the identified baseline scenario abide by the same applicable laws and legislations.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
the proposed CDM project activity? Do they also abide by the same applicable laws and legislations?				
B.4.10. Has it been shown that the project is not common practice?	VVM Para. 119a/b PDD Section B.5	DR	<p>In version 1.1 of the PDD, not enough information was given on the common practice analysis. CL #7 was raised requesting the PP to further clarify the project is not common practice.</p> <p>From the China Wind Farm Installed Capacity Statistics 2007, February 2008, there are 14 wind farms in Guangdong Province, out of which 5 have been registered as CDM project activities (UNFCCC ref no.: 0299, 1963, 1627, 1338 and 1742).</p> <p>The proposed project is a large scale project with the installed capacity of 48.45MW, and the project below 15MW belongs to the small scale project. The installed capacity of Nan'ao Dalankou Wind Farm Project, Fu'ao Wind Farm Project, Nanfang Wind Farm Project, Huaneng Wind Farm Project, Haishiwang Wind Farm Project, Dameisha Wind Farm Project, Xinliaodao Wind Farm Project is not higher than the threshold capacity of 15MW. Therefore, the seven projects are not similar with the proposed project.</p> <p>Guangdong Shanwei Honghaiwan Wind Farm Project was invested in 2000 with the bank loan support from the Denmark government, so Honghaiwan project is not similar to the proposed project activity.</p> <p>The Dannan Wind Farm Project was invested by the Chinese and the Netherlands joint venture and commissioned in 1998, not similar to the proposed project activity.</p> <p>From the above analysis, it is concluded that development of this type of project in Guangdong Province is not common practice without CDM support. The description has been presented in the revised PDD. CL #7 is closed.</p>	CL #7 OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.4.11. What are the key distinctions between the project activity and any similar projects that are widely used as common practice?	VVM Para. 118, 119c/d PDD Section B.	DR	Refer to B.4.10	CL #7 OK
B.5. Application of the Baseline Methodology				
B.5.1. Has the approved methodology been applied correctly for determining baseline emissions ?	VVM Para. 91d PDD Section B (B.6.1 -B.71)	DR	As per the Tool to calculate the emission factor for an electricity system, version 01, a project electricity system and a connected electricity system shall be defined whereas in version 1.1 of the PDD there are no such definitions. Definition of a project electricity system and connected electricity system is requested. CAR #8 was raised. In version 2.0 of the PDD, the project electricity system and connected electricity system have been correctly defined as per the guidance from the Chinese DNA. According to the definition of Chinese DNA, SCPG is the project electricity system, which consists of Guangdong, Guangxi Zhuang Autonomous Region, Yunnan and Guizhou power grids. The Central China Power Grid (CCPG) is the connected electricity system of the SCPG. CCPG consists of Jiangxi Province, Henan Province, Hubei Province, Hunan Province, Sichuan Province and Chongqing Municipality Power Grid. The PDD version 3.0 dated 15/04/2009, using ACM0002 version 09 is consistent with the guidance from the Chinese DNA. CAR #8 is closed.	CAR #8 OK
B.5.2. Has the approved methodology been applied correctly for determining project emissions ?	VVM Para. 90/91d PDD Section B (B.6.2-B.71)	DR	Yes. ACM0002 version 09 has been correctly applied for determining the project emissions. Project emissions should not be taken into account according to ACM0002 (version 09). $PE_y = 0tCO_2e$.	OK
B.5.3. Has the approved methodology been applied	VVM Para.	DR	Yes. ACM0002 version 09 has been correctly applied for determining the project leakage. Leakage is 0.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
correctly for determining leakage?	91d PDD Section B (B.6.2 -B.71)			
B.5.4. Where applicable, has the approved methodology been applied correctly for the direct calculation of emission reductions ?	VVM Para 88/91d PDD Section B (B.6.2 -B.71)	DR	<p>Yes. ACM0002 version 09 has been correctly applied for the direct calculation of emission reductions.</p> <p>Emission reductions are calculated using the below formula:</p> $ER_y = BE_y - PE_y - L_y = BE_y - EG_y * EF_{grid,CM,y}$ <p>EG_y: the net electricity supplied by the project activity to the grid in year y;</p> <p>$EF_{grid,CM,y}$: the combined margin emission coefficient calculated using the 'Tool to calculate the emission factor for an electricity system'</p>	OK
B.5.5. Where there is an option between different equations or parameters, has the methodological choices for the project been explained, have they been properly justified and are they correct?	VVM Para.89/90/91 PDD Section B (B.6.2 -B.71)	DR	<p>Yes. All the methodological choices have been explained and correctly justified in Section B of the PDD.</p> <p>The options to determine the combined margin emissions factor are clearly stated and correctly justified in Section B of the PDD.</p>	OK
B.5.6. Are uncertainties in the GHG emissions estimates	PDD Sections B.5-C	DR	Yes. Uncertainties in the GHG emissions estimates are low, which is addressed in the PDD.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
properly addressed in the documentation?			Data provided for the ex-ante estimation of CERs in Section B.6.2 and B.6.3 of the PDD are in compliance with ACM0002 version 09. Data used are from Official sources like China Energy Statistical Yearbook, China Electric Power Yearbook, IPCC and the official website of the Chinese DNA. The data values have been verified. Most recent official data have been used and vintage can be considered to be conservative. The estimated annual power generation is from the FSR of the project.	
B.6. Ex-ante Data and Parameters Used				
B.6.1. Are the data provided in compliance with the methodology?	VVM Para. 91/67c PDD Section B.6.3/B.6.4	DR	Yes. Data provided in Section B.6.2 and B.6.3 of the PDD are in compliance with ACM0002 version 09.	OK
B.6.2. Is all the data derived from official data sources or replicable records and have these been correctly quoted?	VVM Para. 91a/b PDD Section B.6.3/B.6.4	DR	Yes. Data used are from Official sources like China Energy Statistical Yearbook, China Electric Power Yearbook and IPCC. The estimated annual power generation is from the FSR of the project.	OK
B.6.3. Is the vintage of the baseline data correct?	PDD Section B.6.3/B.6.4	DR	Yes. Most recent official data have been used and vintage can be considered to be conservative.	OK
B.6.4. Is all the data appropriate and correctly applied to the CDM project activity?	VVM Para. 91c PDD Section B.6.3/B.6.4	DR	Yes, it has been validated that the output is a conservative estimate of the emission reductions.	OK
B.6.5. Are data and parameters that are not being monitored and remained fixed throughout the crediting period appropriately assessed,	VVM Para. 90 PDD Section B.6.3/B.6.4	DR	Parameter that is used in the CERs calculation and not monitored is the grid emission factor. It has been validated that the value of grid emission factor is appropriately assessed and correct.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
correct, and will they result in conservative estimates?				
B.7. Calculation of Emissions Reductions				
B.7.1. Has the approved methodology been applied correctly for determining emission reductions ?	VVM Para. 91d PDD Section A.4.4/B.6	DR	Yes. ACM0002 version 09 has been applied exactly as defined for determining emission reductions. The PDD clearly stated which equations will be used in calculating emission reductions. All the required steps/calculations have been followed	OK
B.7.2. Are the emission reduction calculations documented in a complete and transparent manner?	VVM Para. 91e PDD Section B.6	DR	Yes. The PDD documented how each equation is applied in a manner that enables readers to reproduce the calculation.	OK
