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Validation Report

N.V. Nuon Energy Trade & Wholesale
VALIDATION OF THE CDM-PROJECT:
BAILONGJIANG DALIJIE HYDROPOWER STATION

REPORT NO. 1196440

2009, August 03

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

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Subject: Validation of a CDM Project			
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich Germany		TÜV SÜD Contract Partner: TÜV SÜD Industrie Service GmbH Carbon Management Service Westendstr. 199 80686 Munich Germany	
Project Participant (Client): N.V. Nuon Energy Trade & Wholesale Spaklerweg 20 P.O. Box 41920 ZIP 1009 DC Amsterdam The Netherlands		Project Site(s): Bailong River, Zhouqu County, Tibetan Autonomous Prefecture of Gannan, Gansu Province, China. GPS (dam): 104°02'11"E; 33°53'18"N. GPS (powerhouse): 104°03'23"E; 33°53'46"N.	
Project Title: Bailongjiang Dalijie Hydropower Station			
Applied Methodology / Version: ACM0002 / Version 07			Scope(s): 1 Technical Area(s): 1.1
First PDD Version: Date of issuance: 10-05-2008 Version No.: 01 Starting Date of GSP 27-05-2008		Final PDD version: Date of issuance: 03-07-2009 Version No.: 02	
Estimated Annual Emission Reduction:		138,919 tCO ₂ e	
Assessment Team Leader: Dr. Sven Kolmetz		Further Assessment Team Members: Tom Xiong Karin Wagner	
Summary of the Validation Opinion: <div style="margin-left: 20px;"> <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. </div> <div style="margin-left: 20px;"> <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. </div>			

Abbreviations

ACM	Approved Consolidated Methodology
AM	Approved Methodology
AMS	Approved Methodology Small scale
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction
CM	Combined Margin
CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
CR / CL	Clarification Request
DNA	Designated National Authority
DOE	Designated Operational Entity
EF	Emission Factor
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission Reduction
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	GreenHouse Gas(es)
IPCC	Intergovernmental Panel on Climate Change
IRL	Information Reference List
IRR	Internal Rate of Return
KP	Kyoto Protocol
MP	Monitoring Plan
NGO	Non Governmental Organisation
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

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

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

Bailongjiang Dalijie Hydropower Station

1.2 Scope

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

- The Kyoto Protocol, in particular § 12 and modalities and procedures for the CDM
- 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 and 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)
- Baselines and monitoring methodologies (including GHG inventories)
- Management systems and auditing methods
- Environmental issues relevant to the sectoral scope applied for
- Applicable environmental and social impacts and aspects of CDM project activity
- Sector specific technologies and their applications
- Current technical and operational knowledge of the specific sectoral scope and information on best practice

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

Once TÜV SÜD receives a first PDD version, it is made publicly available at the UNFCCC webpage and at TÜV SÜD's webpage 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 could be repeated) and the final PDD will form the basis for the final evaluation as presented in this report. Information on the first and the final PDD version is presented in page 2.

The only purpose of a validation is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD cannot 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 applies standard auditing techniques to assess the correctness of the information provided by the project participants. The assessment is based on the “Clean Development Mechanism Validation and Verification Manual” version 01. The work starts with appointment of team covering the technical scope(s), sectoral scope(s), technical area(s) and relevant host country experience for evaluating the CDM project activity. Once the project is made available for the stakeholder consultation process, members of the team carry out the desk review, follow-up actions, resolution of issues identified and finally preparation of the validation report. The prepared validation report and other supporting documents then undergo an internal quality control by the CB “climate and energy” before submission to the CDM-EB.

In order to ensure transparency, assumptions are clear and explicitly stated; the background material is clearly referenced. TÜV SÜD developed a methodology-specific protocol customised for the project. 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 and any adjustment made to the project design.

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

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

Validation Protocol Table 1: Conformity of Project activity and PDD				
Checklist Topic / Question	Reference	Comments	PDD in GSP	Final PDD
<i>The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further sub-divided. 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 Request 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 Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification. Forward action request to highlight issues related to project implementation that require review during the first verification.</i>	<i>Conclusions are presented in the same manner based on the assessment of the final PDD version and further documents including assumptions presented in the documentation.</i>

Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests			
Clarifications and corrective action requests	Ref. to table 1	Summary of project owner response	Validation team conclusion
<i>If the conclusions from table 1 are either a Corrective Action, a Clarification or a Forward action Request, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 1 where the issue 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 discussion on and revision to project documentation together with the validation team's responses and final conclusions. The conclusions should be reflected 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.

Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests		
Clarifications and corrective action requests	Id. of CAR/CR 1	Explanation of the Conclusion for Denial
<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 with a clear reference to the requirement which is not complied with.</i>

2.1 Appointment of the Assessment Team

According to the technical scopes/areas 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 (CB) ensuring that the required skills are covered by the team. The CB 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/technical area linked to the methodology has to be covered by the assessment team.

