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# Validation Report

**Xinjiang Tianfu Thermoelectric Co., Ltd**

VALIDATION OF THE CDM-PROJECT:  
Manasi River Stage I Hydropower Project of  
Hongshanzui Hydropower Plant, Xinjiang Tianfu  
Thermoelectric Co., Ltd.

REPORT NO. 927756

**2007, August 21**

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

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<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> Jiangsu TÜV Product Service Beijing Branch Unit 918, Landmark Tower 2 No.8 North Dongsanhuan Road Beijing 100004 P.R. China
<b>Client:</b> Xinjiang Tianfu Thermoelectric Co., Ltd No. 54, Hongxing road Shihezi City Xinjiang Uygur Autonomous Region, 832000 P.R.China	<b>Project Site(s):</b> Manasi County, Shihezi City, Xinjiang Uygur Autonomous Region P.R. of China
<b>Project Title:</b>	Manasi River Stage I Hydropower Project of Hongshanzui Hydro- power Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.
<b>Applied Methodology / Version:</b>	ACM0002 version 06 <b>Scope(s):</b> 1
<b>First PDD Version:</b> Date of issuance: 2006-12-11 Version No.: 03 Starting Date of GSP 2006-12-14	<b>Final PDD version:</b> Date of issuance: 2007-08-13 Version No.: 05
<b>Estimated Annual Emission Reduction:</b>	158 534 tons CO <sub>2e</sub>
<b>Assessment Team Leader:</b>	<b>Further Assessment Team Members:</b>
Dr. Sven Kolmetz	Xiaoyan Liu
<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>	

Validation of the CDM Project:

Manasi River Stage I Hydropower Project of Hongshanzui Hydro-  
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## 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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## 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:

Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.

### 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.

<b>Validation Protocol Table 1: Conformity of Project Activity and PDD</b>				
<b>Checklist Topic / Question</b>	<b>Reference</b>	<b>Comments</b>	<b>PDD in GSP</b>	<b>Final PDD</b>
<i>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.</i>	<i>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.</i>	<i>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</i>	<i>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.</i>	<i>Conclusions are presented in the same manner based on the assessment of the final PDD version.</i>

<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>
<i>If the conclusions from table 1 are either a Corrective Action Request or a Clarification Request, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 1 where the Corrective Action Request or Clarification Request is explained.</i>	<i>The responses given by the client or other project participants during the communications with the validation team should be summarised in this section.</i>	<i>This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final PDD".</i>

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>
<i>If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.</i>	<i>Identifier of the Request.</i>	<i>This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion.</i>

## 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
Dr. Sven Kolmetz	ATL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Xiaoyan Liu	A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Dr. Sven Kolmetz** is physicist and auditor 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.

**Xiaoyan Liu** is an auditor for environmental management systems (according to ISO 14001) at Ji-angsu TUV Product Service Ltd. She is based in Beijing. 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

In the period of December 25-26, 2006 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. Huang Chao	Manager of Stratagem Development Dept, Xinjiang Tianfu Thermoelectric Co., Ltd.
Mr. Wu Jian	Engineer of Stratagem Development Dept, Xinjiang Tianfu Thermoelectric Co., Ltd.
Mr. Liu Xinpeng	Plant Manager of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.
Mr. Wang Jun	General Engineer of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.
Mr. Ge Youchun	Manager of Beijing Changjiang River International Holding



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## 2.4 Resolution of Clarification and Corrective Action Requests

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

## 2.5 Internal Quality Control

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

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

## 3 SUMMARY OF FINDINGS

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

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

Xinjiang Manasi Hydropower Project is designed to construct a 50 MW run-of-river hydropower project located on the Manasi River in Manasi County of Shihezi City, Xinjiang Uygur Autonomous Region, P. R. China, which will generate an annual on-grid electricity supply of 187.11 GWh from May 2007 to 2013 and subsequent 212.85 GWh starting from 2014. The proposed project consists of an inhaul hinge, an intake power tunnel of 11.8 km, a 50 MW (9 MW × 2 + 16 MW × 2) powerhouse, an 110 kV switchyard and 110 kV transmission lines for power evacuation. The project will be connected to Xinjiang Grid, and then to Northwest China Grid which includes Shanxi Grid, Gansu Grid, Qinghai Grid, Ningxia Grid and Xinjiang Grid.

The area covered by Northwest China Grid is abundant with coal resources, and thermal power is the major power source of the Grid. The proposed project will displace part of thermal power in the Northwest China Grid by making use of clean and renewable energy.

In total the assessment team expressed 4 Clarification Request and 17 Corrective Action Requests:

As the PDD delivered for GSP was already indicated as version 3 a revision history has been requested (CAR1).

The client had to explain why the emission reduction will increase after the year 2014 as described in the PDD. The reason is the construction of a new reservoir upstream until 2014 that will regulate the water flow (CAR2).

Besides some formal adjustment and the revision of some inconsistencies between the PDD and the approved feasibility study (CAR3-6; CAR9-11; CAR13, CAR17) as well as the EIA (CAR15) and the stakeholder process (CAR16) the list of similar projects had to be completed (CAR7).

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The project developer could show that the calculation of the grid factor is more conservative than the calculation of the Chinese NDRC and that these more conservative figures have been considered for the calculation of the emission reduction (CAR8).

The monitoring of the electricity generation had to be described more precise (CAR12) and it has to be shown that CDM has been considered at the early beginning of the project activity (CAR14).

Besides some further minor corrections these were the main findings. After closing all the open questions the PDD is in compliance with the CDM requirements.

As there was a request of review for this project the DOE has summarized the answer to the request as follows:

**Request 1.2.3; Issue 1:**

As the starting date of the project activity is before the date on which the PDD was made available for public comments, evidence is required that the CDM was seriously considered in the decision to proceed with the project activity. The guidelines for completing the PDD indicate that such information should be included in Section B5.

**Project owner's response:**

As is known to all, the Chinese government officially signed The Kyoto Protocol in May, 1998, and approved it in August, 2002. As called upon by Chinese Government to disseminate CDM knowledge, the Science and Technology Bureau of the Production and Construction Crops held a CDM Workshop on January 11, 2004 (See **Annex 1**) to introduce the CDM concept, its application procedures and technical issues, and representatives of our company took part in this important Workshop and reported the CDM concept to the Board of Executive Directors after the Workshop. As encouraged and promoted by the Workshop, the Board of the Company conducted a study about CDM, and held a Conference of the Board on February 23, 2004 to consider to develop Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant as a CDM project activity so as to take use of revenue of selling CERs for enhancing the project economics. The Conference approved the Resolution of the Board (See **Annex 2**). "The members of Board of Directors agreed that the company should learn and understand the CDM operational procedures, and should develop the Manasi River Stage I Hydropower Plant project as a CDM project activity according to CDM rules." After the Kyoto Protocol entered into force on February 16, 2005, our company officially started the project in February, 2005 as a CDM project activity, since the risk related to the entry into force of Kyoto Protocol has gone.