B.7.3. Is the projection based on same procedures as used for later monitoring or acceptable alternative models?	PDD Section B.6	DR	Yes. The project is based on same procedures as to be used for later monitoring. The calculation of ERs is not expected to change for the first crediting period.	OK
B.7.4. Is the calculation of the emission reduction correct?	VVM Para. 91e PDD Section B.6	DR	Yes. The formulae to calculate emissions and emission reductions have been checked and they are correct. All estimates can be replicated using the data and parameter set out in the PDD.	OK
B.8. Emission Reductions				
B.8.1. Is the form/table required for the indication of projected emission reductions correctly applied?	PDD Section A.4.4/ Section B.6	DR	Yes. The tables required for the indication of projected emission reductions are correctly applied.	OK
B.8.2. Is the projection in line with the envisioned time	PDD Section A.4.4/ Section B.6	DR	Yes. The project is in line with the envisioned time schedule for the project's implementation and the indicated crediting period.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
schedule for the project's implementation and the indicated crediting period?				
B.9. Monitoring Methodology				
<p>B.9.1. Does the monitoring methodology provide a consistent approach in the context of all parameters to be monitored and further information provided by the PDD?</p> <p>Are all parameters and data that are available at validation consistent with the approved methodology. Has this data been interpreted and applied correctly?</p>	<p>VVM Para. 67e PDD Section B.7-B.8 see also Annex 4</p>	DR	<p>ACM0002 provides a consistent approach in the context of all parameters to be monitored and further information provided by the PDD.</p> <p>Data that need to be monitored are listed in the PDD version 2.0 as per ACM0002 version 09.</p> <p>All parameters and data that are available at validation as listed in Section B.6.2 are consistent with ACM0002.</p>	OK
<p>B.9.2. Does the monitoring methodology apply consistently the choice of the option selected for monitoring both of project and baseline emissions?</p>	PDD Sections B and C	DR	<p>Yes. ACM0002 version 09 applies consistently for the choice of the option selected for monitoring baseline emissions. Baseline emission factor is determined ex-ante. EGy needs to be monitored.</p>	OK
B.10. Data and Parameters Monitored				
<p>B.10.1. Does the monitoring plan in the PDD comply with the approved methodology</p>	<p>VVM Para. 91a/91d/121/79</p>	DR,I	<p>Yes. The monitoring plan provides for the collection and archiving of EGy,EGexport,y and EGimport,y that are the only parameters that need to be monitored.</p>	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
provided for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period?	PDD Section B.7-B.7.2			
B.10.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	PDD Section B.7-B.7.2/B.6.2	DR,I	The project emission is zero. No project GHG indicators are needed for project emissions. Not applicable.	OK
B.10.3. Will it be possible to determine the specified project GHG indicators?	PDD Section B.6.2-B.8	DR	No project GHG indicators are needed for project emissions. Not applicable	OK
B.10.4. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	PDD Section B.6.2-B.7.1	DR	<p>Yes. The information given for each monitoring variable (EG_y,EG_{export,y} and EG_{import,y}) is sufficient to ensure the verification of a proper implementation of the monitoring plan.</p> <p>The data source, QA/QC procedures and uncertainty level, etc are clearly specified in the PDD.</p> <p>Main meter is installed at connection point to the grid to monitor the power output generated with the accuracy of no less than 0.5%.</p> <p>The net electricity supply to the grid is checked by sales receipts. When the main meter fails to work normally, the readings of the back-up meter will be adopted. The data will be kept during the crediting period and two years after. The main meter and back-up meter will be calibrated once per year by a qualified calibration organization.</p>	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.10.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	PDD Section B.6.2-B.7.1	DR	<p>Yes. The monitoring plan ensures the verifiability of data quality and correctness.</p> <p>Main meter is installed at connection point to the grid to monitor (EG_y, EG_{export,y} and EG_{import,y}) with the accuracy of no less than 0.5. The main meter and back-up meter will be installed at the connection point to the grid. The main meter and backup meter will be checked and accepted by the grid and the project developer before the project operation. All of the installed meters are sealed after installation or calibration.</p> <p>The meters will be calibrated by authorized third party according to the relevant regulations. Sales receipts are used for double check purpose.</p> <p>The operational and management structure for monitoring is stated in Section B.7.2 of the PDD.</p> <p>Data monitoring process is listed in the monitoring plan of the PDD.</p> <p>QA/QC procedures, data management and training are stated in the monitoring plan.</p>	OK
B.10.6. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	PDD Section B.5-B.7.2	DR	Yes. The monitoring approach is in line with current good practice. The monitoring plan ensures the delivery of high quality data with reasonably acceptable accuracy.	OK
B.10.7. Are all formulae used to determine project emission clearly indicated and in compliance with the monitoring methodology.	PDD Section B.6.2-B.7.1	DR	Yes. The formulae used to determine project's emission are clearly indicated and in compliance with ACM0002 version 09. PE _y =0 as per ACM0002 version 09.	OK
B.11. Quality Control (QC) and Quality Assurance (QA) Procedures				
B.11.1. Is the selection of data	VVM Para. 121	DR	Yes. QA/QC procedures described in the PDD covered all related data.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
undergoing quality control and quality assurance procedures complete?	Refer to all data within the PDD Inc. B.6.2-B.7.1			
B.11.2. Is the belonging determination of uncertainty levels done correctly for each ID in a correct and reliable manner?	Refer to all data within the PDD Inc. B.4/B.7.2/Annex 4	DR	Yes. The uncertainty level of monitored EGy is clearly stated in the PDD. The uncertainty level of monitored data is low as clearly stated in the PDD.	OK
B.11.3. Are quality control procedures and quality assurance procedures sufficiently described to ensure the delivery of high quality data?	VVM Para 121	DR	Yes. The monitoring plan safeguards the proper operations of all data capture, data analysis and data compilation systems to be employed by the project participants.	OK
B.11.4. Is it ensured that data will be bound to national or internal reference standards?	VVM Para. 86d	DR	Yes. Monitored data will be clearly reproducible and comparable and will not be dependent on site-specific adjustments.	OK
B.11.5. Is it ensured that data provisions will be free of potential conflicts of interests resulting in a tendency of overestimating emission reductions?	VVM Para. 19	DR	Yes. Sales receipts will be used for double check. Sales receipts are considered to be a reliable source.	OK
B.12. Operational and Management Structure				
B.12.1. Is the authority and responsibility of project management clearly described?	PDD Section B.8/Annex 1	DR	Yes. The authority and responsibility of project management is clearly described in the monitoring plan. A monitoring director will be appointed who has the overall responsibilities for the monitoring of the project, other staff will be responsible for the data recording, data	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
			collecting, data archiving and emission reductions calculation.	
B.12.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	PDD Section B.8/Annex 1	DR	Yes. The authority and responsibility for registration, monitoring, measurement and reporting is clearly described in the PDD.	OK
B.12.3. Are procedures identified for training of monitoring personnel?	PDD Section B.8/Annex 1	DR	Yes. Procedures for training of monitoring staff are identified.	OK