Name	Qualification	Coverage of sectoral scope	Coverage of technical area	Host country experience
Dr. Sven Kolmetz	ATL	☑	☑	☑
Tom Xiong	GHG-A	☑	☑	☑
Karin Wagner	GHG-A	☑	☑	

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

Tom Xiong is a GHG auditor for environmental management systems at TÜV SÜD China. He is based in Shenzhen. He has received training in the CDM validation process and participated already in several CDM project assessments.

Karin Wagner is an auditor in the “Carbon Management Service” department of TÜV SÜD Industrie Service GmbH in Munich, Germany. She holds a M.Sc. in geological sciences and has gathered experience in environmental consulting before joining TÜV SÜD. Karin Wagner specializes in the assessment of CDM / JI projects as well as voluntary standard projects in the sector of mining/mineral production, waste handling and disposal and renewable energies.

2.2 Review of Documents

A first version of the PDD was submitted to the DOE in May 2008. The first PDD version submitted by the PP and additional background documents related to the project design and baseline were reviewed to verify the correctness, credibility and interpretation of the presented information, furthermore a cross check between information provided and information from other sources have been done as initial step of the validation process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.

2.3 Follow-up Interviews

On June 17-19, 2008 TÜV SÜD performed interviews, telephone conferences and a physical site inspection with the project stakeholders to confirm the relevant information and to resolve the issues identified in the first document review. The table below provides a list of all persons interviewed in this context.

Name	Organisation
Mr. Xian Kaifu	GEPIC Darong Electricity Power Company Ltd.
Mr. Chen Dongwei	GEPIC Darong Electricity Power Company Ltd.
Mr. Guo Xiaohua	GEPIC Darong Electricity Power Company Ltd.
Mr. Li Changfu	GEPIC Darong Electricity Power Company Ltd.
Mr. Chen Liang	GEPIC Darong Electricity Power Company Ltd.
Ms. Wang Huan	DHV
Mr. Mong Huanjun	DHV
Mr. Sun Xiaojun	Xiabazang village
Mr. Zhang Shen	Xiabazang village
Mr. Zhang Linlin	Xiabazang village

2.4 Further cross-check

During the validation process, the team makes reference to available information related to similar projects or technologies as the CDM project activity. The documentation has also been reviewed against the approved methodology applied to confirm the appropriateness of formulae and correctness of calculations.

2.5 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 conclusion on the project design. The CARs and CRs 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 documented in more detail in the validation protocol in annex 1.

The final PDD version that was submitted in July 2009 serves as the basis for the final assessment presented herewith. Changes are not considered to be significant with respect to the qualification of the project as a CDM project based on the two main objectives of the CDM, i.e. to achieve a reduction of anthropogenic GHG emissions and to contribute to a sustainable development.

2.6 Internal Quality Control

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

After confirmation of the PP the validation opinion and relevant documents are submitted to the EB through the UNFCCC web-platform.

3 SUMMARY

The assessment work and the main results are described below in accordance with the VVM reporting requirements. The reference documents indicated in this section and Annex 1 are stated in Annex 2.

3.1 Approval

The project participants are GEPIC Darong Electric Power Company Ltd. of People's Republic of China and N.V. Nuon Energy Trade & Wholesale of the Netherlands. The host Party China and the participating Annex I Party, i.e. the Netherlands meet the requirements to participate in the CDM.

The DNA of China has issued a LoA (IRL 45) in June 2008 authorizing GEPIC Darong Electric Power Company Ltd. as a project participant. The DNA of the Netherlands has also issued a LoA (IRL 46) on 25 June 2008 authorizing N.V. Nuon Energy Trade & Wholesale as a project participant. TÜV SÜD received these letters from the project participants directly and considers the provided letters as authentic.

The China LoA has further been double-checked with the CDM project webpage sponsored by the Department of Climate Change, NDRC (<http://cdm.ccchina.gov.cn>), which further confirms the approval of this CDM project.

Furthermore, after checking the provided LoAs, TÜV SÜD confirms that both letters refer to the precise proposed CDM project activity title in line with the title in the PDD "Bailongjiang Dalijie Hydropower Station".

Both letters also indicate that each participating Party is a Party to the Kyoto Protocol, and that the participation in the Bailongjiang Dalijie Hydropower Station project is voluntary. The Chinese LoA also confirms that the proposed CDM project activity contributes to the sustainable development of China (host country). Based on the information given in these letters, TÜV SÜD considers the approval as unconditional with respect to these items.

Both LoAs have been issued by the respective Party's DNA, National Development and Reform Commission of the People's Republic of China and Ministry of Housing, Spatial Planning and the Environment (Netherlands), respectively.