The relevant document is archived and is ready for reference.

**Response by TÜV SÜD:**

The submitted documents and evidences are available to TÜV SÜD and the translation is correct. We agree to the justification of the project owner completely and confirm that the consideration of CDM has been evidenced (see attached documents).

**Request 3, Issue 1 (second part):**

The DOE validated the OM emission coefficient as 0.9279 tCO<sub>2</sub>/MWh (p.36), while the value in the PDD is 1.2775 tCO<sub>2</sub>/MWh.

**Project owner's response:**

We checked again this issue in PDD but we did not find the two figures mentioned. We guess that this may be from or related to some other project.

Response by TÜV SÜD:

We come to the same conclusion as the project owner. Neither in the validation report nor the PDD the claimed factors can be found.

**Request 1,2,3; Issue 2:**

The output of the project activity will be increased by the creation of a reservoir upriver and the PDD refers to a storage capacity of 0.85 million m<sup>3</sup>. However, the approved methodology is applicable to “Run-of-river hydro power plants; hydro power projects with existing reservoirs where the volume of the reservoir is not increased.” It should be more clearly demonstrated that the project activity complies with the applicability criteria of the approved methodology.

Project owner’s response:

According to our understanding, this issue is related to whether this project is applicable to the Methodology “ACM0002ver. 6 - Consolidated methodology for grid-connected electricity generation from renewable sources” , we would like to make our clarifications in three aspects as below:

1. This project is a run-of-river hydropower project, in accordance with the definition of daily regulation hydropower plants, as stated in Page 32 of Hydropower Fascicule of Water Conservancy Encyclopedia China (**See Annex 3**). The definition for run-of-river hydropower plants is: daily regulation hydropower plants and plants without regulation functions are all looked as “run-of-river” category. As for daily regulation, there is such description in the Annex 3 that “Those plants are considered to be daily regulation hydropower plants if the ratio of the effective storage of the reservoir or of the water pool to designed daily inflow falls into the range of 30%~50%.”

The effective storage of this project is 0.85 million m<sup>3</sup>, the designed daily inflow of the hydropower plant is 4.65 million m<sup>3</sup>. According to the result of calculation, the effective storage only accounts for 18.28% of the designed daily inflow, therefore this project does not have the function of daily regulation, which is consistent with the definition of run-of-river hydropower plant (**See Annex 4**).

2. Further, with installed capacity of 50 MW and flooded surface area of 0.1854 million m<sup>2</sup> at full storage capacity (**See Annex 5**), the power density is calculated to be 269.69 W/m<sup>2</sup>, which is much higher than the threshold of the requirement of the Methodology, and is fully applicable to the methodology.

3. Finally, the approved methodology is applicable to “Run-of-river hydro power plants; hydropower projects with existing reservoirs where the volume of the reservoir is not increased.” The content that “An inhaul hinge designed to lift the water height to insure the operation pressure with a storage capacity of 0.85 million m<sup>3</sup> at normal reservoir level of 842.4 m.” mentioned in the Section A.4.3 in the PDD (Page 5) was not correctly translated, and the correct translation should be “An inhaul hinge designed for water intake, flood discharge and sediment deposition with a storage capacity of 0.85 million m<sup>3</sup>.at normal pool level of 842.4 m (above the sea level)”. For the text in the footnote of the page 2 of the PDD “Kensiwater reservoir (excluded from the proposed project activity), in the upriver of the proposed site, will start operation since 2014.” , we would like to clarify that Kensiwater reservoir is only a reservoir that might be built in future on the upriver of Manasi River area, according to the long term development plan, and even if the Kensiwater reservoir would be buildt, it would have nothing to do with the owner of this proposed CDM project activity, and the investment, construction, operation, management and revenue of Kensiwater reservoir would be done by others, so Kensiwater is not under the control by this proposed CDM project activity, nor by the owner of this project, and therefore shall not be considered as something to affect this project. Furthermore, the completion of Kensiwater will not increase the storage capacity of this project, it might, as forecasted and anticipated, only make the inflow water from upriver for this project much more stable (less flooding), and it might increase slightly, also as forecasted and anticipated, the annual operation hours of the generator units, which, as we understand, is forecasting potential results of those activ-

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ity other than this proposed CDM activity, and therefore should not affect the applicability of this project to the methodology ACM0002.

Response by TÜV SÜD:

This clarification can be confirmed by TÜV SÜD as well due to the on-site audit and the document review. In the methodology it is not clear if the semicolon in the applicability criterion “Run-of-river hydro power plants; hydro power projects with existing reservoirs where the volume of the reservoir is not increased.” means “and” or “or”. As soon as there is a construction work in the river sort of a reservoir will be created. In the case of a run-of-river hydro power plant this reservoir should not exceed the daily flow according to Chinese as well as European definition. This is not the case for this project activity. Hence, we have considered the definition of a run-of-river hydro power plant as described in the methodology to be applicable. Otherwise there will be no hydro power project applicable according to the first definition of the methodology, if both criteria according to the methodology have to be fulfilled - “Run-of-river hydro power plants **and** hydro power projects with existing reservoirs where the volume of the reservoir is not increased.”

If this would be the interpretation of the applicability criteria of ACM0002 this project would have to switch to the second criteria: “New hydro electric power plant...” The power density has been calculated and would be more than 10 W/m<sup>2</sup>. Hence, we think in both cases the applicability criteria are met.

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#### 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://cdm.unfccc.int/Projects/Validation/DB/RO4FGVJMXXFCY9QKYN4RCUF3FK4LYV/view.html">http://cdm.unfccc.int/Projects/Validation/DB/RO4FGVJMXXFCY9QKYN4RCUF3FK4LYV/view.html</a>	
<b>Starting date of the global stakeholder consultation process:</b> 2006-12-14	
<b>Comment submitted by:</b> No comments have been received	<b>Issues raised:</b> -
<b>Response by TÜV SÜD:</b> -	

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## 5 VALIDATION OPINION

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

Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.

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.

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A handwritten signature in blue ink, appearing to read 'Juice Lortso'.

A handwritten signature in blue ink, appearing to read 'Dr. Volker'.

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

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Assessment Team Leader

Validation of the CDM Project:

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## **Annex 1: Validation Protocol**

# Validation Protocol

Project Title: Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.