B.13. Monitoring Plan (Annex 4)				
B.13.1. Is the monitoring plan developed in a project specific manner clearly addressing the unique features of the CDM activity?	VVM Para. 122a	DR	Yes. The monitoring plan addresses the unique feature of the CDM project activity. Through document review of the monitoring plan in the PDD and interview with the project participants, it has been validated that the project participants are capable of implementing the monitoring plan.	OK
B.13.2. Does the monitoring plan completely describe all measures to be implemented for monitoring all parameter required, including measures to be implemented for ensuring data quality?	VVM Para. 122a	DR	Yes. The monitoring plan described all measures to be implemented for monitoring all required parameter (EG _y , EG _{export,y} and EG _{import,y}). QA/QC procedures were described in the PDD.	OK
B.13.3. Does the monitoring plan provide information on monitoring equipment and respective positioning in order to safeguard a	VVM Para. 122b	DR	Yes. The monitoring plan provides information on the meters to measure (EG _y , EG _{export,y} and EG _{import,y}) and its positioning. EG _{export,y} and EG _{import,y} will be measured by meter installed at connection point to the grid to monitor the power output generated with the accuracy of no less than 0.5%. The main meter and	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
proper installation?			back-up meter will be installed at the connection point to the grid. The main meter and backup meter will be checked and accepted by the grid and the project developer before the project operation. All of the installed meters are sealed after installation or calibration.	
B.13.4. Are procedures identified for calibration of monitoring equipment?	VVM Para. 122a-c	DR	Yes. Calibration procedures are identified in the PDD. The meters will be calibrated in accordance with relevant national standard and sectional regulations once per year to ensure the accuracy.	OK
B.13.5. Are procedures identified for maintenance of monitoring equipment and installations?	VVM Para. 122a-c	DR	Yes. Procedures for maintenance of monitoring equipment and installations are identified in the PDD and the maintenance plan of the project.	OK
B.13.6. Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	VVM Para. 122a-c	DR	Yes. Day-to-day records handling procedures were identified in the PDD. However, CL #9 was raised asking PP to further clarify how the data will be collected and internally audited. In the Manual of Training, Monitoring & QA/QC of the project dated August 2008, a detailed responsibility description of each CDM management department has been included. CL #9 is closed.	CL #9 OK
B.13.7. Are procedures identified for dealing with possible monitoring data adjustments and missing data allowing redundant reconstruction of data in case of monitoring problems?	VVM Para. 122a-c	DR	Yes. Emergency plan has been prepared for the project.	OK
B.13.8. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	VVM Para. 122a-c	DR	refer to B.13.6	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.13.9. Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	VVM Para. 122a-c	DR	refer to B.13.6	OK
B.13.10. Describe the ability of the project participants to implement the monitoring plan.	VVM Para. 122a-c	DR, I	Through document review of the monitoring plan in the PDD and interview with the project participants, it has been validated that the project participants are capable of implementing the monitoring plan.	OK
B.14. Baseline Details				
B.14.1. Is there any indication of a date when determining the baseline?	PDD Section B.8/Annex 3	DR	Yes. The completion of the baseline methodology was completed on 18/08/2009.	OK
B.14.2. Is this consistent with the time line of the PDD history?	Also see revision history of the PDD	DR	Yes. It is in consistency with the time line of the PDD history.	OK
B.14.3. Is all data required provided in a complete manner by annex 3 of the PDD?	PDD Annex 3	DR	Pending site visit Yes, all data required is provided in a complete manner in Annex 3 of the PDD.	OK
C. Duration of the Project / Crediting Period				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	VVM Para. 102a-c PDD Section C.1.1/C.1.2	DR	Yes. The start date of the project (04/06/2008) and operational lifetime of the project (20 years) are clearly defined in the PDD. They are reasonable.	OK
C.1.2. Is the assumed crediting time clearly defined and reasonable (renewable	VVM Para. 102a	DR, SV, I	Yes. The assumed crediting time of the project is clearly defined and reasonable, renewable crediting period.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	PDD Section C.2/C.2.1/C.2.2			
C.1.3. Does the project's operational lifetime exceed the crediting period	VVM Para. 102a PDD Section C.1.2/C.2.1.1/C.2.1.2	DR	Yes. The operational lifetime of the project is 20 years. The first crediting period of the project is 7 years. The operational lifetime of the project exceeds the first crediting period.	OK
C.1.4. Does the start date indicate whether this is a new project activity or a pre-existing project activity?	VVM Para. 102a/ 98 PDD Section C.1.1/C.2.1.1	DR	The project is determined to be a new project activity with a start date of 04/06/2008.	OK
D. Environmental Impacts				
D.1.1. Does the project comply with environmental legislation in the host country?	VVM Para. 131 PDD section D	DR	Yes. EIA shows that the project complies with environmental legislation in China.	OK
D.1.2. Has an analysis of the environmental impacts of the project activity been sufficiently described?	VVM Para. 131 PDD section D	DR	Yes. Major content of the approved EIA was described in the PDD. Major content of the EIA has been presented in the PDD which include noise, solid waste, waste water, dust.	OK
D.1.3. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	VVM Para. 131 PDD section D	DR	Yes. China requires for an EIA for the project activity. EIA for the project has been performed and approved.	OK
D.1.4. Will the project create any	VVM Para.	DR	No. As stated in the EIA, the project creates no adverse environmental effects.	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
adverse environmental effects?	131 PDD section D			
D.1.5. Are trans-boundary environmental impacts considered in the analysis?	VVM Para. 131 PDD section D	DR	Yes. Transboundary environmental impacts were considered in the analysis.	OK
D.1.6. Have identified environmental impacts been addressed in the project design?	VVM Para. 131 PDD section D	DR	There are no identified environmental impacts from the project.	OK
E. Stakeholder Comments				
E.1.1. Have relevant stakeholders been consulted?	VVM Para. 128a	DR,I	Who were included in the stakeholder consultation process was not stated in version 1.1 of the PDD. CL #10 was raised requesting the PP to provide further information about the local stakeholder consultation process. Stakeholder consultation questionnaires for the project have been provided and validated. Information about how the stakeholder consultation was conducted has been provided in version 2.0 of the PDD dated 09/02/2009. CL #10 is closed.	CL #10 OK
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	PDD Section E.1	DR,I	Whether appropriate media was used to invite local stakeholders was not stated in version 1.1 of the PDD. CL #10 was raised. Stakeholder consultation questionnaires for the project have been provided and validated. Information about how the stakeholder consultation was conducted has been provided in version 2.0 of the PDD dated 09/02/2009. CL #10 is closed.	CL #10 OK
E.1.3. Is the undertaken stakeholder process described in a complete and transparent manner?	VVM Para. 128a PDD Section E.1	DR,	Pending response to CL #10 The stakeholder process is described in a complete and transparent manner in version 2.0 of the PDD.	OK
E.1.4. Is a summary of the stakeholder comments	VVM Para.	DR	Yes. There is a summary of the stakeholder comments received in the PDD. The project developer has sent out 40 copy of questionnaire to the stakeholders in the	OK

