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# Validation Report

**RWE Power AG**

VALIDATION OF THE CDM-PROJECT:  
Hubei Hefeng Yanzi Town Baishun Village  
Taohuashan Hydropower Station

REPORT NO. 984786 Pos. 60

**2007, November 19**

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

Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
984786 Pos.60	2007-06-05	1	2007-11-19	-

<b>Subject:</b> Validation of a CDM Project	
<b>Accredited TÜV SÜD Unit:</b> TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 - 80686 Munich FEDERAL REPUBLIC OF GERMANY	<b>TÜV SÜD Contract Partner:</b> TÜV SÜD Industrie Service GmbH Carbon Management Service Westendstr. 199 - 80686 Munich FEDERAL REPUBLIC OF GERMANY
<b>Client:</b> RWE Power AG Rellinghauser Straße 37 45128 Essen FEDERAL REPUBLIC OF GERMANY	<b>Project Site(s):</b> Jiufengqiao River Yanzi Town Hefeng County Enshi Tujia-Miao Autonomous Prefecture, Hubei Province P. R CHINA
<b>Project Title:</b> Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower Station	
<b>Applied Methodology / Version:</b> AMS-I.D.	<b>Scope(s):</b> 1
<b>First PDD Version:</b> Date of issuance: 2007-02-27 Version No.: 0.2 Starting Date of GSP 2007-03-06	<b>Final PDD version:</b> Date of issuance: 2007-07-12 Version No.: 3
<b>Estimated Annual Emission Reduction:</b>	39 915 tons CO <sub>2e</sub>
<b>Assessment Team Leader:</b> Dr. Sven Kolmetz	<b>Further Assessment Team Members:</b> Cuiyun Zhang
<b>Summary of the Validation Opinion:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board in case letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively.</li> <li><input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the CDM Executive Board and will inform the project participants and the CDM Executive Board on this decision.</li> </ul>	



## Abbreviations

<b>ACM</b>	Approved Consolidated Methodology
<b>AM</b>	Approved Methodology
<b>CAR</b>	Corrective Action Request
<b>CDM</b>	Clean Development Mechanism
<b>CER</b>	Certified Emission Reduction
<b>CR</b>	Clarification Request
<b>DNA</b>	Designated National Authority
<b>DOE</b>	Designated Operational Entity
<b>EB</b>	Executive Board
<b>EIA / EA</b>	Environmental Impact Assessment / Environmental Assessment
<b>ER</b>	Emission reduction
<b>GHG</b>	Greenhouse gas(es)
<b>KP</b>	Kyoto Protocol
<b>MP</b>	Monitoring Plan
<b>NGO</b>	Non Governmental Organisation
<b>PDD</b>	Project Design Document
<b>PP</b>	Project Participant
<b>TÜV SÜD</b>	TÜV SÜD Industrie Service GmbH
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>VVM</b>	Validation and Verification Manual

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Annex 1: Validation Protocol

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## 1 INTRODUCTION

### 1.1 Objective

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

The project activity discussed by this validation report has been submitted under the project title:  
Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower Station.

### 1.2 Scope

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

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

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

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

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

## 2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual (for further information see [www.vvmanual.info](http://www.vvmanual.info)), an initiative of Designated and Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

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

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

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

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

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

As for this specific project the final PDD was applying a different version of the methodology than the first one, a table 1a and a table 1b are presented reflecting the changes by the revision of the methodology.

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

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

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

## 2.1 Appointment of the Assessment Team

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

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

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

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

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
<b>Dr. Sven Kolmetz</b>	ATL	☑	☑	☑
<b>Cuiyun Zhang</b>	GHG-A	☑	☑	☑

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

**Cuiyun Zhang** is an auditor for environmental management systems (according to ISO 14001) at Jiangsu TUV Product Service Ltd. She is based in Shanghai. In her position she is responsible for the implementation of validation, verification and certifications audits for management systems. She has received training in the CDM validation process and participated already in several CDM project assessments.

## 2.2 Review of Documents

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

## 2.3 Follow-up Interviews

On March 11<sup>th</sup>, 2007 TÜV SÜD performed interviews on-site with project stakeholders to confirm selected information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in the context of this on-site visit.

Name	Organisation
Mr. Fu Weimin	Chinese People's Political Consultative Conference of Hefeng County, Chairman
Mr. Zhuo Wanjun	the People's Government of Hefeng County, Head of County
Mr. Tan Changyu	the People's Government of Hefeng County, Vice Head of County
Mr. Jia Changsheng	Land and Resource Bureau of Hefeng County, Official
Mr. Tian Jiuru	Hefeng Taoyuan Hydropower Co., Ltd. Director
Mr. Huang Liwei	Hefeng Taoyuan Hydropower Co., Ltd. Vice Director
Mr. Hu Nanshan	Hefeng Taoyuan Hydropower Co., Ltd. General Manager
Ms. Tao Meiguang	Hefeng Taoyuan Hydropower Co., Ltd. Vice General Manager
Ms. Jane Yang	Tianqing Power International CDM Consulting Co., Ltd. Vice Director
Ms. Tang Xuemei	Tianqing Power International CDM Consulting Co., Ltd. Consultant



## **2.4 Resolution of Clarification and Corrective Action Requests**

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

## **2.5 Internal Quality Control**

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

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

### 3 SUMMARY OF FINDINGS

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

The specific project activity involves the construction and operation of a run-of-river diversion hydropower station is located on Jiufengqiao River Basin, Baishun Village, Yanzi Town, Hefeng County, Enshi Tujia-Miao Autonomous Prefecture, Hubei Province, People's Republic of China, and the project will be developed by Hefeng Taoyuan Hydropower Co., Ltd. The specific project will use two turbines with a total installed capacity of 12.6MW. On the average, the project activity is expected to operate 3,492hours per year, which corresponds to an average annual generation of 44,010MWh and a net electricity supply to the grid of 42,262.8MWh. The generated electricity will be transmitted to the Enshi Tujia-Miao Autonomous Prefecture Grid through Taohuashan Transformer Substation, then to the Hubei Grid, and, finally, to the Central China Grid.

The specific project activity will transmit renewable hydropower to the Central China Grid, and substitute relevant generation from fired power plant of the Central China Grid, and then reduce Greenhouse Gas emissions amount to 39,915tCO<sub>2</sub>e annually.

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

In total the assessment team expressed 5 Clarification Requests and 5 Corrective Action Requests.

The formal information and evidence have been brought forward and submitted to the DOE, and have been already revised, completed, added or included in the PDD with through the 5 Corrective Action Requests as below:

- the specification of the geographical coordinates [CAR1]
- the detail information about the turbine and generator types [CAR2]
- the missing parameters in section B.6.2. [CAR3]
- the missing data in section B.7. [CAR4, CAR5]

For the project time schedule and other official or reliable evidence (land requisition compensation and grid charge) have also been uploaded to the DOE and carefully revised [CR1, CR3]; necessary data proof for IRR calculation and additionality analysis (VAT, Static investment etc.) have been revised [CR2, CR4]. The accuracy of electricity meters were described and added into the PDD monitoring plan [CR5].

For the BM calculation the PDD adopts modified methods agreed by the EB for the approved methodologies AM0005 and AMS I.D. because plant specific data are not available in China. The emission factor of the thermal power plants is calculated by the proportion of the emissions of coal, gas and oil times the emission factor of the best available coal, gas and oil power plant as defined and published by the Chinese DNA. The new thermal capacity installation that exceeds 20% in the last years, for which data are available, is finally assessed with this factor.