TÜV SÜD considers the requirements of the VVM (§§ 45-48) to be complied with.

The LoA does not specify a version number of the PDD or validation report.

3.2 Participation

The participants of the project activity have been approved by the corresponding Parties, which is confirmed by the issued LoAs.

The means of validation were equivalent to those described in section 3.1 in regard to the approval process of the project activity.

3.3 Project design document

The PDD is compliant with relevant form and guidance as provided by UNFCCC.

The most recent version of the PDD form was used.

TÜV SÜD considers that the most recent version of the guidelines for the completion of the PDD was followed. Relevant information was provided by the participants in the PDD sections. Completeness was assessed through the checklist included as Annex 1 of this report.

3.4 Project description

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

The project activity is a 40.2 MW hydro power project located in the central part of Gansu Province, with the water intake system located at the Bailong River. The project activity is a run-of-river hydro power station, that consists of three HL290-LJ-280 turbines and three SF13.4-36/470 generators of 13.4 MW each, thereby aggregating to the installed capacity of 40.2 MW. The generated electricity will be exported to the North-West China Power Grid (NWCPG), through the local grid.

The project activity is expected to have an annual power output of 163,800 MWh, with 163,472 MWh supplied to the grid. The difference between the total power generated and the net power supply of about 0.2% is due to the need of auxiliary power of the power plant. These values are derived from the FSR, where any other power losses such as transmission line losses are not discussed. However, this could be considered as conservative, as an overall higher value will be applied for the IRR analysis (please see also discussions in section 3.6.3 regarding the IRR with the total power generated).

The exported electricity from the project displaces the power generated by the existing power plants and likely capacity additions in the NWCPG, thereby resulting in an estimated emission reduction of 138,919 tCO₂e annually in the fixed 10-year crediting period.

The project will further contribute to the sustainable development by reducing the power shortages in the area as well as by creating new jobs and a better infrastructure.

The information presented in the PDD on the technical design is consistent with the actual planing and implementation of the project activity as confirmed by:

- Review of data and information (see annex 2), cross check the same with other sources.
- An on-site visit has been performed and relevant stakeholder and personnel with knowledge of the project were interviewed.
- Finally information related to similar projects or technologies as the CDM project activity have been used to confirm the accuracy and completeness of the project description.

In light of the above, TÜV SÜD confirms that the project description as included to the PDD is sufficiently accurate and complete in order to comply with the requirements of the CDM.

3.5 Baseline and monitoring methodology

3.5.1 Applicability of the selected methodology

Compliance with each applicability condition as listed in the chosen baseline and monitoring methodology ACM0002 (Version 07) has been demonstrated.

The assessment was carried out for each applicability criterion and included among others the compliance check of the local project setting with the applicability conditions in regard to baseline setting and eligible project measures. This assessment also included the review of secondary sources which sustain that applicability conditions are complied with.

The Methodology specific protocol included to the Annex 1 documents the assessment process, including the steps taken. The results on the compliance check as well as the relevant evidence are explicitly presented in annex 1.

TÜV SÜD confirms that the chosen baseline and monitoring methodology is applicable to the project activity.

Emission sources which are not addressed by the applied methodology and which are expected to contribute more than 1% of the overall expected average annual emissions reduction have not been identified.

3.5.2 Project boundary

The project boundary was assessed in the context of physical site inspection, interviews and based on the secondary evidence received on the design of the project.

As indicated in the methodology ACM0002 (Version 07), the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to, which was correctly identified as the North-West China Power Grid. The only GHG and emission source included in the project boundary are the CO₂ emissions from the electricity generation in fossil fuel fired power plants that is displaced due to the project activity.

The most relevant documentation assessed in order to confirm the project boundary are following:

- Feasibility Study Report (FSR) (IRL 8), and
- Power Purchase Agreement (IRL 63), confirming the supply of the power to the indicated grid (North-West China Power Grid).

The same have been validated during the validation process using standard audit techniques, further details of any observation are transparently presented in the annex 1.

Hence, TÜV SÜD confirms that the identified boundary and the selected sources and gases as documented in the PDD are justified for the project activity.

3.5.3 Baseline identification

In the PDD the following baseline scenario has been defined:

As per the ACM0002 (Version 07) methodology, the baseline is clearly defined for this type of project activity (i.e. installation of a new grid-connected renewable hydro power plant) which is as following.

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

The information presented in the PDD has been validated by a first document review of all the data, further confirmation based on the on-site visit and a final step by cross checking the information with similar relevant projects and/or technologies. The sources referenced in the PDD have been quoted correctly. The information was cross-checked based on verifiable and credible sources, such as:

- Feasibility Study Report (FSR) (IRL 8), and
- Notice on Strictly Prohibiting the Installation of Fuel-fired Generators with the Capacity of 135 MW or below (IRL 32), and
- ACM0002 (Version 07).