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
received provided?	128b PDD Section E.2		<p>directly affected area, requesting comments on the proposed project construction.</p> <p>100% agreed to the construction of the project;</p> <p>100% thought the project would be helpful to the local economy;</p> <p>95% thought the project would not influence the surrounding area, the other people were unconcerned about the problem;</p> <p>97.5% thought the project would not influence the natural scenery; the others were unconcerned about the problem;</p> <p>92.5% thought the project would not influence the ecosystem; the other people were unconcerned about the problem.</p> <p>All of the stakeholders thought the project would have many advantages such as alleviating the local power shortage, promoting the economic development and increasing the income of the local residents.</p>	
E.1.5. Has due account been taken of any stakeholder comments received?	VVM Para. 128b PDD Section E.3	DR	According to comments from the stakeholders, it is not necessary to adjust the design, construction or operation of the proposed project	OK

References

Reference ID	Title / Description	Comments
/1/	PDD version 1.1 dated 24/10/2008 for GSP, PDD version 2.0 dated 09/02/2009, PDD version 3.0 dated 15/04/2009 and version 3.1 for registration request dated 18/08/2009	The PDD for the project
/2/	Feasibility Study Report of Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project issued by East China Investigation and Design Institute dated November 2007	Approved FSR for the project
/3/	IRR calculation spreadsheet for the project	IRR calculation spreadsheet for the project
/4/	Accreditation certificate for East China Investigation and Design Institute (ECIDI) issued Construction Ministry of the People's Republic of China	Used to confirm the FSR was drafted by an entity that is an authorized third party
/5/	Approval of Taishan Shangchuandao Island Phase I Wind Farm Project issued by Development and Reform Commission of Guangdong Province dated 16/11/2007	Used to confirm the FSR has been approved.
/6/	Construction Project EIA Report issued by East China Investigation and Design Institute dated March 2006	The EIA for the project
/7/	The accreditation certificate for East China Investigation and Design Institute issued by State Environmental Protection Administration of the People's Republic of China dated 20 December 2004 (Certificate No.: SEIA Certificate Jia Zi No. 2001)	Used to confirm the EIA was drafted by an entity that is an authorized third party
/8/	The approval of Construction Project EIA Report of the project issued by EPA of Guangdong Province dated 31/05/2006	Used to confirm the EIA has been approved.
/9/	The service agreement signed between the project owner and SGS dated 09/10/2008	The contract signed between the project owner and the DOE
/10/	The stakeholder consultation survey questionnaires	Used to confirm that the stakeholder consultation process has been performed.
/11/	The attendance list of the stakeholder representatives	Used to confirm that the stakeholder consultation process has been performed.
/12/	The business license of the project owner issued by the Industry and Commerce Administration Management Bureau of Jiangmen City valid from 15/01/2008 to 15/01/2038	Used to confirm that the project owner has legal authority for the project
/13/	The ERPA signed between the project owner and the buyer dated 30/04/2008	Used to confirm that CDM was seriously considered before the project started
/14/	The Implementation Schedule of the project	Used to confirm there is an implementation schedule of the project in place
/15/	The training plan of the project	Used to confirm there is a training plan of the project in place
/16/	The maintenance plan of the project	Used to confirm there is a maintenance plan of the project in place
/17/	Emergency plan of the project	Used to confirm there is an emergency plan of the project in

Reference ID	Title / Description	Comments
/18/	The wind turbine supply contract signed between the project owner and the wind turbine supplier dated 04/06/2008	place Used to determine the start date of the project
/19/	Tower Supply Contract signed with Nanjing Jiangbiao Group	Used to confirm the LOA from the People's Republic of China has been obtained
/20/	The LOA from the People's Republic of China dated December 2008	Used to confirm the LOA from the United Kingdom of Great Britain and Northern Ireland has been obtained
/21/	The LOA from the United Kingdom of Great Britain and Northern Ireland dated 24/02/2009	Used to confirm the MoC for the project has been provided.
/22/	MoC for the project dated 06/03/2009	The methodology against which the PDD is registering
/23/	Guangdong Price Bureau, Announcement of the electricity tariff of the wind farm (Yuejia [2007] No.294), 21 Dec 2007	Used to confirm the investment
/24/	ACM0002 version 09 dated 27/02/2009	Used to confirm the PDD has been completed as per the guidelines
/25/	Guidelines For Completing The Project Design Document (CDM-PDD) And The Proposed New Baseline And Monitoring Methodologies (CDM-NM) Version 07	Used to confirm the two Parties have ratified the KP
/26/	http://unfccc.int/files/essential_background/kyoto_protocol/status_of_ratification/application/pdf/kpstats.pdf	The website where the PDD was published for global stakeholder consultation
/27/	http://cdm.unfccc.int/Projects/Validation/DB/KTDGTS8UZZPV7KCUBFW5BZO5RDCTN/view.html	The official website of the DNA of China. Official data source
/28/	http://cdm.ccchina.gov.cn	Used to confirm the relevant steps in the tool has been followed
/29/	Tool for the demonstration and assessment of additionality, version 05.2	Used to confirm the relevant steps in the tool has been followed
/30/	Tool to calculate the emission factor for an electricity system, version 01.1	Official data source
/31/	2006 IPCC Guidelines for National Greenhouse Gas Inventories	Official data source
/32/	China Energy Statistical Yearbook	Official data source
/33/	China Electric Power Yearbook	Used to confirm the right benchmark IRR is applied in the PDD
/34/	Interim Rules on Economic Assessment of Electric Engineering Retrofit Projects (Ref no.: GuoDian Fa [2002](263))	Used to confirm Construction of other renewable energy power plant with equivalent amount of annual electricity output is not realistic
/35/	Page 54, China Solar PV Report 2007, China Environment Science Press	Used to confirm Construction of other renewable energy power plant with equivalent amount of annual electricity output is not realistic
/36/	Page 6 of Overview of Chinese Renewable Energy Development, NDRC/GEF/World Bank China Renewable Energy Development Project, May	Used to confirm Construction of