The additionality has been evidenced by the investment analysis. The benchmark used (IRR) and the IRR calculation will be uploaded together with the PDD. The investment costs are approved by the regional authorities. The related parts of the feasibility study will be uploaded in a translated version. The consideration of CDM before the starting of the project activity has been evidenced as well. Hence, the project is additional.

Hence, the project complies with the requirements.

#### 4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

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

The following table presents all key information on this process:

<b>webpage:</b> <a href="http://www.netinform.de/KE/Wegweiser/Guide2_1.aspx?ID=2673&amp;Ebene1_ID=26&amp;Ebene2_ID=795&amp;mode=1">http://www.netinform.de/KE/Wegweiser/Guide2_1.aspx?ID=2673&amp;Ebene1_ID=26&amp;Ebene2_ID=795&amp;mode=1</a>	
<b>Starting date of the global stakeholder consultation process:</b> 2007-03-06	
<b>Comment submitted by:</b> none	<b>Issues raised:</b> -
<b>Response by TÜV SÜD:</b> -	

## 5 VALIDATION OPINION

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

Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower Station.

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

An analysis as provided by the applied methodology demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

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

Munich, 2007-11-19



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

Munich, 2007-11-19



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Assessment Team Leader

Validation of the CDM Project:  
Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower  
Station



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## **Annex 1: Validation Protocol**

## Validation Protocol

Project Title: Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower

Date of Completion: November 19<sup>th</sup>, 2007

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
<b>A. General description of small-scale project activity</b>				
<b>A.1. Title of the small-scale project activity</b>				
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?	1	The project is titled with the name of the project location and the energy source of the project. Hence, it can be clearly identified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.2. Are there any indications concerning the revision number and the date of the revision?	1	The available PDD for document review and on-site assessment is indicated as version 0.2 and has been completed on Feb. 27 <sup>th</sup> , 2007.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.3. Is this consistent with the time line of the project's history?	1	This is the first and only PDD at validator's desk while preparing the protocol. Moreover, the same version PDD has been used for GSP since 06/03/2007.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.2. Description of the small-scale project activity</b>				
A.2.1. Is the description delivering a transparent overview of the project activities?	1, 6, 7	The proposed project activity is a run-of-river hydropower plant. The location is at Jiufengqiao River Basin, Baishun Village, Yanzi Town, Hefeng County, Enshi Tujia-Miao Autonomous Prefecture, Hubei Province. The generated power will be fed to Hubei Provincial Power grid, an integral part of the Central China Grid that displaces the electricity mainly supplied by thermal plants. Through two sets of generation units (2*6300kW), 44,010MWh are expected to be generated and consequently, the annual emission reductions are estimated to be about 40,000tCO <sub>2</sub> . During the on-site audit, the project activities given in the PDD have been proved by the auditor.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	1, 7, 11, 27	The following data deliver evidence of the project activity: <ul style="list-style-type: none"> <li>- Purchasing contracts of turbines and generators;</li> <li>- Feasibility Study Report (approved by Hubei Development and Reform Commission on Oct. 25<sup>th</sup>, 2005)</li> <li>- Environmental Impact Assessment of the proposed project</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Validation Protocol

Project Title: Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower

Date of Completion: November 19<sup>th</sup>, 2007

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		(approved by the EPB of Hubei on May 24, 2004)		
A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?	1	The planning schedule in the past and for the future was clearly described by the project manager. At the time of the on site audit, two generation units were being installed. Pls. add the related information into PDD. <u>Clarification Request 1:</u> The time schedule of the implementation of the project should be included into the PDD.	CR 1	<input checked="" type="checkbox"/>
A.2.4. Is all information presented consistent with details provided by further chapters of the PDD?	1	The information given in the PDD, such as, net electricity delivered to the grid and annual emission reduction, are all consistent with the figures in the further chapters.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2.5. Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance?	1	Yes, because the project activity is a new hydro electric power project, which will produce power for the substitution of grid supplied electricity mainly from coal fired plants. Doubtless, this technology will reduce GHG emissions significantly.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2.6. Is the brief explanation how the project will reduce greenhouse gas emission transparent and suitable?	1, 6	In this case, the electricity is going to be generated through the utilization of a renewable source and it will displace the power delivered by the Central China Grid which is mainly supplied using coal-fired plants. Doubtlessly, the greenhouse gas emission will be reduced due to the proposed project activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.3. Project participants</b>				
A.3.1. Is the form required for the indication of project participants correctly applied?	1, 2	The form required by the template is used in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?	1	The investment party and project owner are RWE Power AG and Hefeng Taoyuan Hydropower Co., Ltd. respectively. The related information has been confirmed with the project owner and CDM developer.	Open Issue	<input checked="" type="checkbox"/>