TÜV SÜD has determined that no reasonable alternative scenario has been excluded.

Based on the validated assumptions on calculations TÜV SÜD considers that the identified baseline scenario is reasonable.

TÜV SÜD confirms that all relevant CDM requirements, including relevant and / or sectoral policies and circumstances, have been identified correctly taken into account in the definition of the baseline scenario.

A verifiable description of the baseline scenario has been included to the PDD.

In regard to item 86 of VVM, TÜV SÜD confirms that:

1. All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
2. All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
3. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
4. Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD;
5. The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CDM project activity.

3.5.4 Algorithm and/or formulae used to determine emission reductions

TÜV SÜD has assessed the calculations of project emissions, baseline emissions and leakage and emission reductions. Corresponding calculations were carried out based on calculation spreadsheets. The parameters and equations presented in the PDD and further documentation have been compared with the information and requirements presented in the methodology and respective tools. The equation comparison has been made explicitly following all the formulae presented in the calculation files.

The assumptions and data used to determine the emission reductions are listed in the PDD and all the sources have been checked and confirmed.

Based on the information reviewed it can be confirmed that the sources used are correctly quoted and interpreted in the PDD.

The values presented in the PDD are considered reasonable based on the documentation reviewed, further references and the result of the interviews.

The baseline methodology has been correctly applied following the requirements.

The estimate of the baseline emissions can be confirmed as the same have been replicated by the audit team using the information provided.

Detailed information on the verification of the parameters used in the equations can be found in the annex 1. The algorithms for the determination of the baseline, project and leakage are discussed in the following sections.

3.5.4.1 Baseline Emissions

The calculation of the baseline emissions followed the procedures described in the methodology ACM0002 (Version 07).

The operating margin emission factor (EF_{OM}) was determined based on the simple OM method. The ex-ante option was chosen for this calculation. The calculation of the build margin emission factor (EF_{BM}) was based on modified methods agreed by the EB, because plant specific data are not available for China. The emission factor of the thermal power plants was calculated by the proportion of the emissions of coal, gas and oil times the emission factor of the best available coal, gas and oil power plant as defined and published by the Chinese DNA. The new thermal capacity installation

that exceeded 20% in the last years, for which data was available, was finally assessed with this factor.

The baseline calculation was based on the published OM/BM calculation process recently issued by the NDRC (China DNA). The values for the EF_{OM} and EF_{BM} (i.e. 1.1257 tCO₂/MWh and 0.5739 tCO₂/MWh, respectively) were equal compared to the most recent values published by the Chinese DNA at the time of commencement of the validation of this project and are therefore accepted for the calculation of the baseline emissions and the emission reductions. The same values were also applied in the PDD that was uploaded for GSP.

The value for the combined margin emission factor (EF_{CM}) was determined using the weighted average of the EF_{BM} and EF_{OM} using the default values for the factors as described in the methodology (i.e. 0.5 for hydro plants; 0.8498 tCO₂/MWh).

3.5.5 Project emissions

As indicated by the applied methodology, this type of project does not consider project emissions, since the minimum required power density is above the threshold.

3.5.6 Leakage

Not applicable as indicated by the applied methodology.

3.5.7 Emission Reductions

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

3.6 Additionality

The additionality of the project has been presented in the PDD by applying the first, second and fourth step as indicated in the "Tool for the demonstration and assessment of additionality" (Version 5.2).

The approach used in the PDD was assessed first based on a document review, where following relevant documents have been reviewed:

- Feasibility Study Report (FSR) (IRL 8), and
- Investment analysis calculations (IRL 35).

On site, the additionality has been discussed principally with Mr. Xian Kaifu from GEPIC Darong Electric Power Company Ltd. Furthermore a series of documents were reviewed on-site (for details see annex 2).

Finally the data, rationales, assumptions, justifications and documentation provided have been checked using local knowledge and sectoral and financial expertise, the same has been cross checked by:

- Negotiations and final CDM development contract with DHV (IRL 27, 28, 55), and
- Application and approval of CDM development by Gansu DRC (IRL 47, 48), and
- Loan approval depends on CDM development (IRL 49).

Based on these validation steps, TÜV SÜD can confirm that the documentation assessed is appropriate for this project.

3.6.1 Prior consideration of the clean development mechanism

The starting date of the project activity is determined by signing the contract for the construction works on 10 November 2006. This was the first real action, when the project owner committed to any expenditure.

In order to confirm the same the assessment team has reviewed the following documents:

- Construction contract signed in November 2006 (IRL 26), and
- Construction start in December 2006 (IRL 52), and
- Equipment purchase contract (IRL 25), which were signed later in November 2006 (i.e. 27/11/2006), hence, the project starting date which equals the date when the construction contract was signed, is fully in line with recent EB requirements regarding this date.