Reference ID	Title / Description	Comments
	2004.	other renewable energy power plant with equivalent amount of annual electricity output is not realistic
/37/	http://finance.21cn.com/news/cydt/2007/06/28/3319602.shtml	Used to confirm Construction of a thermal power plant with equivalent amount of annual electricity output is not realistic
/38/	Notice on Strictly Prohibiting the Installation of Fuel-fired Generators with the Capacity of 135MW or below issued by the General Office of the State Council, Decree No. 2002-6	Used to confirm Construction of a thermal power plant with equivalent amount of annual electricity output is not realistic
/39/	http://www.gov.cn/gongbao/content/2002/content_61480.htm	Used to confirm the tariff of wind power will not increased in the near future
/40/	http://politics.people.com.cn/GB/5752740.html	Data source of projects used in the common practice analysis
/41/	"Statistics of domestic wind farm installation capacity in 2007", Shi Pengfei, available from http://www.xjwind.com/cn/UploadFiles/200851412232316.pdf	Project discussed in the common practice analysis
/42/	http://cdm.unfccc.int/Projects/DB/DNV-CUK1203852135.01/view	Project discussed in the investment analysis
/43/	http://cdm.unfccc.int/Projects/DB/BVQI1189424843.32/view	Project discussed in the investment analysis
/44/	http://cdm.unfccc.int/Projects/DB/TUEV-SUED1217248156.51/view	Project discussed in the investment analysis
/45/	http://cdm.unfccc.int/Projects/DB/BVQI1189424843.32/view	Project discussed in the common practice analysis
/46/	http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1144397841.66/view	Project discussed in the common practice analysis
/47/	http://cdm.unfccc.int/Projects/DB/TUEV-SUED1205492047.65/view	
/48/	http://cdm.unfccc.int/Projects/Validation/DB/QDZRX42QWXSNNHPBBXGL7WU45FJ91Z/view.html	Project discussed in the common practice analysis
/49/	http://cdm.unfccc.int/Projects/Validation/DB/YW6WC2XP2KR4D1RO19ZFODPPDH2DAU/view.html	Project discussed in the common practice analysis
/50/	http://www.asksolar.com/culture/2005/0410/255.html	Used to confirm China implemented power sector reform to establish a more commercialized power market in China
/51/	http://www.ndrc.gov.cn/xwfb/t20050708_28096.htm	Used to confirm the requirements from EB has been fulfilled
/52/	EB38 report dated 14/03/2008	Used to confirm the requirements from EB has been fulfilled
/53/	Annex 35 to EB39 report dated 16/05/2008	Used to confirm the requirements

Reference ID	Title / Description	Comments
/54/	EB41 report dated 02/08/2008	from EB has been fulfilled Used to confirm the requirements from EB has been fulfilled
/55/	Validation and Verification Manual Version 01 dated 28/11/2008	Used to confirm the requirements from EB has been fulfilled
/56/	Annex 12 to EB43 report dated 24/10/2008	Used to confirm the requirements from EB has been fulfilled
/57/	http://cdm.unfccc.int/Projects/DB/TUEV-SUED1217248156.51/view	Project discussed in the Additionality Assessment
/58/	http://cdm.unfccc.int/Projects/DB/DNV-CUK1203852135.01/view	Project discussed in the Additionality Assessment
/59/	http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1144397841.66/view	Project discussed in the Additionality Assessment

A.3 Annex 3: Overview of Findings

Findings Overview

Findings Overview Summary

	CARs	CLs	FARs
Total Number raised	5	5	0

Date:	28/11/2008	Raised by:	Joe Sun		
Type:	CAR	Number:	CAR #1	Reference:	2 under Table 1
Lead Assessor Comment:			Date: 28/11/2008		
Letter of Approval from UK needs to be provided.					
Project Participant Response:			Date: 01/02/2009		
Pending					
Documentation Provided by Project Participant:					
Pending					
Information Verified by Lead Assessor:					
Pending					
Reasoning for not Acceptance or Acceptance and Close Out:					
CAR #1 is yet to be closed out.					
Project Participant Response:			Date: 25/02/2009		
The Letter of Approval from UK was issued on 24 February 2009, and has been provided to the DOE.					
Documentation Provided by Project Participant:					
Letter of Approval for Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project by UK's DNA, February 24 2009					
Information Verified by Lead Assessor:					
LOA from UK has been provided by the project participant; The LOA shows that the UK has ratified the KP, the project assists UK in achieving compliance with part of their emission reduction commitment under Art. 3 of the KP and is entered into voluntarily; The LOA refers to the precise proposed CDM project activity title in the PDD being submitted for registration; The LOA from UK is unconditional with respect to the aspects mentioned above; The LOA from UK has been issued by the DNA of UK.					
Reasoning for not Acceptance or Acceptance and Close Out:					
CAR #1 is closed out.					
Acceptance and Close out by Lead Assessor:			Date: 25/02/2009		
Joe Sun					

Date:	28/11/2008		Raised by:	Joe Sun		
Type:	CAR	Number:	CAR #2		Reference:	3 under Table 1
Lead Assessor Comment:				Date: 28/11/2008		
Letter of Approval from China needs to be provided.						
Project Participant Response:				Date: 01/02/2009		
The Letter of Approval from China was issued in December 2008, and has been provided to the DOE.						
Documentation Provided by Project Participant:						
Letter of Approval for Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project by National Development and Reform Commission of the People's Republic of China [No. 1612], December 2008						
Information Verified by Lead Assessor:						