Date of Completion: 21/08/2007

Number of Pages: 38



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**Table 1 Conformity of Project Activity and PDD**

CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PDD in GSP	Final PDD
<b>A. General description of project activity</b>					
<b>A.1. Title of the project activity</b>					
A.1.1.	Does the used project title clearly enable to identify the unique CDM activity?	1, 2	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 indication concerning the revision number and the date of the revision?	1, 2	The available PDD is indicated as version 03 dated 11/12/2006 and also indicated as the final version.  <u>Corrective Action Request 1:</u>  A revision history of the PDD should be included.	CAR1	<input checked="" type="checkbox"/>
A.1.3.	Is this consistent with the time line of the project's history?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.2. Description of the project activity</b>					
A.2.1.	Is the description delivering a transparent overview of the project activities?	1, 2	The project is described transparently and the project activities described have been proven during the on-site audit.  <u>Corrective Action Request 2:</u>  Please explain the reason in the PDD why the generation output will be increased after 2014.	CAR2	<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, 2 5-9 13	The project activity is the displacement of electricity generated by coal fired power plants with electricity generated by hydro power. The following data deliver evidences for the project activity: <ul style="list-style-type: none"><li>- Feasibility study and approval</li><li>- EIA and EIA approval</li><li>- Agreement of Connection to Grid</li></ul> This data have been evidenced during the on-site audit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



# Validation Protocol

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?	1, 2	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2.4. Is all information presented consistent with details provided by further chapters of the PDD?	1, 2	Yes.	<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 is correctly applied. Xinjiang Tianfu Thermoelectric Co., Ltd. and The Tokyo Electric Power Company Inc. are considered as project participant.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?	1, 2	A Certified Emission Reductions Purchase Agreement has been signed by two participants in October, 2006.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	1, 2	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.4. Technical description of the project activity</b>				
<i>A.4.1. Location of the 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, 2	The project location could be clearly identified according to the PDD. The project activity located on the middle reaches of Manasi River, in Manasi County, Shihezi City, Xinjiang Uygur Autonomous Region. The geographical coordinates are given. <u>Corrective Action Request 3:</u> The map showing the project location and Xinjiang Uygur Autonomous Region should be in English.	CAR3	<input checked="" type="checkbox"/>
A.4.1.2. How is it ensured and/or demonstrated,	1, 2	The EIA of the proposed project was approved by the Environ-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	6, 8	mental Protection Bureau of Xinjiang Production and Construction Crops on September 1st and the Feasibility Study was approved by the Planning Committee of Xinjiang Production and Construction Corps on June 18 <sup>th</sup> , 2004.		
<b>A.4.2. Category(ies) of project activity</b>				
A.4.2.1. To which category(ies) does the project activity belonging to? Is the category correctly identified and indicated?	1, 2	Yes, the project falls into scope 1.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.4.3. Technology to be employed by the project activity</b>				
A.4.3.1. Does the technical design of the project activity reflect current good practices?	1, 2	<u>Corrective Action Request 4:</u> Please deliver a reference list of the manufacturer that shows the reliability of the manufacturer and that state of the art technology will be used.	CAR4	<input checked="" type="checkbox"/>
A.4.3.2. Does the description of the technology to be applied provide sufficient and transparent input/ information to evaluate its impact on the greenhouse gas balance?	1, 2	Yes. There is no doubt that this technology will reduce the GHG emissions significantly.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.3. Does the implementation of the project activity require any technology transfer from annex-I countries to the host country(ies)?	1, 2	No, it doesn't. There is not technology transfer from annex-I countries to China by the proposed project.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.4. Is the technology implemented by the project activity environmentally safe?	1, 2 7	Yes. The proposed project is located on a semi-desert region with seldom resident, cultivation area and plantation. The environmental impact caused by the project activity will be very low after the suggested mitigation measures by the EIA report are adopted.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.5. Is the information provided in compliance with actual situation or planning?	1, 2 5	Yes, except the following small inconsistencies: – Turbines/ generators models between the PDD and equipment contracts	CAR5	<input checked="" type="checkbox"/>

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		<p>– The electricity output since 2014 between the PDD (212850GWh) and the Feasibility Study (21512GWh)</p> <p><u>Corrective Action Request 5:</u> The same has to be revised.</p>		
A.4.3.6. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	1, 2	The common practice for electricity generation is still coal-fired power plant. Hence, the project definitely would result in a better performance than the common practice.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1, 2	We do not expect that there will be a substitution because equipments have not finished installment and expected generation electricity date is May of 2007. The life time of the project is under normal circumstances longer than the crediting period.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.8. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	1, 2	Yes, in order to guarantee safe operation, the project owner organized several internal and external training for the operators.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.9. Is information available on the demand and requirements for training and maintenance?	1, 2	Yes, the relevant trainings have been provided.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.10. Is a schedule available for the implementation of the project and are there any risks for delays?	1, 2	<p>The planning schedule in the past and for the future was clearly described by the project owner during the on-site audit and it is also available in the PDD.</p> <p>Two units of electricity generation have been installed. Other two units will be installed soon and the risk for delays is very low.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.4.4. Estimated amount of emission reductions over the chosen crediting period</b>				
A.4.4.1. Is the form required for the indication of projected emission reductions correctly	1, 2	<p>7*3 year crediting period is selected.</p> <p><u>Corrective Action Request 6:</u></p>	CAR6	<input checked="" type="checkbox"/>

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applied?		No, the form has to be revised according to the common way.								
A.4.4.2. Are the figures provided consistent with other data presented in the PDD?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
<b>A.4.5. Public funding of the project activity</b>										
A.4.5.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	1, 2	Yes. There is no public funding necessary; all costs are covered by bank loans and private equity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
A.4.5.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	1, 2	The statements are consistent within the PDD.	<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</b>										
B.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	1, 2	Yes, the latest version of ACM0002 (version 6) has been applied and the reference is clearly indicated.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
B.1.2. Is the applied version the most recent one and / or is this version still applicable?	1, 2	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
<b>B.2. Justification of the choice of the methodology and why it is applicable to the project activity</b>										
B.2.1. Is the applied methodology considered the most appropriate one?	1, 2	Yes. The approved methodology ACM0002 is exactly applicable to hydro power projects.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
B.2.2. Criterion 1: Type of capacity addition by renewable energy	1, 2	<table border="1"> <thead> <tr> <th>Applicability checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Criterion discussed in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Compliance provable?</td> <td>Yes</td> </tr> </tbody> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No									
Criterion discussed in the PDD?	Yes									
Compliance provable?	Yes									