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Project Title: Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		<u>Open Issue:</u> Pls. deliver the LoA issued by China and Germany together with MoC countersigned by both parties to DOE before raising the request of registration.		
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	1	The information of both participants given in Annex 1 is consistent with the one in section A.3 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.4. Technical description of the small-scale project activity</b>				
<i>A.4.1. Location of the small-scale project activity</i>				
A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	1	The geographical coordinates of the Hefeng County is given in PDD. However, <u>Corrective Action Request 1:</u> Pls. indicate the exact geographical coordinates of the proposed project into the revised PDD. Moreover, the unit shall be precise in second.	CAR 1	<input checked="" type="checkbox"/>
A.4.1.2. How is it ensured and/or demonstrated, that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	1	The sites of the dam and the power station have been visited by the audit team in March. At that time, the construction of the dam has been accomplished and two turbines were in installation. The risk of not implementing the proposed project at the defined site is zero.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>A.4.2. Type and category(ies) and technology/measure of the small-scale project activity</i>				
A.4.2.1. To which type(s) does the project activity belong to? Is the type correctly identified and indicated?	1, 2	The project activity utilizes hydropower for power generation, so, it falls into Type I – Renewable Energy Projects.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2.2. To which category (ies) does the project activity belong to? Is the category cor-	1, 6	The capacity of the project is 12.6 MW, so it does not exceeds the threshold capacity of 15 MW, moreover, the generated electricity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
rectly identified and indicated?		is supplied to the Central China Grid, hence, the Category is I-D – Grid connected renewable electricity generation.		
A.4.2.3. Does the technical design of the project activity reflect current good practices?	11	The domestic technology implemented at hydropower projects has been matured in China. Therefore, all the equipments are developed and manufactured domestically. In this case, the supplier is Chongqing Yunhe Group which is also the supplier of several hydropower plants in Hefeng County.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2.4. Does the implementation of the project activity require any technology transfer from Annex-I-countries to the host country (ies)?	11	In this case, the advanced domestic-made facilities are used, hence, there's no technology transfer from annex-I-countries to the host country.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2.5. Is the technology implemented by the project activity environmentally safe?	26	Referring to the approved EIA, it will not cause any environmental problem.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2.6. Is the information provided in compliance with actual situation or planning?	11	<u>Corrective Action Request 2:</u> The turbine and generator types at the project site and in the purchasing contract are different to the ones described in the PDD. Pls. correct.	CAR 2	<input checked="" type="checkbox"/>
A.4.2.7. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	11	Because the technology of installing a new hydropower plant has been fully developed and successfully implemented over China for decades, the technology applied in the proposed project has no difference compared to other applied in other similar hydro-power plants.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2.8. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	11	We do not expect that there will be a substitution because the turbines, generators and the other equipment will be newly commissioned and installed. The life cycle of the turbines and generators are under normal circumstances longer than the project period.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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A.4.2.9. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	14	To guarantee safe operation during the life time, the operators were dispatched to Taohuashan Phase I Hydropower Plant (a power plant that has been in operation since 1998), to acquire the experience on maintenance and operation. Additionally, the generation unit supplier will provide the operation and maintenance when installing the equipment on site. The training invitation and training plan in 2007 have been reviewed during the on site visit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2.10. Is information available on the demand and requirements for training and maintenance?	14	Pls. refer to A.4.2.9 of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2.11. Is a schedule available for the implementation of the project and are there any risks for delays?	1	Pls. see CR1. However, the construction of the dam has been completed as scheduled and the installation of the turbine is in process, the risks for delays seem low.	See CR 1	<input checked="" type="checkbox"/>
<b>A.4.3. Estimated amount of emission reductions over the chosen crediting period</b>				
A.4.3.1. Is the form required for the indication of projected emission reductions correctly applied?	1, 2	Yes, the required form is correctly applied in PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.2. Are the figures provided consistent with other data presented in the PDD?	1	The yearly emission reduction is estimated to be 39,915 tCO <sub>2</sub> which is the result of the grid's emission factor times the annual electricity that is fed into the grid. The same figure is quoted in the entire PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.3. Are the figures consistent with the small-scale criteria for the used Type?	1, 11	The sum capacity of two generation units is 12.6 MW which is lower than the limit of 15 MW for a small –scale definition.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.4.4. Public funding of the small-scale project activity</b>				
A.4.4.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	1	There's no public funding from Annex I parties. Project owner's equity capital and commercial loan from bank compose the investment of this project. The agreements between the bank and	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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		project owner have been reviewed during the audit.												
A.4.4.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	1	Same statements are presented in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
<b>A.4.5. Confirmation that the small-scale project activity is not a debundled component of a large scale project activity</b>														
A.4.5.1. Is there a registered small-scale CDM project activity or an application to register another small-scale CDM project activity with the following characteristics:	1	<table border="1"> <thead> <tr> <th>Debundling checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>The same project participants?</td> <td>No</td> </tr> <tr> <td>In the same project category and technology/measure?</td> <td>No</td> </tr> <tr> <td>Registered within previous two years? Or in registration process?</td> <td>No</td> </tr> <tr> <td>Whose boundary is within 1 km of the project boundary of the small scale project activity under consideration?</td> <td>No</td> </tr> </tbody> </table>	Debundling checklist	Yes / No	The same project participants?	No	In the same project category and technology/measure?	No	Registered within previous two years? Or in registration process?	No	Whose boundary is within 1 km of the project boundary of the small scale project activity under consideration?	No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Debundling checklist	Yes / No													
The same project participants?	No													
In the same project category and technology/measure?	No													
Registered within previous two years? Or in registration process?	No													
Whose boundary is within 1 km of the project boundary of the small scale project activity under consideration?	No													
A.4.5.2. If the answer to all the above question is 'Yes' then does the total size of the small scale project activity combined with previously registered small scale CDM project activity exceeds the limits of small scale CDM project activities?	1	Because the project fulfils the criteria of small scale project, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
<b>B. Application of a baseline and monitoring methodology</b>														
<b>B.1. Title and reference of the approved baseline and monitoring methodology applied to the small-scale project activity</b>														
B.1.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	1, 2	The AMS- I .D. Renewable electricity generation for a grid (Version 10) and methodology ACM0002 (Version 06) are applied to the proposed project. They have been clearly demonstrated in B.1 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

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B.1.1.2. Is the applied version the most recent one and / or is this version still applicable?	1, 2	Yes, both are latest versions at the site visiting time.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
<b>B.2. Justification of the choice of the project category</b>												
B.2.1. Is the applied methodology considered the most appropriate one?	1, 2	The project activity fulfills the criteria of AMS-I.D.: <ul style="list-style-type: none"> <li>- Newly-build power plant utilizing the hydro source;</li> <li>- The generated electricity displaces the power from an electricity distribution system which is mainly supplied with fossil fuel fired generation units.</li> <li>- The total renewable components are lower than 15MW.</li> </ul> Thus, the AMS-I.D. (version 10) seems to be the only one that makes sense.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
B.2.1.1. Criterion 1: This category comprises renewable energy generation units, such as photovoltaics, hydro, tidal/wave, wind, geothermal and renewable biomass, that supply electricity to and/or displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit.	1, 2	<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No / NA</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Compliance provable?</td> <td>Yes</td> </tr> <tr> <td>Compliance verified?</td> <td>Yes</td> </tr> </table>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Compliance verified?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	Yes											
Compliance provable?	Yes											
Compliance verified?	Yes											
B.2.1.2. Criterion 2: If the unit added has both renewable and non-renewable components (e.g.. a wind/diesel unit), the eligibility limit of 15MW for a small-scale CDM project activity applies only to the renewable component. If the unit added	1, 2	<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No / NA</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Compliance provable?</td> <td>Yes</td> </tr> <tr> <td>Compliance verified?</td> <td>Yes</td> </tr> </table>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Compliance verified?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	Yes											
Compliance provable?	Yes											
Compliance verified?	Yes											

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co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15MW.												
B.2.1.3. Criterion 3: Biomass combined heat and power (co-generation) systems that supply electricity to and/or displace electricity from a grid are included in this category. To qualify under this category, the sum of all forms of energy output shall not exceed 45 MW <sub>thermal</sub> e.g. for a biomass based co-generating system the rating for all the boilers combined shall not exceed 45 MW <sub>thermal</sub> .	1, 2	<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No / NA</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>N.A.</td> </tr> <tr> <td>Compliance provable?</td> <td>N.A.</td> </tr> <tr> <td>Compliance verified?</td> <td>N.A.</td> </tr> </table> <p>Because the proposed project is a hydropower plant, this criteria is not applicable.</p>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	N.A.	Compliance provable?	N.A.	Compliance verified?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	N.A.											
Compliance provable?	N.A.											
Compliance verified?	N.A.											
B.2.1.4. Criterion 4: In the case of project activities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct <sup>1</sup> from the existing units.	1, 2	<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No / NA</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>N.A.</td> </tr> <tr> <td>Compliance provable?</td> <td>N.A.</td> </tr> <tr> <td>Compliance verified?</td> <td>N.A.</td> </tr> </table> <p>Because the proposed project is a hydropower plant, this criteria is not applicable.</p>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	N.A.	Compliance provable?	N.A.	Compliance verified?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	N.A.											
Compliance provable?	N.A.											
Compliance verified?	N.A.											
B.2.1.5. Criterion 5: Project activities that seek to retrofit or modify an existing facility for renewable energy generation are included in this category. To qualify as a small scale project, the total output of the modified or retrofitted unit shall not exceed the limit of 15 MW.	1, 2	<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No / NA</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>N.A.</td> </tr> <tr> <td>Compliance provable?</td> <td>N.A.</td> </tr> <tr> <td>Compliance verified?</td> <td>N.A.</td> </tr> </table> <p>The project is a newly installed power plant; it doesn't need to be</p>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	N.A.	Compliance provable?	N.A.	Compliance verified?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	N.A.											
Compliance provable?	N.A.											
Compliance verified?	N.A.											