LOA for the project issued by the Chinese DNA dated December 2008. LOA from China has been provided by the project participant; The LOA shows that China has ratified the KP, the project assists China in achieving sustainable development and is entered into voluntarily; The LOA refers to the precise proposed CDM project activity title in the PDD being submitted for registration; The LOA from China is unconditional with respect to the aspects mentioned above; The LOA from China has been issued by the DNA of China, National Development and Reform Commission of the People's Republic of China.	
Reasoning for not Acceptance or Acceptance and Close Out:	
CAR #2 is closed out.	
Acceptance and Close out by Lead Assessor: Joe Sun	Date: 14/02/2009

Date:	28/11/2008	Raised by:	Joe Sun		
Type:	CAR	Number:	CAR #3	Reference:	5 under Table 1
Lead Assessor Comment:			Date: 28/11/2008		
The CDM-PDD format was modified in version 1.1 of the PDD. No page number was marked and UNFCCC logo in the page header has been moved. Please modify the PDD in conformance with the UNFCCC CDM-PDD format.					
Project Participant Response:			Date: 01/02/2009		
The latest CDM-PDD template version 3.0 has been re-applied.					
Documentation Provided by Project Participant:					
PDD Version 2.0 dated 09/02/2009					
Information Verified by Lead Assessor:					
In the PDD version 2.0 dated 09/02/2009, the right template of CDM-PDD has been used.					
Reasoning for not Acceptance or Acceptance and Close Out:					
CAR #3 is closed out.					
Acceptance and Close out by Lead Assessor:			Date: 14/02/2009		
Joe Sun					

Date:	28/11/2008	Raised by:	Joe Sun		
Type:	CAR	Number:	CAR #4	Reference:	6 under Table 1
Lead Assessor Comment:			Date: 28/11/2008		
Please provide the MoC for the project.					
Project Participant Response:			Date: 06/03/2009		
The MOC for the project has been provided.					
Documentation Provided by Project Participant:					
MOC for the project dated 06/03/2009					
Information Verified by Lead Assessor:					
The MoC for the project dated 06/03/2009 has been provided. The MOC adopted the latest template for MOC available from the UNFCCC website at the time of the validation and it was filled out in compliance with the PROCEDURES FOR MODALITIES OF COMMUNICATION BETWEEN PROJECT PARTICIPANTS AND THE EXECUTIVE BOARD version 01 dated 13/02/2009:					
1. The MOC includes the title of the project, which is the same as that in the PDD and LOAs;					
2. The MOC includes the date of Submission which is 06/03/2009;					
3. The MOC lists the two project participants which is the same as that in the PDD;					
4. Clear designation of focal point for each scope of authority is in the MOC;					
5. Contact details and specimen signature of each focal point and signing authority are included in the MOC;					
6. Signatures of all project participants confirming their agreement to the terms of the statement of modalities of communication are in section 3 of the MOC.					
Reasoning for not Acceptance or Acceptance and Close Out:					
CAR #4 is closed out.					

Acceptance and Close out by Lead Assessor: Joe Sun	Date: 15/04/2009
---	----------------------------

Date:	28/11/2008		Raised by:	Joe Sun	
Type:	CL	Number:	CL #5		Reference: A.4.9
Lead Assessor Comment:				Date: 28/11/2008	
Please provide information related to the maintenance of the equipments and training plan of the staff.					
Project Participant Response:				Date: 01/02/2009	
The information related to the maintenance of the equipments and training plan of the staff has been provided to DOE.					
Documentation Provided by Project Participant:					
CGN Taishanchuandao Wind Power Co. Ltd., Manual of Training, Monitoring & QA/QC, August 2008					
Information Verified by Lead Assessor:					
In the Manual of Training, Monitoring & QA/QC of the project dated August 2008, maintenance of the equipments and training plan of the staff has been included.					
Reasoning for not Acceptance or Acceptance and Close Out:					
CL #5 is closed out.					
Acceptance and Close out by Lead Assessor: Joe Sun				Date: 14/02/2009	

Date:	28/11/2008	Raised by:	Joe Sun		
Type:	CL	Number:	CL #6	Reference:	B.4.3
Lead Assessor Comment:			Date: 28/11/2008		
Please provide an implementation timeline of the project and further demonstrate in compliance with paragraphs 96, 98 and 100 of the VVM, paragraph 67 and paragraph 5, Annex 46 of EB41 report that incentive of income from CDM has been seriously considered before the project started and continuing and real actions have been taken to secure CDM status for the project in parallel with its implementation.					
Project Participant Response:			Date: 01/02/2009		
A detailed implementation timeline has been added in the revised PDD. The FSR was completed and approved in November 2007, in which the income of CDM had been seriously considered. Based on the economic analysis and the conclusion in the FSR, a Board meeting was held to make a decision to undertake the project as a proposed CDM project activity on November 20, 2007. After a public bidding, an ERPA was signed with CRM on April 30, 2008; the validation contract was signed with SGS on 09/10/2008; the PDD has been made publicly available from 13/11/2008 to 12/12/2008 and comments were invited through the UNFCCC website. From the time point mentioned above, the CDM has been seriously considered before the project start date and real actions have been taken to secure CDM status in parallel with the proposed project. June 4, 2008, the date of Equipment Purchase Agreement (EPA), is considered the start date of the project activity according to the definition in the Glossary of CDM Terms and Paragraph 67 and Paragraph 5, Annex 46 of EB41 report.					
Documentation Provided by Project Participant:					
Equipment Purchase Agreement dated 04/06/2008 Feasibility Study Report of Guangdong Taishan Shangchuandao Island Phase I Wind Farm Project issued by East China Investigation and Design Institute dated November 2007 Accreditation certificate for East China Investigation and Design Institute issued by the National Development and Reform Committee of the People's Republic of China dated 20/03/2007 Approval of Jiangmen Taishan Shangchuandao Island Phase I Wind Farm Project issued by Development and Reform Commission of Guangdong Province dated 16/11/2007 Board Meeting Report to make a decision to undertake the project as a proposed CDM project activity dated 20/11/2007 Emission Reductions Purchase Agreement relating to the CGN Guangdong Chuandao Phase I Windfarm Project dated 30/04/2008 The validation contract signed between SGS and CRM dated 09/10/2008					
Information Verified by Lead Assessor:					

The above evidences have been provided to the assessors and verified. From the timeline of the project and the evidences provided, CDM has been seriously considered before the project start date and real actions have been taken to secure CDM status in parallel with the proposed project.	
Reasoning for not Acceptance or Acceptance and Close Out:	
CL #6 is closed out.	
Acceptance and Close out by Lead Assessor: Joe Sun	Date: 14/02/2009