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		<table border="1"> <tr> <td>Evidences provided in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Compliance verified?</td> <td>Yes</td> </tr> </table>	Evidences provided in the PDD?	Yes	Compliance verified?	Yes								
Evidences provided in the PDD?	Yes													
Compliance verified?	Yes													
B.2.3. Criterion 2: Exclusion of fuel switching activities	1, 2	<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Compliance provable?</td> <td>Yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Compliance verified?</td> <td>Yes</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	Yes	Compliance verified?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	Yes													
Compliance provable?	Yes													
Evidences provided in the PDD?	Yes													
Compliance verified?	Yes													
B.2.4. Criterion 3: Defined electricity grid boundaries	1, 2	<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Compliance provable?</td> <td>Yes</td> </tr> <tr> <td>Evidences provided in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Compliance verified?</td> <td>Yes</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	Yes	Compliance verified?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	Yes													
Compliance provable?	Yes													
Evidences provided in the PDD?	Yes													
Compliance verified?	Yes													
B.2.5. Criterion 4: Approved inclusion in other methodologies (if applied only)	1, 2	Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
<b>B.3. Description of the sources and gases included in the project boundary</b>														
B.3.1. Source: Fugitive Emissions from non-condensable gases (geothermal activities only) Gas(es): CO <sub>2</sub> , CH <sub>4</sub> Type: Project Emissions	1, 2	<table border="1"> <tr> <td>Boundary checklist</td> <td>Yes / No</td> </tr> <tr> <td>Source and gas(es) discussed by the PDD?</td> <td>N/A</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>N/A</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>N/A</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>N/A</td> </tr> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	N/A	Inclusion / exclusion justified?	N/A	Explanation / Justification sufficient?	N/A	Consistency with monitoring plan?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	N/A													
Inclusion / exclusion justified?	N/A													
Explanation / Justification sufficient?	N/A													
Consistency with monitoring plan?	N/A													

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B.3.2. Source: Emissions from combustion of fossil fuels (geothermal activities only) Gas(es): CO <sub>2</sub> Type: Project Emissions	1, 2	<table border="1"> <thead> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Source and gas(es) discussed by the PDD?</td> <td>N/A</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>N/A</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>N/A</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>N/A</td> </tr> </tbody> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	N/A	Inclusion / exclusion justified?	N/A	Explanation / Justification sufficient?	N/A	Consistency with monitoring plan?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	N/A													
Inclusion / exclusion justified?	N/A													
Explanation / Justification sufficient?	N/A													
Consistency with monitoring plan?	N/A													
B.3.3. Source: Emissions from the reservoir (new hydroelectric activities only) Gas(es): CO <sub>2</sub> , CH <sub>4</sub> Type: Project Emissions	1, 2	<table border="1"> <thead> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Source and gas(es) discussed by the PDD?</td> <td>N/A</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>N/A</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>N/A</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>N/A</td> </tr> </tbody> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	N/A	Inclusion / exclusion justified?	N/A	Explanation / Justification sufficient?	N/A	Consistency with monitoring plan?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	N/A													
Inclusion / exclusion justified?	N/A													
Explanation / Justification sufficient?	N/A													
Consistency with monitoring plan?	N/A													
B.3.4. Source: Emissions from electricity generation in fossil fuel fired power plants of the project electricity system Gas(es): CO <sub>2</sub> Type: Baseline Emissions	1, 2	<table border="1"> <thead> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Source and gas(es) discussed by the PDD?</td> <td>N/A</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>N/A</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>N/A</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>N/A</td> </tr> </tbody> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	N/A	Inclusion / exclusion justified?	N/A	Explanation / Justification sufficient?	N/A	Consistency with monitoring plan?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	N/A													
Inclusion / exclusion justified?	N/A													
Explanation / Justification sufficient?	N/A													
Consistency with monitoring plan?	N/A													
B.3.5. Source: Emissions from electricity generation in fossil fuel fired power plants of any connected electricity system Gas(es): CO <sub>2</sub>	1, 2	<table border="1"> <thead> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Source and gas(es) discussed by the PDD?</td> <td>Yes</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>Yes</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>Yes</td> </tr> </tbody> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	Yes													
Inclusion / exclusion justified?	Yes													
Explanation / Justification sufficient?	Yes													

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Type: Baseline Emissions			Consistency with monitoring plan? Yes												
B.3.6.	Source: Emissions from electricity generation in fossil fuel fired power plants of imported electricity Gas(es): CO <sub>2</sub> Type: Baseline Emissions	1, 2	<table border="1"> <thead> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Source and gas(es) discussed by the PDD?</td> <td>N/A</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>N/A</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>N/A</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>N/A</td> </tr> </tbody> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	N/A	Inclusion / exclusion justified?	N/A	Explanation / Justification sufficient?	N/A	Consistency with monitoring plan?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No														
Source and gas(es) discussed by the PDD?	N/A														
Inclusion / exclusion justified?	N/A														
Explanation / Justification sufficient?	N/A														
Consistency with monitoring plan?	N/A														
B.3.7.	Do the spatial and technological boundaries as verified on-site comply with the discussion provided by the PDD?	1, 2	Yes. The project boundary of the proposed project is represented by North West China Grid which consists of several sub-grids including Shanxi, Gansu, Qinghai, Ningxia and Xinjiang,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
<b>B.4. Description of how the baseline scenario is identified and description of the identified baseline scenario</b>															
B.4.1.	Is it clearly described that the baseline is represented by the combined margin of the grid the activity will be connected to?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
B.4.2.	In case of any modification or retrofit of existing facilities: Is data available to determine the historic production level?	1, 2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
B.4.3.	In case of any modification or retrofit of existing facilities: Have conservative assumptions been applied in order to estimate the point in time when the existing equipment needs to be replaced?	1, 2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

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<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 CDM project activity (assessment and demonstration of additionality):</b>				
B.5.1. In case of applying step 0 of the additionality tool: Is evidence provided, that the project's starting date is after Jan 01, 2000 and before Nov 18, 2004?	1, 2 3	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.2. In case of applying step 0 of the additionality tool: Is evidence provided, that CDM has been considered seriously in the decision to proceed with the project activity?	1, 2 3	See B.5.1.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.3. Have realistic and credible alternatives been identified providing comparable outputs or services? (step 1a)	1, 2 3	The following baseline scenarios are discussed: <ul style="list-style-type: none"> <li>- Construction of a fossil fuel-fired power plant with equivalent amount of installed capacity or annual electricity output;</li> <li>- The proposed project activity not undertaken as a CDM project activity;</li> <li>- Provision of equivalent amount of annual power output by the grid (Northwest China Grid) which the proposed project is connected with.</li> </ul> <p>These scenarios are the only ones that are making sense.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.4. Is the project activity without CDM included in these alternatives? (step 1a)	1, 2 3	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.5. Is a discussion provided for all identified alternatives concerning the compliance with applicable laws and regulations? (step 1b)	1, 2 3	Yes. China's power regulations about prohibiting the installation of coal-fired power plants of less than 135MW and strictly limit the installation of fossil fuel-fired power units with less than 100MW are identified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