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		considered.		
<b>B.3. Description of the project boundary</b>				
B.3.1. Does the project boundary include physical, geographical site where the project activity takes place?	1, 2	Yes, as stated in the PDD, the project boundary is the physical, geographical site of the renewable generation source. Moreover, for the purpose of the baseline calculation according to ACM0002, a system boundary is also given: the Central China Grid.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.3.2. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD?	1, 2	The boundaries presented in the PDD have been verified by the on site auditor.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>B.4. Description of baseline and its development</b>				
B.4.1. Have all technically feasible baseline scenario alternatives to the project activity been identified and discussed by the PDD? Why can this list be considered as being complete?	1, 2	The following baseline scenarios are discussed: <ul style="list-style-type: none"> <li>- Business as usual (grid electricity supplied from Central China Grid)</li> <li>- Installation of a coal-fired power plant with similar capacity</li> <li>- Installation of a power plant utilizing another renewable energy, such as biomass, solar source or geothermal source.</li> <li>- The project itself without consideration of the CDM</li> </ul> These scenarios are the only ones that are making sense.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.2. Does the project identify correctly and excludes those options not in line with regulatory or legal requirements?	1, 2	The relative regulations and laws are clearly discussed for each scenario in the PDD. According to Chinese power regulations, construction of a coal-fired power plant of less than 135 MW is prohibited in the areas covered by large grids; so the alternative of installing a coal-fired power plant with similar capacity is not a realistic and credible alternative. On the other hand, the rest three	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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		alternatives are in compliance with the relevant Chinese laws and regulations. The Renewable Energy Law which effects on Jan. 1 <sup>st</sup> , 2006 encourages and supports renewable-based power generation.		
B.4.3. Have applicable regulatory or legal requirements been identified?	1, 2	Pls. see B.4.2. of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.4. Does the PDD identify the most likely baseline scenario in absence of the project activity?	1, 2	Since there's no other renewable source available at the project site, the alternatives of the proposed hydropower activity without CDM and with equivalent annual electricity are the most likely in the baseline scenario.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.5. Is this identification supported by official and/or verifiable documents (e.g. studies, web pages, certificates, etc)?	1, 2	During the on site visit, the audit team has verified that no others renewable sources could be utilized at the project site. Regarding the possibility of installing a thermal power plant with equivalent power generation, there's a regulation that says: Notice on Strictly Prohibiting the Installation of Fuel fired Generator with the Capacity of 135 MW or below. It was issued by the General Office of the State Council.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.6. Is the identified baseline scenario in line with regulatory or legal requirements?	1, 2	Yes, the baseline scenario, business as usual, is in line with the regulations and legal requirements.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered small-scale CDM project activity:</b>				
B.5.1. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	3, 25	Three analysis methods are provided according to the Additionality tool (version 3). Because the proposed project generates economic benefits through the sales of electricity other than CDM revenue, the Option I (simple cost analysis) can't be taken. Moreover, the Option II (investment comparison analysis) only applies to projects where alternatives should be similar investment pro-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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		jects, however, in this case, the baseline scenario is Central China Grid, hence, Option II can't be adopted either. It deems that Option III (benchmark analysis) is the only applicable one. In this case, the benchmark IRR quoted from "Economic Evaluation Code for Small Hydropower Project" is used. The IRR benchmark is set as 10% (with VAT).		
B.5.2. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?	3, 25	As described above, Option III is chosen for the investment analysis. So this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.3. In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	3, 25	As described above, Option III is chosen for the investment analysis. So this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.4. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	3, 25, 36	<p>The spreadsheet and related documents have been verified by the on site auditor. The whole calculation process and most of the data come from the approved feasibility study report. However,</p> <p><u>Clarification Request 2:</u></p> <ul style="list-style-type: none"> <li>- According to the Chinese regulation, the VAT for small scaled hydropower is 6%, pls. deliver the official evidence to audit team that the 17% VAT is applied to the proposed project instead;</li> <li>- According to the feasibility report, the static investment is about 72 million RMB, pls. clarify the reason why 88.8 million RMB is used for IRR calculation;</li> <li>- Pls. deliver the related data source of the electricity tariff;</li> <li>- Pls. provide additional calculation process on figuring out the annual operation cost</li> </ul>	CR 2	<input checked="" type="checkbox"/>

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B.5.5. In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?	3, 25	The audit team has verified the calculation process and quoted data under the scenario of the project activity without CDM revenue and the project itself.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.6. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	3, 25	Pls. see CR 2.	See CR 2	<input checked="" type="checkbox"/>
B.5.7. In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	3, 37, 35	<p>The following financial barriers are discussed in the PDD:</p> <ul style="list-style-type: none"> <li>- Financing surroundings</li> <li>- Increased Investment Cost</li> <li>- Uncertainty of electricity sales</li> <li>- Uncertainty of grid price</li> </ul> <p>Additional documents are required for supporting the mentioned opinion:</p> <p><u>Clarification Request 3:</u></p> <p>Please deliver the official or reliable evidence that</p> <ul style="list-style-type: none"> <li>- the land requisition compensation is increased and has impacted the proposed project;</li> <li>- The grid company is reluctant to purchase electricity generated via hydropower;</li> <li>- The Enshi Tujia-Miao Autonomous Prefecture Grid Company will charge 0.05/kWh due to using the Enshi Grid</li> </ul>	CR 3	<input checked="" type="checkbox"/>
B.5.8. In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?	3, 37, 35	See CR 3.	See CR 3	<input checked="" type="checkbox"/>

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B.5.9. In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	3, 37, 35	See CAR 3.	See CAR 3	<input checked="" type="checkbox"/>
B.5.10. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	1	The additionality tool has not been used, so, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.11. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the CDM component (step 4b)?	1	The additionality tool has not been used, so, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.12. Is it appropriately explained how the approval of the project activity will help to overcome the economic and financial hurdles or other identified barriers (step 5)?	1	The additionality tool has not been used, so, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
If the additionality tool has not been used please answer B.5.13 to B.5.18				
B.5.13. If the starting date of the project activity is before the date of validation, is evidence available to prove that incentive from the CDM was seriously considered in the decision to proceed with the project activity?	38, 39	<u>Clarification Request 4:</u> As introduced by the project owner, the revenue of CDM has been considered at the beginning of the project activity. Pls. deliver the related evidence to the DOE.	CR 4	<input checked="" type="checkbox"/>
B.5.14. Is a complete list of barriers developed that prevents the project activity to occur?	1	Yes, besides the investment barrier, the project needs also face the barriers of uncertainty of electricity sales and uncertainty of electricity tariff.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.15. Does this list include at least one of the following barriers?	1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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		Barrier	Discussed?	Verifiable?		
		Investment	Yes	Yes		
		Technological	Yes	Yes		
		Due to prevailing practice	No	No		
		Other	Yes	Yes		
B.5.16. Does the discussion sufficiently take into account relevant national and/or sectoral policies?	1, 16	Yes, according to the Bank Credit Policy Direction in 2005, it is required that loans given to small private companies in the Western China should be cautions. Such general instruction set additional barrier to the proposed project activity.			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.17. Is transparent and documented evidence provided on the existence and significance of these barriers?	3, 35, 37	Pls. refer to CR 3.			See CR 3	<input checked="" type="checkbox"/>
B.5.18. Is it appropriately explained how the approval of the project activity will help to overcome the identified barriers?	3, 35, 37	Pls. refer to CR 3.			See CR 3	<input checked="" type="checkbox"/>
<b>B.6. Emissions reductions</b>						
<i>B.6.1. Explanation of methodological choices</i>						
B.6.1.1. Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	1	According to the methodology, the baseline emission will be calculated as per ACM0002 (version 6).			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	1	The methodology provides two alternatives for the baseline calculation. Because the generated electricity is going to displace the power from the Central China Grid, the approach provided from ACM0002 is more reasonable than using the weighted average emissions of the current generation mix.			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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<b>B.6.1.3. Determination of project emissions (Comment on any line answered "No")</b>										
B.6.1.3.1. Component 1: emissions from use of fossil fuel	1	<table border="1"> <tr> <td>Project emission checklist</td> <td>Yes / No</td> </tr> <tr> <td>Component discussed in the PDD?</td> <td>N.A.</td> </tr> <tr> <td>Formulae correctly applied?</td> <td>N.A.</td> </tr> </table> <p>Because the proposed project activity is a newly installed hydro-power plant, no fossil fuel will be used for the project activity, this section is not applicable.</p>	Project emission checklist	Yes / No	Component discussed in the PDD?	N.A.	Formulae correctly applied?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Project emission checklist	Yes / No									
Component discussed in the PDD?	N.A.									
Formulae correctly applied?	N.A.									
B.6.1.4. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameters to be used and / or monitored?	1	Referring to Annex 3, the calculation process does strictly follow the approved methodology and clarification to BM. The quoted formulae and parameters are the same to the ones in the methodology and presented in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
B.6.1.5. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1	Since there's no energy generating equipment being transferred from or to another activity, the leakage doesn't need to be considered.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
B.6.1.6. Are the formulae required for the determination of emission reductions correctly presented?	1	Formulae in the PDD are clearly presented for the determination of the emission reduction. As the project emission and leakage are both zero, the emission reduction is equal to the baseline emission.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
<b>B.6.2. Data and parameters that are available at validation</b>										
B.6.2.1. Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the applied methodology?	1, 2	<u>Corrective Action Request 3:</u> Referring to the CAR 4, the data needs to be updated with the latest official data source. On the other hand, pls. refer to the following B.6.2.3 – B.6.2.12 in the protocol to complete the parame-	CAR 3	<input checked="" type="checkbox"/>						