Date:	28/11/2008		Raised by:	Joe Sun	
Type:	CL	Number:	CL #7	Reference:	B.4.8
Lead Assessor Comment:				Date: 28/11/2008	
Please further clarify the project is not common practice.					
Project Participant Response:				Date: 01/02/2009	
A detailed common practice analysis is presented in the revised PDD, which shows that the proposed project is not common practice.					
Documentation Provided by Project Participant:					
<p>China Wind Farm Installed Capacity Statistics 2007, February 2008, http://www.xjwind.com/cn/UploadFiles/200851412232316.pdf</p> <p>Chinese National Development and Reform Commission, Separate Power Plants from Network and Compete in Price to Enter Network, April 11, 2002, http://www.ndrc.gov.cn/xwfb/t20050708_28096.htm</p> <p>Electricity tariff of the project listed as a similar project which is not a CDM project, http://www.asksolar.com/culture/2005/0410/255.html</p> <p>Introduction of Fu'ao Wind Farm Project(3MW), Nanfang Wind Farm Project(5.5MW), Huaneng Wind Farm Project(13.5MW) and Dannan Wind Farm Project (24MW). http://www.ydtz.com/news/shownews.asp?id=2737</p> <p>Introduction of Guangdong Shanwei Honghaiwan Wind Farm Project (16.5MW) http://www.powerem.com.cn/Article/2009/200906/42374.html</p> <p>Web links of the CDM projects:</p> <p>http://cdm.unfccc.int/Projects/DB/DNV-CUK1203852135.01/view</p> <p>http://cdm.unfccc.int/Projects/DB/BVQI1189424843.32/view</p> <p>http://cdm.unfccc.int/Projects/DB/TUEV-SUED1217248156.51/view</p> <p>http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1144397841.66/view</p> <p>http://cdm.unfccc.int/Projects/DB/TUEV-SUED1205492047.65/view</p> <p>http://cdm.unfccc.int/Projects/Validation/DB/QDZRX42QWXSNNHXPBBXGL7WU45FJ91Z/view.html</p> <p>http://cdm.unfccc.int/Projects/Validation/DB/YW6WC2XP2KR4D1RO19ZFODPPDH2DAU/view.html</p>					
Information Verified by Lead Assessor:					

<p>From the China Wind Farm Installed Capacity Statistics 2007, February 2008, there are 14 wind farms in Guangdong Province, 5 out of which have been registered as CDM project activities (UNFCCC ref no.: 0299, 1963, 1627, 1338 and 1742).</p> <p>Seven out of the fourteen projects (Nan'ao Dalankou Wind Farm Project, Fu'ao Wind Farm Project, Nanfang Wind Farm Project, Huaneng Wind Farm Project, Haishiwan Wind Farm Project, Dameisha Wind Farm Project, Xinliaodao Wind Farm Project) have installed capacity not higher than 15MW, not similar to this proposed project activity.</p> <p>Guangdong Shanwei Honghaiwan Wind Farm Project was invested in 2000 with the bank loan support from the Denmark government, so Honghaiwan project is not similar to the proposed project activity.</p> <p>The Dinnan Wind Farm Project was invested by the Chinese and the Netherlands joint venture and commissioned in 1998, different from the proposed project activity.</p>	
Reasoning for not Acceptance or Acceptance and Close Out:	
Detailed information about common practice in the revised PDD has been provided. The common practice analysis of the project is justified. CL #7 is closed.	
Acceptance and Close out by Lead Assessor: Joe Sun	Date: 15/04/2009

Date:	28/11/2008	Raised by:	Joe Sun		
Type:	CAR	Number:	CAR #8	Reference:	B.5.1
Lead Assessor Comment:			Date: 28/11/2008		
As per the Tool to calculate the emission factor for an electricity system, version 01, a project electricity system and a connected electricity system shall be defined whereas in version 1.1 of the PDD there are no such definitions. Definition of a project electricity system and connected electricity system is requested.					
Project Participant Response:			Date: 01/02/2009		
According to the definition of Chinese DNA, SCPG is the project electricity system, which consists of Guangdong, Guangxi Zhuang Autonomous Region, Yunnan and Guizhou power grids. The Central China Power Grid (CCPG) is the connected electricity system of the SCPG. CCPG consists of Jiangxi Province, Henan Province, Hubei Province, Hunan Province, Sichuan Province and Chongqing Municipality Power Grid. The electricity transfer is from CCPG to SCPG, therefore, the import electricity generation is taken into account. It has already been added in the revised PDD.					
Documentation Provided by Project Participant:					
Chinese DNA, OM Calculation of 2008 Baseline Emission Factors for Regional Power Grids in China, December 30, 2008: http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File1888.pdf					
Information Verified by Lead Assessor:					
In version 2.0 of the PDD, the project electricity system and connected electricity system have been correctly defined as per the guidance from the Chinese DNA.					
Reasoning for not Acceptance or Acceptance and Close Out:					
CAR #8 is closed.					
Acceptance and Close out by Lead Assessor: Joe Sun			Date: 14/02/2009		

Date:	28/11/2008		Raised by:	Joe Sun		
Type:	CL	Number:	CL #9		Reference:	B.13.6
Lead Assessor Comment:				Date: 28/11/2008		
Please further clarify how the data will be collected and internally audited.						
Project Participant Response:				Date: 01/02/2009		
A detailed responsibility description of each CDM management department has been added in the revised PDD.						
Documentation Provided by Project Participant:						
CGN Taishanchuandao Wind Power Co. Ltd., Manual of Training, Monitoring & QA/QC, August 2008						
Information Verified by Lead Assessor:						
In the Manual of Training, Monitoring & QA/QC of the project dated August 2008, a detailed responsibility description of each CDM management department has been included.						
Reasoning for not Acceptance or Acceptance and Close Out:						

CL #9 is closed.					
Acceptance and Close out by Lead Assessor: Joe Sun				Date: 14/02/2009	

Date:	28/11/2008	Raised by:	Joe Sun		
Type:	CL	Number:	CL #10	Reference:	E.1.1 and E.1.2
Lead Assessor Comment:				Date: 28/11/2008	
Please further clarify how the local stakeholder consultation was conducted, such as who were included in the stakeholder consultation process and whether appropriate media was used to invite local stakeholders.					
Project Participant Response:				Date: 01/02/2009	
In October, 2007, the project developer sent out questionnaires to the stakeholders in the directly affected area, requesting comments on the proposed project construction. As there are few people living around the wind farm project site, the stakeholders were noticed in person and 40 copies of questionnaire were distributed, and 40 copies of questionnaire were returned. The age of the participating stakeholders was in the range of 26 to 70 years old, including 35 local residents and 5 government officers of Chuandao Town and Taishan County. The events mentioned above have been added in the revised PDD. And the questionnaires have been provided to the DOE.					
Documentation Provided by Project Participant:					
Questionnaires on the construction of the Chuandao Phase I Wind Farm, October 2007; version 2.0 of the PDD					
Information Verified by Lead Assessor:					
Stakeholder consultation questionnaires for the project have been provided and validated. Information about how the stakeholder consultation was conducted has been provided in version 2.0 of the PDD dated 09/02/2009.					
Reasoning for not Acceptance or Acceptance and Close Out:					
CL #10 is closed.					
Acceptance and Close out by Lead Assessor: Joe Sun				Date: 14/02/2009	