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B.5.6. In case the PDD argues that specific laws are not enforced in the country or region: Is evidence available concerning that statement? (step 1b)	1, 2 3	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.7. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	1, 2 3, 11	Yes, the benchmark analysis is applied. 10% IRR benchmark of total investment is used. <u>Clarification Request1:</u> The document that justifies the benchmark and a PDF version of the IRR calculation (based on verified figures) has to be delivered to the DOE for uploading together with the PDD according to the EB28 decisions.	CR1	<input checked="" type="checkbox"/>
B.5.8. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?	1, 2 3	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.9. In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1, 2 3	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.10. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1, 2 3, 11	Yes, the IRR and NPV indicator is selected.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.11. 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?	1, 2 3, 11	The calculation of IRR and NPV is done for the project activity without the revenues from the sale of CERs and with the revenues from the sale of CERs. The calculation has been checked by the DOE.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.12. In case of Option II or Option III: Is the analysis presented in a transparent man-	1, 2	Yes. The input data have been verified during the on-site audit, but the IRR and NPV calculation has to be revised according to	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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ner including publicly available proofs for the utilized data?	3, 6	CAR 5.		
B.5.13. In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	1, 2 3	Financial barriers due to higher risks and lower return of investment and construction barriers due to the difficult geological conditions are claimed.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.14. In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?	1, 2 3	The barriers analysis is transparent. <u>Clarification Request 2:</u> As the barrier analysis has been applied additional to the investment analysis evidence (documents) for the claimed barriers have to be delivered that can be published finally together with the PDD.	CR2	<input checked="" type="checkbox"/>
B.5.15. In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	1, 2 3	The above barrier will not impact the implementation of the baseline alternative (Provision of equivalent amount of annual power output by the grid where the proposed project is connected with).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.16. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	1, 2 3	Other similar activities in Xinjiang, such as Dashankou Hydropower, Tiemenguan Hydropower etc have not been completely identified. <u>Corrective Action Request 7:</u> The same has to be revised.	CAR7	<input checked="" type="checkbox"/>
B.5.17. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the CDM component (step 4b)?	1, 2 3	Yes, as the similar projects were built under the planned economy system without the requirement to consider economic benefits.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.5.18. Is it appropriately explained how the approval of the project activity will help to overcome the economic and financial hurdles or other identified barriers (step 5)?	1, 2 3	The CDM registration will help to overcome the financial risks and make the hydro power plant a more attractive proposition for the investor and project participant.	<input checked="" type="checkbox"/>	<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, 2	The calculation of the emission reduction is applied according to the steps described in ACM0002: <ul style="list-style-type: none"> <li>- Calculation of the Operating Margin Emission Factor</li> <li>- Calculation of the Build Margin Emission Factor</li> <li>- Calculation of the Combined Margin Emission Factor</li> </ul> These steps are described in a transparent manner.	<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, 2	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.3. Are the formulae required for the determination of project emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1, 2	<u>Clarifications requests 3:</u> In order to heat the buildings at the project site, a coal-fired boiler was seen under construction during the on-site audit. Please clarify the emission of this boiler: If emissions are estimated to be less than 1% of the total emission reductions then it may not be included in the PDD. However, if the emissions are estimated to more than 1 % of the total emission reductions then they have to be included in the PDD and a deviation for this project activity has to be requested.	CR3	<input checked="" type="checkbox"/>
B.6.1.4. Are the formulae required for the determi-	1, 2	Yes, formulae to calculate the baseline emissions are correctly	CAR8	<input checked="" type="checkbox"/>

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nation of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?		<p>presented. NDRC OM and BM emission factor of Northwest China Grid published on the NDRC website on October 16, 2006 are used.</p> <p><u>Corrective Action Request 8:</u></p> <ul style="list-style-type: none"> <li>- The formula number 3 on page 15 and number 9 on page 17 of the PDD are not identified.</li> <li>- The latest published official emission factors have to be used.</li> <li>- A comparison between the official emission factors and the one required by the methodology (using IPCC2006 and national values where available) has to be submitted to the DOE. The more conservative value should be used.</li> <li>- Excel sheet of the emission factor calculation should be submitted for verifying the calculations.</li> </ul>		
B.6.1.5. Is the choice of options to determine the emissions factor (OM, BM) justified in a suitable and transparent manner?	1, 2	Yes. BM calculation method is based on Request for deviation submitted by DNV for projects in China, which was approved by EB.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.6. In case of alternative weighing factors for the Combined Margin: Is the quantification of the alternative weighing factor justified in a suitable and transparent manner?	1, 2	Not applicable. The default weights for hydro power projects in the 6th version of ACM0002 (OM 0.5 and BM 0.5 respectively) are used.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.7. In case of alternative weighing factors for the Combined Margin: Is the guidance for the PDD concerning the acceptability of alternative weights considered in the discussion?	1, 2	See B.6.1.6.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.8. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification	1, 2	No leakage is considered according to the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD																		
of parameter to be used and / or monitored?																						
B.6.1.9. Are formulae required for the determination of emission reductions correctly presented?	1, 2	Yes.	<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	Yes. A list of parameters is clearly presented. <u>Corrective Action Request 9:</u> The parameters mentioned in official published data, such as the captive power rate, $\lambda_i$ , the proportion of emission from different fuel $i$ power plant to the total emissions etc, as well as CM, OM and BM have to be presented.	CAR9	<input checked="" type="checkbox"/>																		
B.6.2.2. Is the choice of ex-ante or ex-post vintage of OM and BM factors clearly specified in the PDD?	1, 2	Yes, the ex-ante calculation of emission factors is chosen.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
B.6.2.3. Parameter Title: Annual electricity supplied to the grid prior to retrofit (applicable only for retrofit and modification activities)	1, 2	<table 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"/>
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																					
B.6.2.4. Parameter Title: Emission factor of the grid (CM)	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 CAR9	<input checked="" type="checkbox"/>														
Data Checklist	Yes / No																					
Title in line with methodology?	No																					

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		<table border="1"> <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> </table> See CAR9.	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						
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																					
B.6.2.5. Parameter Title: Operating margin (OM) emission factor of the grid	1, 2	<table border="1"> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> <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> </table> See CAR9.	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 CAR9	<input checked="" type="checkbox"/>
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																					
B.6.2.6. Parameter Title: Build margin (BM) emission factor of the grid	1, 2	<table border="1"> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> <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> </table> See CAR9.	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 CAR9	<input checked="" type="checkbox"/>
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																					
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		See CAR9.																				
B.6.2.7. 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>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>Yes</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>N/A</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					
B.6.2.8. 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>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>Yes</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>N/A</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					
B.6.2.9. Parameter Title: electricity generation supplied to the grid by each province	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>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	CAR10	<input checked="" type="checkbox"/>										
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					