In addition, the assessment team cross checked this information with Mr. Xian Kaifu (GEPIC Darong Electric Power Company Ltd) during various discussions on site.

The starting date of the project activity is determined to be 10 November 2006 which is before 02 August 2008 and also before the GSP. The PPs have presented to the assessment team the following documentation:

- The construction contract (IRL 26), newspaper announcement confirming construction start (IRL 52), and the equipment purchase contract (IRL 25) to clearly define the construction contract as the first real action, and
- Application and approval of CDM development from Gansu DRC (IRL 47, 48) in September 2006 as well as CDM development negotiations with DHV (IRL 27, 28, 55) between May 2005 and June 2006, which clearly shows the early CDM consideration.

The original of the documentation presented has been reviewed and cross checked based on interviews with Mr. Xian Kaifu (GEPIC Datong Electric Power Company Ltd), hence the documents can be considered appropriate to confirm the prior consideration.

Additionally, in order to confirm that the PPs have taken real actions to continue the activity as CDM, the following timeline has been reviewed against the respective documents presented in the table below:

Activity	Document	Auditor conclusion
June 2007 Request and proposal for validation services with a DOE	Copy of proposal from SGS (IRL 54)	Search for DOE for validation services clearly indicates on-going CDM actions
July 2007 MoU	Copy of MoU (IRL 56)	Negotiations between project owner and Nuon as the buyer clearly indicates on-going CDM –actions.
January 2008 ERPA	Copy of ERPA (IRL 53)	Signing of ERPA clearly indicates on-going CDM actions.
May 2008 Start of validation	Order to TÜV SÜD, GSP Start (UNFCCC Webpage)	Start of validation work by TÜV SÜD also clearly indicates that CDM actions were still on-going.
2009 On-going validation work	Communications between TÜV SÜD and the PPs	On-going validation work clearly indicates that the CDM application was in progress.

Hence the project complies with the requirements to demonstrate the prior consideration of the CDM.

3.6.2 Identifications of alternatives

The output of the project is electricity that is exported to the North-West China Power Grid.

The list of alternatives to supply the outputs mentioned above, which is presented in the PDD includes the project activity undertaken without being registered as CDM project. The rest of the alternatives presented do include all plausible scenarios taking into account the local and sectoral situations for the outputs mentioned. Hence the list of alternatives is considered to be complete.

3.6.3 Investment analysis

The PPs use the investment analysis (benchmark analysis) to demonstrate the additionality. The financial returns of the proposed project are insufficient to justify the investment.

The parameters used in the financial calculations have been validated based on a review of the sources presented in the PDD, inter alia the Feasibility Study Report (FSR) (IRL 8, 9) (investment costs, the O&M costs, annual power generation and supply, etc.). Since the tariff indicated in the FSR was simply calculated back in order to get a reasonable IRR, the tariff for the investment analysis in the PDD was derived from a public notice on the tariff (IRL 58). These values were confirmed verbally during the site visit.

A first meeting was held in June 2006, discussing the potential of CDM application as first results of the feasibility study indicated the poor financial situation of this project (IRL 50). A first version of the FSR was finalized two months later in August 2006 (IRL 8), which was revised again in October 2006 (IRL 9), including the comments from the local DRC. After the issuance of the first FSR in August 2006, it was obvious that the project is not financially attractive, and the project owner made the final decision to apply for CDM in September 2006, which could be evidenced by a second board meeting (IRL 51). Given the fact that the final investment decision and the finalization of the FSR is pretty much at the same time, it could be confirmed that it is pretty unlikely that the input values have materially changed.

Furthermore based on a cross check with the following documents mentioned below, it can be seen that the parameters are plausible and can be considered acceptable under the project situation.

- Investment Plan (IRL 64), equipment invoices and contracts (IRL 25, 26), confirming that the actual investment costs were slightly higher than those estimated in the FSR and applied in the investment analysis (i.e. approximately 350 Mio RMB are already spent on the project, 20 Mio RMB more than estimated in the FSR), and
- Public power price notices from 2004 and 2008 (IRL 58 and 60), confirming that the applied gross tariff of 0.227 RMB/kWh is plausible (i.e. the 2004 document refers to a tariff of 0.227 RMB/kWh incl. VAT and the 2008 document refers to a tariff of 0.2503 RMB/kWh (not indicated whether this is gross or net tariff)); however, even with the electricity price indicated in 2008 (i.e. assuming the more conservative value of 0.2503 RMB/kWh as the net tariff, the IRR is still below the benchmark and the project is not financially attractive; and
- the PPA (IRL 63) simply indicates that the tariff should be in line with the relevant regulation and does not specify a value for the electricity price; and
- even with a 40% increase in the tariff, which is above the difference between applied tariff and the tariff indicated in the power price notice published in 2008 (IRL 60), the project is still not financially attractive with an IRR of 7.33%, and