A.4 Annex 4: Team Members Statements of Competency

Statement of Competence

Name: Joe Sun Guozhong

SGS Affiliate: China

Status

- | | |
|---------------------------|-------------------------------------|
| - Product Co-ordinator | <input checked="" type="checkbox"/> |
| - Operations Co-ordinator | <input type="checkbox"/> |
| - Technical Reviewer | <input checked="" type="checkbox"/> |
| - Expert | <input checked="" type="checkbox"/> |

Validation

Verification

- | | | |
|---------------------------------------|-------------------------------------|-------------------------------------|
| - Local Assessor | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| - Lead Assessor | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| - Assessor
/ Trainee Lead Assessor | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Scopes of Expertise

- | | |
|---|-------------------------------------|
| 1. Energy Industries (renewable / non-renewable) | <input checked="" type="checkbox"/> |
| 2. Energy Distribution | <input type="checkbox"/> |
| 3. Energy Demand | <input type="checkbox"/> |
| 4. Manufacturing | <input type="checkbox"/> |
| 5. Chemical Industry | <input checked="" type="checkbox"/> |
| 6. Construction | <input type="checkbox"/> |
| 7. Transport | <input type="checkbox"/> |
| 8. Mining/Mineral Production | <input type="checkbox"/> |
| 9. Metal Production | <input type="checkbox"/> |
| 10. Fugitive Emissions from Fuels (solid, oil and gas) | <input type="checkbox"/> |
| 11. Fugitive Emissions from Production and
Consumption of Halocarbons and Sulphur Hexafluoride | <input type="checkbox"/> |
| 12. Solvent Use | <input type="checkbox"/> |
| 13. Waste Handling and Disposal | <input type="checkbox"/> |
| 14. Afforestation and Reforestation | <input type="checkbox"/> |
| 15. Agriculture | <input type="checkbox"/> |

Approved Member of Staff by Siddharth Yadav Date: 10/03/2009

Statement of Competence

Name: Michael Wu Shimin

SGS Affiliate: China

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☒

Validation

Verification

- Local Assessor ☒
- Lead Assessor ☐
- Assessor ☒
- / Trainee Lead Assessor ☒

Scopes of Expertise

1. Energy Industries (renewable / non-renewable) ☒
2. Energy Distribution ☐
3. Energy Demand ☐
4. Manufacturing ☐
5. Chemical Industry ☒
6. Construction ☐
7. Transport ☐
8. Mining/Mineral Production ☐
9. Metal Production ☐
10. Fugitive Emissions from Fuels (solid, oil and gas) ☐
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride ☐
12. Solvent Use ☐
13. Waste Handling and Disposal ☐
14. Afforestation and Reforestation ☐
15. Agriculture ☐

Approved Member of Staff by Joe Sun and Siddharth Yadav

Date: 15/01/2009

Statement of Competence

Name: Yolanda Zheng

SGS Affiliate: China

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☒

Validation

Verification

- Local Assessor ☒
- Lead Assessor ☐
- Assessor ☐
- / Trainee Lead Assessor

Scopes of Expertise

- | | |
|--|-------------------------------------|
| 1. Energy Industries (renewable / non-renewable) | <input checked="" type="checkbox"/> |
| 2. Energy Distribution | <input type="checkbox"/> |
| 3. Energy Demand | <input type="checkbox"/> |
| 4. Manufacturing | <input type="checkbox"/> |
| 5. Chemical Industry | <input type="checkbox"/> |
| 6. Construction | <input type="checkbox"/> |
| 7. Transport | <input type="checkbox"/> |
| 8. Mining/Mineral Production | <input type="checkbox"/> |
| 9. Metal Production | <input type="checkbox"/> |
| 10. Fugitive Emissions from Fuels (solid, oil and gas) | <input type="checkbox"/> |
| 11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride | <input type="checkbox"/> |
| 12. Solvent Use | <input type="checkbox"/> |
| 13. Waste Handling and Disposal | <input type="checkbox"/> |
| 14. Afforestation and Reforestation | <input type="checkbox"/> |
| 15. Agriculture | <input type="checkbox"/> |

Approved Member of Staff by Joe Sun and Siddharth Yadav

Date: 06/04/2009

Statement of Competence

Name: Richard Huang

SGS Affiliate: Taiwan

Status

- | | |
|---------------------------|-------------------------------------|
| - Product Co-ordinator | <input type="checkbox"/> |
| - Operations Co-ordinator | <input type="checkbox"/> |
| - Technical Reviewer | <input type="checkbox"/> |
| - Expert | <input checked="" type="checkbox"/> |

Validation

Verification

- | | | |
|---------------------------------------|-------------------------------------|-------------------------------------|
| - Local Assessor | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| - Lead Assessor | <input type="checkbox"/> | <input type="checkbox"/> |
| - Assessor
/ Trainee Lead Assessor | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Scopes of Expertise

- | | |
|---|--------------------------|
| 1. Energy Industries (renewable / non-renewable) | <input type="checkbox"/> |
| 2. Energy Distribution | <input type="checkbox"/> |
| 3. Energy Demand | <input type="checkbox"/> |
| 4. Manufacturing | <input type="checkbox"/> |
| 5. Chemical Industry | <input type="checkbox"/> |
| 6. Construction | <input type="checkbox"/> |
| 7. Transport | <input type="checkbox"/> |
| 8. Mining/Mineral Production | <input type="checkbox"/> |
| 9. Metal Production | <input type="checkbox"/> |
| 10. Fugitive Emissions from Fuels (solid,oil and gas) | <input type="checkbox"/> |
| 11. Fugitive Emissions from Production and
Consumption of Halocarbons and Sulphur Hexafluoride | <input type="checkbox"/> |
| 12. Solvent Use | <input type="checkbox"/> |
| 13. Waste Handling and Disposal | <input type="checkbox"/> |
| 14. Afforestation and Reforestation | <input type="checkbox"/> |
| 15. Agriculture | <input type="checkbox"/> |

Approved Member of Staff by Siddharth Yadav Date: 15/04/2009

Richard Huang Lichia is an Assessor for the SGS Climate Change with experience in the validation and verification of CDM, Gold Standard and VCS projects in China and Taiwan. He is assigned on the validation of this project as financial expert.