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Source clearly referenced?	No																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					
B.6.2.10. Parameter Title: surface area of full reservoir level (for new hydroelectric activities 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> <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"/>
Data Checklist	Yes / No																					
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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.6.2.11. 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> <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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B.6.2.12. 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>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> <p>There is no imported electricity into Northwest China Grid till now.</p>	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"/>
Data Checklist	Yes / No																					
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Appropriate description of parameter?	N/A																					
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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.6.2.13. Parameter Title: CO <sub>2</sub> emission coefficient of fuels used in connected grids	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>Yes</td> </tr> <tr> <td>Data unit correctly expressed?</td> <td>Yes</td> </tr> <tr> <td>Appropriate description of parameter?</td> <td>Yes</td> </tr> <tr> <td>Source clearly referenced?</td> <td>Yes</td> </tr> <tr> <td>Correct value provided?</td> <td>Yes</td> </tr> <tr> <td>Has this value been verified?</td> <td>Yes</td> </tr> <tr> <td>Choice of data correctly justified?</td> <td>Yes</td> </tr> <tr> <td>Measurement method correctly described?</td> <td>N/A</td> </tr> </tbody> </table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Appropriate description of parameter?	Yes																					
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Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					
<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.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
B.6.3.2. Are the GHG calculations documented in	1, 2	Yes, but see CAR8.	See	<input checked="" type="checkbox"/>																		

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a complete and transparent manner?			CAR8					
B.6.3.3. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<b>B.6.4. Summary of the ex-ante estimation of emission reductions</b>								
B.6.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1, 2	Yes, emission reduction will be achieved through avoided power generation of fossil fuel electricity due to the power generated by the proposed project.	<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	<u>Corrective Action Request 11:</u> No, because only the first crediting period can be estimated now. Please revise accordingly.	CAR11	<input checked="" type="checkbox"/>				
B.6.4.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
B.6.4.4. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<b>B.7. Application of the monitoring methodology and description of the monitoring plan</b>								
<b>B.7.1. Data and parameters monitored</b>								
B.7.1.1. Is the list of parameters presented by chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	1, 2	Yes. The EGY is the parameter that shall be monitored and recorded.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
B.7.1.2. Parameter Title: Electricity supplied to the grid	1, 2	<table border="1"> <tr> <td>Monitoring Checklist</td> <td>Yes / No</td> </tr> <tr> <td>Title in line with methodology?</td> <td>Yes</td> </tr> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No							
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B.7.1.6. Parameter Title: Quantity of steam generated during well testing (for geothermal projects only)	1, 2	<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> </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	☑	☑												
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B.7.1.8. Parameter Title: Fraction of CH <sub>4</sub> in steam during well testing (for geothermal projects only)	1, 2	<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> </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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
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B.7.1.9. Parameter Title: CO <sub>2</sub> emission coefficient of fuel used by the geothermal plant (for geothermal projects only)	1, 2	<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, 2	<p>According to the statement in the PDD, the plant manager will in charge of the measurement of electric power; An appointed monitoring officer will be responsible for the verification of measurement and calculation of emission reductions. The General Manager will review the monitoring report.</p> <p><u>Clarifications requests 4:</u></p> <p>The user of the monitoring plan has to be clarified, Hongshanzui</p>	CR4	<input checked="" type="checkbox"/>																								

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		Hydropower plant or its mother company—Xinjiang Tianfu Thermolectric Co., Ltd?		
B.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1, 2	A monitoring officer will be responsible for collection of sales receipts, collection of billing receipts of the power supplied from the grid to the project. Electronic data will be kept for 2 years following the end of the crediting period.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.3. Does the monitoring plan provide current good monitoring practice?	1, 2 10	<u>Corrective Action Request 12:</u> <ul style="list-style-type: none"> <li>- According to the electric equipment collection line figure, there are 2 two-way ammeters connected in parallel to measure the supplied electricity and the purchased electricity simultaneously. There are another 2 two-way back-up ammeters for future usage. This is different from the statement in the PDD.</li> <li>- A schematic diagram of the location of the power meters should be included.</li> </ul>	CAR12	<input checked="" type="checkbox"/>
B.7.2.4. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	1, 2	Not applicable. Annex 4 refers to the chapter B.7.2.	<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. Is there any indication of a date when the baseline was determined?	1, 2	Yes, the 23/10/2006.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.2. Is this consistent with the time line of the PDD history?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.8.3. Is the information on the person(s) / entity(ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	1, 2	Ms. Shunrong LIN and Mr. Zheng KANG from Changjiang River International Holding determined the baseline and monitoring methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.4. Is information provided whether this person / entity is also considered a project participant?	1, 2	<u>Corrective Action Request 13:</u> Please indicate if this person/entity is a project participant.	CAR13	<input checked="" type="checkbox"/>
<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, 2	According to the PDD, the project starting date is 01/05/2007 and the operational lifetime is expected to be 25 years. 01/05/2007 is the expected date of all units starting electricity generation. <u>Corrective Action Request 14:</u> <ul style="list-style-type: none"> <li>- The project starting date has to be re-defined (start of construction) and revised.</li> <li>- Evidence showing the CDM support considered at the early stage of the proposed project has to be delivered to the DOE.</li> </ul>	CAR14	<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, 2	7 years with potential for 2 renewals is chosen as the crediting period.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