- TÜV SÜD also considers the application of a fixed tariff as valid and appropriate, as well as in line with Chinese codes and standards to calculate the economic return of a hydropower project. In addition, TÜV SÜD would like to point out that even with a 40% increase in the tariff, the IRR would still remain below the benchmark, and the project would still not be financially attractive. In addition, TÜV SÜD highly expects that in case that the power price would increase, O&M costs are also likely to increase as well, since both parameters are mostly linked to inflation. In summary, TÜV SÜD considers the application of fixed values as appropriate and valid.
- It could be verified that the plant load factor of 46.5% (or 4075 annual full load operation hours) was determined by Northwest Hydro Consulting Engineers (IRL 8), which is a third-party engineering company contracted by the project participant. Hence, TÜV SÜD confirms that the PLF has been defined correctly in the PDD (as per EB48, Annex 11) as well as the resulting input data applied for the IRR calculation.

The project is not operational yet, hence no power has been generated and no sales receipts or invoices are available for cross-checking on the annual power generation as well as the O&M costs. However, based on TÜV SÜD's internal statistical evaluation of 250 hydroelectric power plants in China, TÜV SÜD can confirm that the applied values are well within the typical range and were therefore also deemed to be appropriate and plausible (i.e. O&M costs are typically less than 5% of the total investment costs, the average operational hours are around 3800 hours or the PLF is around 40%).

The benchmark used for the financial analysis is obtained from "Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects" published by the Chinese State Power Corporation (IRL 40). This value has been checked against the source and the suitability for this project can be confirmed as conservative based on TÜV SÜD's local and sectoral expertise.

Further assumptions presented in the financial analysis, inter alia lifetime and taxes have also been reviewed and were found appropriate based on the FSR and its approval (IRL 8, 9, 2) as well as based on TÜV SÜD's local and sectoral expertise. Hence it can be confirmed that the underlying assumptions are appropriate for this project.

The sensitivity analysis was analyzed in detail and we herewith confirm that the underlying assumptions, parameters and chosen values are appropriate and that the calculations have been performed correctly. The application of the total power generation instead of the net power supply is totally covered by the sensitivity analysis, hence it could be confirmed that even with the total power generated applied in the IRR calculation, the IRR remains below the benchmark.

The financial calculation has been completely checked, all the calculation files were checked and no mistakes have been found. Hence it can be confirmed that the calculations are correct.

3.6.4 Barrier analysis

Barrier analysis was not applied for this project.

3.6.5 Common practice analysis

The region for the common practice analysis has been defined as Gansu Province in Central China: The project activity's technology can be found in different country regions, where different situations can appear. Hence, the region has been defined taken into account the kind of technology and the industry type. The assessment team reviewed the approach presented in the PDD and can confirm that the relevant parameters as location, infrastructure, economical situation and development were taken into account in order to define the region to be used for the common practice based on TÜV SÜD's local and sectoral expertise. In summary, the presented region can be considered appropriate for the common practice analysis.

Further on, similar projects were considered as hydropower projects with a capacity between 20 MW and 60 MW and that were installed after 2002, i.e. after the Chinese Power Reform. TÜV SÜD considered the applied capacity range as reasonable, since it is well within a reasonable range (i.e. 40.2 MW +/- 50%). The consideration of hydropower projects after 2002 is also deemed appropriate since the investment conditions significantly changed after this reform (IRL 41, 42). In summary, TÜV SÜD considers the defined criteria for similar projects as plausible and appropriate.

The assessment team reviewed official sources such as the China Water Resources/Hydraulics and Energy Yearbooks (IRL 37, 38, 39, 44). This information confirms that the list of similar projects presented in the PDD is complete. In addition, the team made a further cross-check of the information based on the interviews.

All similar projects are also applying for CDM or are already registered as CDM projects. This could be confirmed by cross-checking with the UNFCCC webpage.

Hence it can be confirmed that the proposed CDM activity is not a common practice in the defined region.

3.7 Monitoring plan

The monitoring plan presented in the PDD complies with the requirement of the methodology. The assessment team has checked all the parameters presented in the monitoring plan against the requirements of the methodology; no deviations relevant for the project activity have been found in the plan.

The procedures have been evaluated by the assessment team through document review and interviews with the relevant personnel; this information together with the on-site inspection allows the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The major parameters to be monitored have been discussed with the PPs especially regarding the location of the meters, the data management and in general the quality assurance and quality control procedures to be implemented in the context of the project.