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		ter list which is required as per the methodology.			
B.6.2.2.Comment on any line answered with “No”					
B.6.2.3.Parameter Title: Annual electricity supplied to the grid prior to retrofit (applicable only for retrofit and modification activities)	1, 2	Data Checklist		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	Yes / No		
		Data unit correctly expressed?	N.A.		
		Appropriate description of parameter?	N.A.		
		Source clearly referenced?	N.A.		
		Correct value provided?	N.A.		
		Has this value been verified?	N.A.		
		Choice of data correctly justified?	N.A.		
		Measurement method correctly described?	N.A.		
B.6.2.3. Parameter Title: Emission factor of the grid (CM)	1, 2	Data Checklist		See CAR 3	<input checked="" type="checkbox"/>
		Title in line with methodology?	Yes / No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		
		Correct value provided?	No		

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B.6.2.4. Parameter Title: Operating margin (OM) emission factor of the grid	1, 2	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>No</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>No</td> </tr> <tr> <td>Appropriate description?</td> <td>No</td> </tr> <tr> <td>Source clearly referenced?</td> <td>No</td> </tr> <tr> <td>Correct value provided?</td> <td>No</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>No</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>No</td> </tr> </tbody> </table> <p>Pls. kindly refer to CAR 3.</p>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description?	No	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	No	CAR 3	<input checked="" type="checkbox"/>
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Measurement method correctly described?	No																					
B.6.2.5. Parameter Title: Build margin (BM) emission factor of the grid	1, 2	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>No</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>No</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>No</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	CAR 3	<input checked="" type="checkbox"/>										
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B.6.2.6. Parameter Title: fuel consumption of each power source	1, 2	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>No</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>No</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>No</td> </tr> <tr> <td>Source clearly referenced?</td> <td>No</td> </tr> <tr> <td>Correct value provided?</td> <td>No</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>No</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>No</td> </tr> </tbody> </table> <p>Pls. kindly refer to CAR 3.</p>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	No	See CAR 3	<input checked="" type="checkbox"/>
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B.6.2.7. Parameter Title: emission coefficient of each fuel	1, 2	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>No</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	No	See CAR 3	<input checked="" type="checkbox"/>														
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B.6.2.8. Parameter Title: electricity generation of each power source	1, 2	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>N.A.</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>N.A.</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>N.A.</td> </tr> <tr> <td>Source clearly referenced?</td> <td>N.A.</td> </tr> <tr> <td>Correct value provided?</td> <td>N.A.</td> </tr> <tr> <td>Has this value been verified?</td> <td>N.A.</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>N.A.</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>N.A.</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Measurement method correctly described?	N.A.																					
B.6.2.9. Parameter Title: fraction of time with low costs /must run plant at the margin (for simple adjusted OM only)	1, 2	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>N.A.</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>														
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B.6.2.10. Parameter Title: electricity imports	1, 2	<table border="1"> <thead> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>No</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>No</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>No</td> </tr> <tr> <td>Source clearly referenced?</td> <td>No</td> </tr> <tr> <td>Correct value provided?</td> <td>No</td> </tr> <tr> <td>Has this value been verified?</td> <td>No</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>No</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>No</td> </tr> </tbody> </table> <p>Pls. kindly refer to CAR 3.</p>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	No	See CAR 3	<input checked="" type="checkbox"/>
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Correct value provided?	No																					
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Choice of data correctly justified?	No																					
Measurement method correctly described?	No																					
B.6.2.11. Parameter Title: CO <sub>2</sub> emission coefficient of fuels used in	1, 2		See CAR 3	<input checked="" type="checkbox"/>																		

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connected grids		Data Checklist		Yes / No		
		Title in line with methodology?		No		
		Data unit correctly expressed?		No		
		Appropriate description of parameter?		No		
		Source clearly referenced?		No		
		Correct value provided?		No		
		Has this value been verified?		No		
		Choice of data correctly justified?		No		
		Measurement method correctly described?		No		
Pls. kindly refer to CAR 3.						
<b>B.6.3. Ex-ante calculation of emission reductions</b>						
B.6.3.1. Is the projection based on the same procedures as used for future monitoring?	1, 2	Yes. Being a hydropower project, the net electricity to grid is the required parameter for both baseline calculation and future monitoring.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
B.6.3.2. Are the GHG calculations documented in a complete and transparent manner?	1, 2	The calculation process has been completely demonstrated in Annex 3 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
B.6.3.3. If there is more than one component of the project activity, then, are emission reduction calculations provided separately for each component?	1, 2	Only one hydropower station is included in the PDD. Hence, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
B.6.3.4. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1, 2	Yes, the data is consistent through the entire PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<b>B.6.4. Summary of the ex-ante estimation of emission reductions</b>						