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<b>D. Environmental impacts</b>				
<b>D.1. Documentation on the analysis of the environmental impacts, including transboundary impacts</b>				
D.1.1. Has the analysis of the environmental impacts of the project activity been sufficiently described?	1, 2 9	Yes, the environmental impacts of the project activity during construction and operation period have been clearly described. <u>Corrective Action Request 15:</u>  - There is a small inconsistency about the approval date of EIA between the PDD and the official approval.  - Repeated paragraphs describing the environmental impacts are shown in the chapter D.1 of the PDD.  The same has to be revised.	CAR15	<input checked="" type="checkbox"/>
D.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	1, 2 9	Yes, EIA is a must in P. R. China for new hydro power projects. The EIA of the proposed project was approved by the Environmental Protection Bureau of Xinjiang Production and Construction Crops on Sep.1st, 2005. The documents have been reviewed by the DOE.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.3. Will the project create any adverse environmental effects?	1, 2 8, 9	Referred to the EIA and the approval of 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?	1, 2 8, 9	There is no trans-boundary impact described in the EIA report or approval of EIA.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<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 suf-	1, 2 8, 9	Referring to the EIA and the approval of EIA, there is no adverse environmental impact from the project activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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ficiently?				
D.2.2. Does the project comply with environmental legislation in the host country?	1, 2 8, 9	Yes, the project is in conformity with the environmental legislation of P. R. China and the EIA has been approved by authorized organization.	<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?	1, 2 15	Yes, the relevant stakeholders have been consulted via questionnaires. No negative comments were given from the participants.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	1, 2 15	Questionnaires were used to invite comments by local stakeholders. <u>Corrective Action Request 16:</u> There is a small inconsistency about the questionnaires contents between the PDD and the one reviewed by the validator. This inconsistency has to be revised. The revision will not impact the result of the collected comments.	CAR16	<input checked="" type="checkbox"/>
E.1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	1, 2	There are no regulations/laws in China for carrying out the stakeholder consultation process for this project activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	1, 2	The Questionnaire process is described in a complete and transparent manner.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
<b>E.2. Summary of the comments received</b>				
E.2.1. Is a summary of the stakeholder comments received provided?	1, 2	Yes, E.2. and E.3. of the PDD give a summary of stakeholder comments received by questionnaires.	<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?	1, 2 15	All stakeholder comments are positive, no action has been taken.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>F. Annexes 1 - 4</b>				
<b>Annex 1: Contact Information</b>				
F.1.1. Is the information provided consistent with the one given under section A.3?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.2. Is the information on all private participants and directly involved Parties presented?	1, 2	The information about Xinjiang Tianfu Thermoelectric Co., Ltd and The Tokyo Electric Power Company Inc. are presented.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Annex 2: Information regarding public funding</b>				
F.1.3. Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?	1, 2	Yes. There is no public funding necessary; all costs are covered by bank loans and private equity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.4. If necessary: Is an affirmation available that any such funding from Annex-I-countries does not result in a diversion of ODA?	1, 2	See F.1.3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
<b>Annex 3: Baseline information</b>				
F.1.5. If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	1, 2	Yes. The official published emission factors about OM and BM are used.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.6. Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	1, 2	Yes, but see CAR8.	See CAR8	<input checked="" type="checkbox"/>
F.1.7. Does the additional information substantiate / support statements given in other sections of the PDD?	1, 2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Annex 4: Monitoring information</b>				
F.1.8. If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	1, 2	Not applicable. Annex 4 is referring to the chapter B.7.2 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.9. Is the information provided verifiable? Has sufficient evidence been provided to the validation team?	1, 2	See F.1.8.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.10. Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	1, 2	See F.1.8.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
<p>The available PDD is indicated as version 03 dated 11/12/2006 and also indicated as the final version.</p> <p><u>Corrective Action Request 1:</u></p> <p>A revision history of the PDD should be included.</p>	A.1.2	The revision history has been included.	☑
<p>The project is described transparently and the project activities described have been proven during the on-site audit.</p> <p><u>Corrective Action Request 2:</u></p> <p>Please explain the reason in the PDD why the generation output will be increased after 2014.</p>	A.2.1	The explanation has been included. A new reservoir will be built upstream until 2014 that will regulate the water flow.	☑

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<p>The project location could be clearly identified according to the PDD. The project activity located on the middle reaches of Manasi River, in Manasi County, Shihezi City, Xinjiang Uygur Autonomous Region. The geographical coordinates are given.</p> <p><u>Corrective Action Request 3:</u></p> <p>The map showing the project location and Xinjiang Uygur Autonomous Region should be in English.</p>	A.4.1.1	The English map has been included.	☑
<p><u>Corrective Action Request 4:</u></p> <p>Please deliver a reference list of the manufacturer that shows the reliability of the manufacturer and that state of the art technology will be used.</p>	A.4.3.1	The relevant website address of the manufacturers has been added to the PDD.	☑
<p>Yes, except the following small inconsistencies:</p> <ul style="list-style-type: none"> <li>– Turbines/ generators models between the PDD and equipment contracts</li> <li>– The electricity output since 2014 between the PDD (212. 850GWh) and the Feasibility Study (215.12 GWh)</li> </ul> <p><u>Corrective Action Request 5:</u></p> <p>The same has to be revised.</p>	A.4.3.5	The figure has been revised.	☑

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7*3 year crediting period is selected. <u>Corrective Action Request 6:</u> The form has to be revised according to the common way.	A.4.4.1	The form has been revised.	<input checked="" type="checkbox"/>
Other similar activities in Xinjiang, such as Dashankou Hydropower, Tiemenguan Hydropower etc have not been completely identified. <u>Corrective Action Request 7:</u> The same has to be revised.	B.5.16	The similar activities have been identified and added to the PDD.	<input checked="" type="checkbox"/>

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<p>Formulae to calculate the baseline emissions are correctly presented. NDRC OM and BM emission factor of Northwest China Grid published on the NDRC website on October 16, 2006 are used.</p> <p><u>Corrective Action Request 8:</u></p> <ul style="list-style-type: none"> <li>- The formula number 3 on page 15 and number 9 on page 17 of the PDD are not identified.</li> <li>- The latest published official emission factors have to be used.</li> <li>- A comparison between the official emission factors and the one required by the methodology (using IPCC2006 and national values where available) has to be submitted to the DOE. The more conservative value should be used.</li> <li>- An Excel sheet of the emission factor calculation should be submitted for verifying the calculations.</li> </ul>	<p>B.6.1.4</p>	<p>The formula has been revised.</p> <p>The comparison of default values of IPCC 1996 and 2006 is made in the PDD, and the lower values are selected for the calculation. The result is more conservative than the latest published official emission factors but the difference is almost negligible. Nevertheless, the more conservative data are used.</p> <p>An Excel sheet including the calculation is available and has been provided to the audit team.</p>	<p><input checked="" type="checkbox"/></p>
<p>Yes. A list of parameters is clearly presented.</p> <p><u>Corrective Action Request 9:</u></p> <p>The parameters mentioned in official published data, such as the captive power rate, <math>\lambda_i</math> the proportion of emission from different fuel <math>i</math> power plant to the total emissions etc, as well as CM, OM and BM have to be presented.</p>	<p>B.6.2.1</p>	<p>The relevant parameter have been added and presented in the PDD.</p>	<p><input checked="" type="checkbox"/></p>



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<p><u>Corrective Action Request 10:</u> This parameter does not directly adopt the data of the Yearbooks, but is calculated using the electricity generation times captive power rate.</p>	B.6.2.9	The data source of the parameter has been revised.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 11:</u> No, because only the first crediting period can be estimated now. Please revise accordingly.</p>	B.6.4.2	The form has been revised.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 12:</u></p> <ul style="list-style-type: none"> <li>- According to the electric equipment collection line figure, there is a difference to the statement in the PDD.</li> <li>- A schematic diagram of the location of the power meters should be included.</li> </ul>	B.7.2.3	The diagram has been added to the PDD. The relevant statements have been revised.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 13:</u> Please indicate if this person/entity is a project participant.</p>	B.8.4	This part has been revised.	<input checked="" type="checkbox"/>

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<p>According to the PDD, the project starting date is 01/05/2007 and the operational life-time is expected to be 25 years. 01/05/2007 is the expected date of all units starting electricity generation.</p> <p><u>Corrective Action Request 14:</u></p> <ul style="list-style-type: none"> <li>- The project starting date has to be re-defined (start of construction) and revised.</li> <li>- Evidence showing the CDM support considered at the early stage of the proposed project has to be delivered to the DOE.</li> </ul>	<p>C.1.1</p>	<p>The date has been revised.</p> <p>The evidence has been submitted to the audit team.</p>	<p><input checked="" type="checkbox"/></p>
<p>Yes, the environmental impacts of the project activity during construction and operation period have been clearly described.</p> <p><u>Corrective Action Request 15:</u></p> <ul style="list-style-type: none"> <li>- There is a small inconsistency about the approval date of the EIA between the PDD and the official approval.</li> <li>- Repeated paragraphs describing the environmental impacts are shown in the chapter D.1 of the PDD.</li> </ul> <p>The same has to be revised.</p>	<p>D.1.1</p>	<p>The inconsistency and repeated paragraphs have been revised.</p>	<p><input checked="" type="checkbox"/></p>