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B.6.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1, 2	Demonstrated in the PDD, being a hydropower plant, the baseline emission is equal to the emission reduction. There's no doubt that it will result in fewer GHG emission.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	1, 2	Yes, the table is complete, which includes the emission due to the project activity, baseline emission, leakage emission and the overall emission reduction.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.3. If the project activity involves more than one component, is separate table included for each of the component.	1, 2	Pls. refer to B.6.3.3 of protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.4. Do these values comply with small-scale criteria for every year?	1, 2	Because there's no plan to expand the installed capacity, it will be always less than 15 MW which is the limitation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.5. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1, 2	The life time of the project is expected to be 25 years and the renewable crediting period of max. 7 years with potential for 2 renewals is chosen. The yearly emission reduction and total emission reduction are indicated in B.6.4 table in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.6. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	1, 2	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>B.7. Application of the monitoring methodology and description of the monitoring plan</b>				
<i>B.7.1. Data and parameters monitored</i>				
B.7.1.1. Is the list of parameters presented in chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	1	Yes, the electricity supplied to the grid and the power fed from the grid will be measured and recorded separately. <u>Clarification Request 5:</u> The accuracy of electricity meters shall be described in the revised PDD. Furthermore, a diagram of these meters shall be presented in the revised PDD.	CR 5	<input checked="" type="checkbox"/>
B.7.1.2. Comment on any line answered with "No"				
B.7.1.2.1. Parameter Title:	1		CAR 4	<input checked="" type="checkbox"/>

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Monitoring Checklist	Yes / No																											
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<p>B.7.1.2.2. Amount of biomass input (if applicable)</p>	<p>1</p>	<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>N.A.</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>N.A.</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>N.A.</td> </tr> <tr> <td>Source clearly referenced?</td> <td>N.A.</td> </tr> <tr> <td>Correct value provided for estimation?</td> <td>N.A.</td> </tr> <tr> <td>Has this value been verified?</td> <td>N.A.</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>N.A.</td> </tr> <tr> <td>Correct reference to standards?</td> <td>N.A.</td> </tr> <tr> <td>Indication of accuracy provided?</td> <td>N.A.</td> </tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	<p><input checked="" type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>				
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B.7.1.2.3. Amount of fossil fuel (if applicable)	1	<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Title in line with methodology?</td> <td>N.A.</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>N.A.</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>N.A.</td> </tr> <tr> <td>Source clearly referenced?</td> <td>N.A.</td> </tr> <tr> <td>Correct value provided for estimation?</td> <td>N.A.</td> </tr> <tr> <td>Has this value been verified?</td> <td>N.A.</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>N.A.</td> </tr> <tr> <td>Correct reference to standards?</td> <td>N.A.</td> </tr> <tr> <td>Indication of accuracy provided?</td> <td>N.A.</td> </tr> <tr> <td>QA/QC procedures described?</td> <td>N.A.</td> </tr> <tr> <td>QA/QC procedures appropriate?</td> <td>N.A.</td> </tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	QA/QC procedures described?	N.A.	QA/QC procedures appropriate?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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<b>B.7.2. Description of the monitoring plan</b>																												
B.7.2.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?	1	A Chief monitoring officer will be appointed by the project owner, who will supervise and verify metering and recording, will collect data (including readings of meters and sales receipts), calculate emission reductions and will prepare the monitoring report. The Chief monitoring officer will receive support from Tianqing Power	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																								

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		International CDM Consulting Co., Ltd.		
B.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1	The management structure of monitoring the electricity fed to grid is clearly presented in PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.3. Does the monitoring plan provide current good monitoring practice?	1	The calibration process and standard fulfils the industry standard in China and the monitoring process is a common procedure which is generally adopted by local companies.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.4. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	1	There's no additional information provided in annex 4, so this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>B.8. Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)</b>				
B.8.1.1. Is there any indication of a date when the baseline was determined?	1	The baseline is determined on Feb. 27 <sup>th</sup> , 2007.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.1.2. Has dd/mm/yyyy format been used to indicate the date?	1	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.1.3. Is this consistent with the time line of the PDD history?	1	It's also the date of accomplishing the PDD, which is used for GSP and on site audit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.1.4. Is the information on the person(s) / entity (ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	1	Yes. The responsible persons indicated in PDD are also the ones being interviewed for baseline verification during the on site audit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.1.5. Is information provided whether this person / entity is also considered a project participant?	1	The company listed in B.8, Beijing Tianqing Power International CDM Consulting Co., Ltd., is not a project participant, but the CDM developer and consultant.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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<b>C. Duration of the project activity / crediting period</b>				
<b>C.1. Duration of the project activity</b>				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	1	<u>Corrective Action Request 5:</u> Pls. correct the starting date of the project activity with the starting date of construction.	CAR 5	<input checked="" type="checkbox"/>
<b>C.2. Choice of the crediting period and related information</b>				
C.2.1. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1	The life time of the project is 25 years. It was confirmed with the provided evidence, such as purchasing contract, business plan and the validator has the confidence that it's reasonable. Therefore, the max. 7 years with potential for 2 renewals is chosen as the crediting period.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C.2.2. Has dd/mm/yyyy format been used to indicate the start date of the crediting period.	1	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>D. Environmental impacts</b>				
<b>D.1. If required by the host Party, documentation on the analysis of the environmental impacts of the project activity:</b>				
D.1.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved? If yes answer also D.1.2 to D.1.4	26, 27	Yes, EIA is required in P. R. China for the installation of a new hydropower plant. An EIA survey was carried out by the authorized organization and approved by the EPB of Hubei Province. All the documents have been reviewed by the DOE.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.2. Has the analysis of the environmental impacts of the project activity been sufficiently described?	26, 27	Yes, the environmental impacts of the project activity such as noise, visual impacts, interference with communication, land use, air quality and water usage have been clearly described.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.3. Will the project create any adverse environmental effects?	26, 27	Referred to the approved EIA, the project will create no negative environmental impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.4. Were transboundary environmental impacts identified in the analysis?	26, 27	The proposed plant is located within China, hence, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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<b>D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party</b>					
D.2.1.	Have the identified environmental impacts been addressed in the project design sufficiently?	26, 27	Referring to the EIA and to its approval, the impacts on the environment are not significant.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.2.	Does the project comply with environmental legislation in the host country?	26, 27	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>E. Stakeholders' comments</b>					
<b>E.1. Brief description how comments by local stakeholders have been invited and compiled</b>					
E.1.1.	Have relevant stakeholders been consulted?	28-33	A special stakeholder consultation meeting for introducing the project activity was organized on Jan. 9th, 2007. The opinions concerning the influence the project would have on the local society, economy and daily life were collected in the meeting. To ensure all the stakeholders received the information, with help of the local government and the consulting company, the meeting bulletin was announced via <a href="http://www.tgcmdchina.com">www.tgcmdchina.com</a> and in Enshi Newspaper. Furthermore, before the meeting, questionnaires were distributed to residents who may be impacted by the project activity and 20 copies have been returned. No negative comments were received. The related photos, participant list, questionnaires and newspaper were delivered to the auditor for review.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.2.	Have appropriate media been used to invite comments by local stakeholders?	28-33	Pls. see E.1.1 of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.3.	If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	28-33	There are no regulations/laws in China for carrying out the stakeholder consultation process for this project activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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E.1.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	28-33	Pls. see E.1.1 of protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>E.2.Summary of the comments received</b>				
E.2.1. Is a summary of the received stakeholder comments provided?	28-33	Yes, in E.2 of the PDD, the summary of the stakeholder comments were analyzed and provided.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>E.3.Report on how due account was taken of any comments received</b>				
E.3.1. Has due account been taken of any stakeholder comments received?	28-33	Referring to the PDD and to the filled questionnaires which were gathered from participants and reviewed by the validator on site, all stakeholder comments are positive.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>F. Annexes 1 - 4</b>				
<b>F.1. Annex 1: Contact Information</b>				
F.1.1. Is the information provided consistent with the one given under section A.3?	1	Pls. see A.3.2 of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.2. Is the information on all private participants and directly involved Parties presented?	1	Pls. see A.3.2 of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>F.2. Annex 2: Information regarding public funding</b>				
F.2.1. Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?	1	Pls. see A.4.4.1 of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.2.2. If necessary: Is an affirmation available that any such funding from Annex-I-countries does not result in a diversion of ODA?	1	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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<b>F.3. Annex 3: Baseline information</b>					
F.3.1.	If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	1, 22-24	Pls. kindly see B.6.1.2 of the protocol. All the data used for baseline calculation are consistent throughout the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.3.2.	Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	1, 22-24	Pls. see F.3.1. of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.3.3.	Does the additional information substantiate / support statements given in other sections of the PDD?	1, 22-24	Annex 3 presents all the data used for the emission factor calculation and the reason why the NDRC publish values are adopted in this case.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>F.4. Annex 4: Monitoring information</b>					
F.4.1.	If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	1	Monitoring management structure and procedures are clearly depicted in B.7.2, hence, there's no additional description in Annex 4.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.4.2.	Is the information provided verifiable? Has sufficient evidence been provided to the validation team?	1	Pls. see F.4.1 of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.4.3.	Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	1	Pls. see F.4.1 of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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**Table 2 Resolution of Corrective Action and Clarification Requests**

Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
<p><u>Corrective Action Request 1:</u> Pls. indicate the exact geographical coordinates of the proposed project into the revised PDD. Moreover, the unit shall be precise in second.</p>	A.4.1.1	We have included the correct coordinates (including seconds) of the dam site in Section A.4.1.4.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 2:</u> The turbine and generator types at the project site and in the purchasing contract are different to the ones described in the PDD. Pls. correct.</p>	A.4.2.6	We have corrected section A.4.2. in accordance with the purchasing contract	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 3:</u> Referring to the CAR 4, the data needs to be updated with the latest official data source. On the other hand, pls. refer to the following B.6.2.3 – B.6.2.12 in the protocol to complete the parameter list which is required as per the methodology.</p>	B.6.2.1	<p>We have corrected section B.6.2</p> <p><b><u>DOE Response:</u></b> As the version 10 of the methodology has been used, the IPCC 1996 values are acceptable because ACM0002 is still referring to IPCC1996 as well as the officially published grid factors. If there are new grid factors published before registration these have to be considered.</p>	<input checked="" type="checkbox"/>  The newly published grid factors would result in significant higher emission reductions. Hence, the approach used in the PDD can be considered to be conservative.
<p><u>Corrective Action Request 4:</u> The data quoted in B.7.1 tables of PDD are not consistent with the data in A.2. Pls. correct.</p>	B.7.1.2.1	We have corrected section B.7.1	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 5:</u></p>	C.1.1	We have corrected the date in section C.1.1 of the PDD	<input checked="" type="checkbox"/>

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Pls. correct the starting date of the project activity with the starting date of construction.		to the starting date of construction activities. Additionally, we have corrected the starting date of the first crediting period to a more credible one (due to delays).	
<u>Clarification Request 1:</u> The time schedule of the implementation of the project should be included into the PDD.	A.2.3	We have included the main implementation data in section A.4.2. The project started operations in April 2007, and therefore no further future events are listed. Because the project started operations, there are no risks for delays.	<input checked="" type="checkbox"/>
<u>Clarification Request 2:</u> <ul style="list-style-type: none"> <li>- According to the Chinese regulation, the VAT for small scaled hydropower is 6%, pls. deliver the official evidence to audit team that the 17% VAT is applied to the proposed project instead;</li> <li>- According to the feasibility report, the static investment is about 72 million RMB, pls. clarify the reason why 88.8 million RMB is used for IRR calculation;</li> <li>- Pls. deliver the related data source of the electricity tariff;</li> </ul> Pls. provide additional calculation process on figuring out the annual operation cost	B.5.4	We will separately provide evidence for the fact that the project entity is considered a normal taxpayer and that 17% VAT is applied.  We will also provide evidence for the electricity tariff, which is 0.348 RMB/kWh minus the 0.04 RMB/kWh charge for using the Enshi grid. The grid price used in the IRR calculation is therefore 0.308RMB/kWh (including VAT).  Note that table B.1 in the PDD is corrected and now lists values in Yuan RMB to aid transparency and consistency. Also the figure for static investment is now in Yuan RMB and is in accordance with the feasibility report.	<input checked="" type="checkbox"/> Has been verified by the local auditor.
<u>Clarification Request 3:</u> Please deliver the official or reliable evidence that <ul style="list-style-type: none"> <li>- the land requisition compensation is increased and has impacted the proposed project;</li> </ul>	B.5.7	We will provide evidence for the land requisition compensation to the validator.  We will provide evidence for the reluctance of the grid company to purchase hydropower electricity to the validator.	<input checked="" type="checkbox"/> Has been verified by the local auditor.

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<ul style="list-style-type: none"> <li>- The grid company is reluctant to purchase electricity generated via hydro-power;</li> <li>- The Enshi Tujia-Miao Autonomous Prefecture Grid Company will charge 0.05/kWh due to using the Enshi Grid.</li> </ul>		<p>The charge for using the Enshi Grid is 0.04 yuan RMB 0.04 / kWh. We have corrected this in the PDD and will provide evidence to the validator (please also see response to Clarification Request 2).</p>	
<p><u>Clarification Request 4:</u> As introduced by the project owner, the revenue of CDM has been considered at the beginning of the project activity. Pls. deliver the related evidence to the DOE.</p>	<p>B.5.13</p>	<p>The start of construction activities was in August 2005. We will provide three evidence documents separately to the validator to evidence the project owner decided to apply for CDM project status before August 2005.</p> <ul style="list-style-type: none"> <li>-Discussions between Project owner and CDM advisors on CDM application.</li> <li>-Signed development contract with CDM advisors</li> <li>-Directorate Resolution to apply for CDM project status</li> </ul>	<p><input checked="" type="checkbox"/> Has been verified by the local auditor.</p>
<p><u>Clarification Request 5:</u> The accuracy of electricity meters shall be described in the revised PDD. Furthermore, a diagram of these meters shall be presented in the revised PDD.</p>	<p>B.7.1.1</p>	<p>We have corrected the monitoring sections in the PDD, in particular Section B.7.2 and Annex 4. Among others, an electrical diagram is included and the accuracy of the meters is described.</p>	<p><input checked="" type="checkbox"/></p>

Validation of the CDM Project:  
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## **Annex 2: Information Reference List**