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<p>Questionnaires were used to invite comments by local stakeholders.</p> <p><u>Corrective Action Request 16:</u></p> <p>There is a small inconsistency about the questionnaires contents between the PDD and the one reviewed by the validator. This inconsistency has to be revised.</p> <p>The revision will not impact the result of the collected comments.</p>	E.1.2	The inconsistency has been revised.	☑
<p><u>Corrective Action Request 17:</u></p> <p>In table A.1-2, A.2-2 and A.3-2 the South China Grid is mentioned. Please correct this as well as the related data if necessary.</p>	Annex 3	South China Grid has been changed to Northwest Grid. The revision will not impact the imputed data and calculated emission factor.	☑
<p>Yes, the benchmark analysis is applied. 10% IRR benchmark of total investment is used.</p> <p><u>Clarification Request1:</u></p> <p>The document that justifies the benchmark and a PDF version of the IRR calculation (based on verified figures) has to be delivered to the DOE for uploading together with the PDD according to the EB28 decisions.</p>	B.5.7	The documents have been submitted to the audit team.	☑
<p>The barriers analysis is transparent.</p> <p><u>Clarification Request 2:</u></p> <p>As the barrier analysis has been applied additional to the investment analysis evidence (documents) for the claimed barriers have to be delivered that can be published finally together with the PDD.</p>	B.5.14	The financing barriers are cancelled. The evidence of construction barrier analysis is the Feasibility Study Report. The relevant page has been submitted to the audit team.	☑

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<p><u>Clarifications Request 3:</u></p> <p>In order to heat the buildings at the project site, a coal-fired boiler was seen under construction during the on-site audit.</p> <p>Please clarify the emission of this boiler: If emissions are estimated to be less than 1% of the total emission reductions then it may not be included in the PDD. However, if the emissions are estimated to more than 1 % of the total emission reductions then they have to be included in the PDD and a deviation for this project activity has to be requested.</p>	<p>B.6.1.3</p>	<p>The calculation of emission from a coal-fired boiler has been submitted to the audit team. The yearly emission is 1179tCO<sub>2</sub> which is accounted for 0.75% of the emission reduction.</p>	<p><input checked="" type="checkbox"/></p>
<p>According to the statement in the PDD, the plant manager will in charge of the measurement of electric power; An appointed monitoring officer will be responsible for the verification of measurement and calculation of emission reductions. The General Manager will review the monitoring report.</p> <p><u>Clarifications Request 4:</u></p> <p>The user of the monitoring plan has to be clarified, Hongshanzui Hydropower plant or its mother company—Xinjiang Tianfu Thermoelectric Co., Ltd?</p>	<p>B.7.2.1</p>	<p>The part has been clarified.</p>	<p><input checked="" type="checkbox"/></p>

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**Table 3 Unresolved Corrective Action and Clarification Requests (in case of denials)**

Clarifications and / or corrective action requests by validation team	Id. of CAR/CR	Explanation of Conclusion for Denial
-	-	-


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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 “Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.”, version 03
2.	Consolidated baseline methodology for grid-connected electricity generation from renewable sources, ACM0002, version 06
3.	Tool for the demonstration and assessment of additionality, version 02
4.	Participant list of on-site interview, signed on December 26 <sup>th</sup> , 2006
5.	On-site interviews at the project site in Manasi County of Shihezi City, Xinjiang Uygur Autonomous Region, China., conducted on December 25-26, 2006 by auditing team of TÜV SÜD:  Validation team: <p style="margin-left: 100px;">Ms. Liu Xiaoyan                      CDM Auditor, TUV SÜD Industrie Service GmbH</p> Interviewed persons: <p style="margin-left: 100px;">Mr. Huang Chao                      Manager of Stratagem Development Dept, Xinjiang Tianfu Thermoelectric Co., Ltd.  Mr. Wu Jian                              Engineer of Stratagem Development Dept, Xinjiang Tianfu Thermoelectric Co., Ltd.  Mr. Liu Xinpeng                      Plant Manager of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.  Mr. Wang Jun                          General Engineer of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.  Mr. Ge Youchun                      Manager of Beijing Changjiang River International Holding</p>
6.	Feasibility Study Report for CDM project “Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.”, dated April 2004
7.	Approval of Feasibility Study Report for CDM project “Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.”, issued by Planning Committee of Xinjiang Production and Construction Corps, File No. Bin Ji (Nong Jing) Fa [2004]435, dated June 18 <sup>th</sup> , 2004
8.	EIA Report for CDM project “Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.”, dated August 2004
9.	Approval of EIA Report for CDM project “Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.”, issued by Environmental Protection Bureau of Xinjiang Production and Construction Corps, File No. Bing Huan Fa [2004]63, dated September 1 <sup>st</sup> , 2004.
10.	Main Electric equipments connection lines figure, the Survey Design Institution of Xinjiang Production and Construction Corps, dated

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Reference No.	Document or Type of Information
	March, 2006
11.	Economic Evaluation Code for Small Hydropower Projects, P.R.China Industry Standard, standard no. SL16-1995(The financial benchmark IRR of total investment is 10%. )
12.	Water Conservation and Hydro Power Engineering Classification and Floodwater Standard, standard no. SL252-2000 (The hydro power with less than 50MW in rural areas of China belongs to the small scale hydropower project.)
13.	Agreement of Grid connection signed between Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd. and Shihezi Electricity Control Center, dated October 20 <sup>th</sup> , 2006
14.	Purchasing and Selling Electricity Contract signed between Hongshanzui Hydropower Plant and Xinjiang Tianfu Thermoelectric Co., Ltd., dated October 20 <sup>th</sup> , 2006
15.	Local Stakeholder Comments Questionnaire Sample
16.	Project Design Document for CDM project “Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.”, version 04
17.	Resolution of the fourth conference of the second Board of Directors of Xinjiang Tianfu Thermoelectric CO., Ltd, Feb.23,2004
18.	Project Design Document for CDM project “Manasi River Stage I Hydropower Project of Hongshanzui Hydropower Plant, Xinjiang Tianfu Thermoelectric Co., Ltd.”, version 05
19.	Evidence for CDM Workshop January 11, 2004 (annex 1)
20.	Evidence for the resolution of the board, February 23, 2004 (annex 2)
21.	Definition of Run-of-river hydro power plants in China (annex 3)
22.	Feasibility Study report: evidence for the daily flow (annex 4)
23.	Feasibility Study report: evidence for the power density (annex 5)