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Reference No.	Document or Type of Information																																				
1	Project Design Document for CDM project “Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower Station”, version 0.2, dated on Feb. 27 <sup>th</sup> , 2007																																				
2	I.D. Grid connected renewable electricity generation, Version 10																																				
3	Tool for the demonstration and assessment of additionality, version 03																																				
4	Participant list of on-site interview, signed on Mar. 11 <sup>th</sup> , 2007																																				
5	<p>On-site interviews and inspection at the office conducted on Mar. 11<sup>th</sup>, 2007 by validators of TÜV SÜD.</p> <p>Validation team:</p> <table border="0" data-bbox="394 774 2134 861"> <tr> <td>Sven Kolmetz</td> <td>TÜV SÜD Industrie Service GmbH</td> <td></td> </tr> <tr> <td>Cuiyun Zhang</td> <td>Jiangsu TUV Product Service Ltd.</td> <td></td> </tr> </table> <p>Interviewed persons:</p> <table border="0" data-bbox="394 957 2134 1316"> <tr> <td>Mr. Fu Weimin</td> <td>Chinese People’s Political Consultative Conference of Hefeng County</td> <td>Chairman</td> </tr> <tr> <td>Mr. Zhuo Wanjun</td> <td>the People’s Government of Hefeng County</td> <td>Head of County</td> </tr> <tr> <td>Mr. Tan Changyu</td> <td>the People’s Government of Hefeng County</td> <td>Vice Head of County</td> </tr> <tr> <td>Mr. Jia Changsheng</td> <td>Land and Resource Bureau of Hefeng County</td> <td>Official</td> </tr> <tr> <td>Mr. Tian Jiuru</td> <td>Hefeng Taoyuan Hydropower Co., Ltd.</td> <td>Director</td> </tr> <tr> <td>Mr. Huang Liwei</td> <td>Hefeng Taoyuan Hydropower Co., Ltd.</td> <td>Vice Director</td> </tr> <tr> <td>Mr. Hu Nanshan</td> <td>Hefeng Taoyuan Hydropower Co., Ltd.</td> <td>General Manager</td> </tr> <tr> <td>Ms. Tao Meiguang</td> <td>Hefeng Taoyuan Hydropower Co., Ltd.</td> <td>Vice General Manager</td> </tr> <tr> <td>Ms. Jane Yang</td> <td>Tianqing Power International CDM Consulting Co., Ltd.</td> <td>Vice Director</td> </tr> <tr> <td>Ms. Tang Xuemei</td> <td>Tianqing Power International CDM Consulting Co., Ltd.</td> <td>Consultant</td> </tr> </table>	Sven Kolmetz	TÜV SÜD Industrie Service GmbH		Cuiyun Zhang	Jiangsu TUV Product Service Ltd.		Mr. Fu Weimin	Chinese People’s Political Consultative Conference of Hefeng County	Chairman	Mr. Zhuo Wanjun	the People’s Government of Hefeng County	Head of County	Mr. Tan Changyu	the People’s Government of Hefeng County	Vice Head of County	Mr. Jia Changsheng	Land and Resource Bureau of Hefeng County	Official	Mr. Tian Jiuru	Hefeng Taoyuan Hydropower Co., Ltd.	Director	Mr. Huang Liwei	Hefeng Taoyuan Hydropower Co., Ltd.	Vice Director	Mr. Hu Nanshan	Hefeng Taoyuan Hydropower Co., Ltd.	General Manager	Ms. Tao Meiguang	Hefeng Taoyuan Hydropower Co., Ltd.	Vice General Manager	Ms. Jane Yang	Tianqing Power International CDM Consulting Co., Ltd.	Vice Director	Ms. Tang Xuemei	Tianqing Power International CDM Consulting Co., Ltd.	Consultant
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Ms. Tang Xuemei	Tianqing Power International CDM Consulting Co., Ltd.	Consultant																																			
6	Feasibility report of Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower Station, dated in Aug., 2004, Hubei Water Resources and Electricity Research Institution																																				

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Reference No.	Document or Type of Information
7	Approval of feasibility report of Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower Station, dated on Oct. 25 <sup>th</sup> , 2005, Hubei Development and Reform Commission
8	Approval of land and water protection proposal, dated on June 2 <sup>nd</sup> , 2004, Water Resource Bureau of Enshi Autonomous Prefecture
9	Approval of occupying the land for construction, dated on Dec. 4 <sup>th</sup> , 2005, Land Resource Bureau of Hefeng County
10	Permission of water consumption, dated on Dec. 20, 2003, Water Resource Bureau of Enshi Autonomous Prefecture
11	Purchasing contract of turbine and generator, dated in Oct., 2005, Chongqing Yunhe Group
12	Training invitation of turbines operation, dated on Oct. 8 <sup>th</sup> , 2006, Hubei Hongcheng General Machine Group
13	Enrollment fax, dated on Oct. 16 <sup>th</sup> , 2006, Hefeng Taoyuan Hydropower Co., Ltd.
14	Training plan in 2007 for the daily operation and maintenance, dated on Dec. 25 <sup>th</sup> , 2006, Hefeng Taoyuan Hydropower Co., Ltd.
15	Economic Evaluation Code for Small Hydropower Project (SL16-95), Tianqing Power International CDM Consulting Co., Ltd.
16	Bank Credit Policy Direction in 2005, Tianqing Power International CDM Consulting Co., Ltd.
17	Loan Agreement between China Construction Bank Hubei Branch and Hefeng Taoyuan Hydropower Co., Ltd., dated on July 17 <sup>th</sup> 2006, Hefeng Taoyuan Hydropower Co., Ltd.
18	Wire transfer evidence, Hefeng Taoyuan Hydropower Co., Ltd.
19	Electricity tariff, dated June 20 <sup>th</sup> , 2006, Price Bureau of Enshi Autonomous Prefecture
20	Agreement of electricity management in grid, dated in Aug. 2005, Hubei Grid Company
21	Purchasing contract of electricity delivered to grid, dated in Dec., 2005
22	Carbon emission factor spreadsheet, Tianqing Power International CDM Consulting Co., Ltd.
23	China Electric Power Yearbook 2003-2005
24	China Energy Statistical Yearbook 2000-2005
25	Financial analysis, Tianqing Power International CDM Consulting Co., Ltd.
26	EIA of Hubei Hefeng Yanzi town Baishun Village Taohuashan, dated in May, 2004, Enshi Autonomous Prefecture Environmental

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Reference No.	Document or Type of Information
	Research Institution
27	Approval of EIA, date on May 24 <sup>th</sup> , 2004, Hubei Environment Protection Bureau
28	The meeting minute of compensation for installation of Taohuashan Hydropower, dated July 25 <sup>th</sup> , 2005 , the People’s Government of Hefeng County
29	Compensation Agreement with local resident (sampling), dated Nov. 17 <sup>th</sup> , 2005, Sanxi Village Committee
30	Bulletin in Enshi Evening Paper, dated on Jan. 8 <sup>th</sup> , 2007, Tianqing Power International CDM Consulting Co., Ltd.
31	Minute of local stakeholder meeting, dated on Jan. 9 <sup>th</sup> , 2007, Hefeng Taoyuan Hydropower Co., Ltd.
32	Questionnaire of local stakeholder comments, Tianqing Power International CDM Consulting Co., Ltd.
33	Supporting letter to CDM project activity, dated on June 20 <sup>th</sup> , 2005, Development and Planning Bureau of Hefeng County
34	VAT rate, dated on June 22 <sup>nd</sup> , 2007, issued by Hefeng County Taxation Bureau, submitted on Aug. 2 <sup>nd</sup> , 2007
35	Increasing compensation on land, issued by the People’s Government of Yanzi Town, submitted on Aug. 2 <sup>nd</sup> , 2007
36	English version of total investment from the approved feasibility report, submitted on Aug. 2 <sup>nd</sup> , 2007
37	Reluctance of the grid company to purchase hydropower electricity from the purchasing contract of electricity, submitted on Aug. 2 <sup>nd</sup> , 2007
38	Application of government sustaining CDM, dated on May 12 <sup>th</sup> , 2005, submitted on Aug. 2 <sup>nd</sup> , 2007
39	Agreement on developing the CDM project, dated on May 25 <sup>th</sup> , 2005, submitted on Aug. 2 <sup>nd</sup> , 2007
40	Project Design Document for CDM project “Hubei Hefeng Yanzi Town Baishun Village Taohuashan Hydropower Station”, version 3 dated on July 12 <sup>th</sup> , 2007