The power supplied to and purchased from the NWCPG are measured by national standard electricity metering instruments that are calibrated periodically. One main meter and one back-up meter are installed at the transformer sub-station. Two cross-check meters are also in place at the outlet of the project site. Furthermore, three meters, one at each generator measure the total electricity generated (electricity supplied to the grid and the electricity supplied to internal loads).

All those meters will have an accuracy of 0.2S. Cross-check measures include the comparison with the actual power sales and purchase receipts.

As required by the methodology, the installed capacity as well as the area of the reservoir will be monitored annually.

In summary, it is expected that the PPs will be able to implement the monitoring plan and the emission reductions achieved can be reported ex-post and verified.

3.8 Sustainable development

The LoA of the host country clearly presents a statement that the project contributes to the sustainable development of the host Party, i.e. People's Republic of China.

3.9 Local stakeholder consultation

The relevant local stakeholders have been invited via a newspaper announcement in the Gansu Daily, as well as online on the DHV webpage in September 2007. The evidence of these invitations

is IRL 62 and 63. The assessment team reviewed the documentation in order to validate the inclusion of relevant stakeholders and using the local expertise, it can be confirmed that the communication method used to invite the stakeholders can be considered appropriate. The summary of comments presented in the PDD has been cross checked with the documentation of the stakeholders' consultation and is found to be complete.

The relevant comments presented by the local stakeholders have been taken due account by the PPs, the same has been cross-checked with the information obtained during the interviews.

In summary, the local stakeholder consultation was adequately performed according to the CDM requirements.

3.10 Environmental impacts

The project participants ordered the Environmental Assessment Research Center of Lanzhou University to prepare an environmental impact assessment (EIA) for this project activity (IRL 13). The assessment team made a document review of the information presented. The IRL 14 (EIA approval by the local Environment Protection Bureau) confirms the correctness of the approach used by the PPs. Hence the PPs followed the requirements of the host country regarding the environmental impacts.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

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

The following table presents all key information on this process:

Webpage: http://cdm.unfccc.int/Projects/Validation/DB/23YR1QBVSZ3TA7QUOXSOE51E4I4X4O/view.html http://www.netinform.net/KE/Wegweiser/Guide2_1.aspx?ID=5183&Ebene1_ID=26&Ebene2_ID=1523&mode=1	
Starting date of the global stakeholder consultation process: 2008-05-27	
Comment submitted by: -	Issues raised: none
Response by TÜV SÜD: -	

5 VALIDATION OPINION

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

Bailongjiang Dalijie Hydropower Station

Standard auditing techniques have been used for the validation of the project. Methodology-specific protocol customised for the project have been prepared to carry out the audit and present the outcome in a transparent and comprehensive manner.

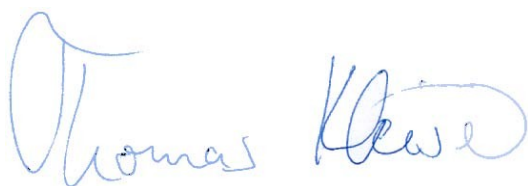
The review of the project design documentation, the subsequent follow-up interviews and the further cross check of references have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol. In our opinion, the project meets all relevant UNFCCC requirements 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 following the VVM requirements. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

Munich, 03-08-2009

Munich, 03-08-2009



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



Dr. Sven Kolmetz
Assessment Team Leader

Validation of the CDM Project:
Bailongjiang Dalijie Hydropower Station



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Annex 1: Validation Protocol

Validation Protocol

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Table 1 Conformity of Project Activity and PDD

CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PDD in GSP	Final PDD
A. General description of project activity					
A.1. Title of the project activity					
A.1.1.	Does the used project title clearly enable to identify the unique CDM activity?	1, 2	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 for the on-site audit is indicated as 1 st version dated May 10, 2008.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.3.	Is this consistent with the time line of the project's history?	1, 2, 8,9, 10, 11, 12, 13, 14,	The GSP has been started with this version. The project Environmental Impact Assessment (EIA) was approved on May 25, 2007 by Environmental Protection Bureau of Gansu Province. The project was approved on Nov.20, 2007 by Development and Reform Commission of Gansu Province. Project construction contract was signed on Nov.18, 2006 and the project is expected to be operational in 2009.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2. Description of the project activity					
A.2.1.	Is the description delivering a transparent overview of the project activities?	1, 2	The project is described transparently. It is a hydro power project, located in Zhouqu County, Tibetan Autonomous Prefecture of Gannan, Gansu Province, China. The installed capacity is 40.2MW and the average power generation for the grid is 163,800MWh. The power generated will be connected to the Northwest China Power Grid. <u>Corrective Action Request No.1</u> As per the latest PDD guidelines (version 07), this section of the PDD should include: 1. The purpose of the project activity with a concise description (a couple of paragraphs) of:	CAR 1	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
		<p>(a) The scenario existing prior to the start of the implementation of the project activity;</p> <p>(b) The project scenario, including a summary of the scope of activities/measures that are being implemented within the proposed project activity;</p> <p>(c) The baseline scenario, as identified in section "B.4 Description of how the baseline scenario is identified and description of the identified baseline scenario". If the baseline scenario is the same as the scenario existing prior to the start of implementation of the project activity, there is no need to repeat the description of the scenarios, but only to state that both are the same.</p> <p>Explain how the proposed project activity reduces greenhouse gas emissions making reference to the scenarios, emission sources and gases described in sections "A.4.3. Technology to be employed by the project activity" and "B.3. Description of the sources and gases included in the project boundary".</p>		
<p>A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?</p>	<p>1, 2, 8,9, 10, 11, 12, 13, 14, 17, 18</p>	<p>The project activity is the displacement of electricity generated by coal fired power plants with electricity generated by hydro power. The following documents deliver evidences for the project activity:</p> <ul style="list-style-type: none"> - Feasibility study - EIA and EIA approval - Pre-approval of land expropriation - Approval of forest land <p>These documents have been evidenced during the audit.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?</p>	<p>1, 8, 9, 10,</p>	<p>During the on site audit, the audit team reviewed these proofs provided by the project owner.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PDD in GSP	Final PDD
		11, 12			
A.2.4.	Is all information presented consistent with details provided by further chapters of the PDD?	1	<u>Corrective Action Request No.2</u> The first crediting period is presented in the section A.2, obviously that is in contradiction with section C.2.2 where the fixed crediting period of max.10 years is chosen as crediting period, please resolve this contradiction.	CAR 2	<input checked="" type="checkbox"/>
A.3. Project participants					
A.3.1.	Is the form required for the indication of project participants correctly applied?	1, 2	The form is correctly applied. In Table A.1 and Annex 1 of the PDD the two parties involved in the project are mentioned.	<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	<u>Open issue:</u> The letter of approval from both parties as well MoC has not been provided. They should be provided to the DOE before submitting for registration.	Open Issue	<input checked="" type="checkbox"/>
A.3.3.	Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	1, 2	<u>Corrective Action Request No.3</u> The information on participants provided is not completely consistent with details provided in the annex 1, please resolve the inconsistency.	CAR 3	<input checked="" type="checkbox"/>
A.4. Technical description of the project activity					
A.4.1. Location of the project activity					
A.4.1.1.	Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	1,2	The proposed project activity is located in Diebu County, Autonomous Prefecture of Gannan, Gansu Province, P.R.China. <u>Corrective Action Request No.4.</u> The information provided on the location of the project activity doesn't allow for a clear identification of the site, please submit the GPS coordinates of the power houses and dam with degree,	CAR 4	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
		minute and second format.		
A.4.1.2. How is it ensured and/or demonstrated, that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	1,2, 6, 12, 14	The project was approved by the local Development and Reform Commission and the EIA of the proposed project was approved by the local Environmental Protection Bureau.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2. Category(ies) of project activity				
A.4.2.1. To which category(ies) does the project activity belonging to? Is the category correctly identified and indicated?	1,2	Yes, the project falls into scope 1, Energy industries (renewable/non-renewable sources) as it deals with energy generation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3. Technology to be employed by the project activity				
A.4.3.1. Does the technical design of the project activity reflect current good practices?	1,2, 8, 9, 25	<p>Yes, the project design reflects the current good practices based on the description in the feasibility study report and the investigation on site.</p> <p><u>Corrective Action Request No.5</u></p> <p>As per the latest PDD guidelines, this section should further explain the purpose of the project activity, as described in section "A.2. Description of the project activity", taking the information provided in that section as a basis and including a detailed description of:</p> <p>(a) The scenario existing prior to the start of the implementation of the project activity, with a list of the equipment(s) and systems in operation at that time;</p> <p>(b) The scope of activities/measures that are being implemented within the project activity, with a list of the equipment(s) and systems that will be installed and/or modified within the project activity;</p> <p>c) The baseline scenario, as identified in section "B.4 Description of how the baseline scenario is identified and description of the</p>	CAR 5	<input checked="" type="checkbox"/>

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		<p>identified baseline scenario", with an indicative list of the equipment(s) and systems that would have been in place in the absence of the project activity. If the baseline scenario is the same as the scenario existing prior to the start of implementation of the project activity, there is no need to repeat the description of the scenarios, but only to state that both are the same.</p> <p>The description of the scenarios should include, inter alia:</p> <p>(a) A list and the arrangement of the main manufacturing/production technologies, systems and equipments involved. Include in the description information about the age and average lifetime of the equipments based on manufacturer's specifications and industry standards, and existing and forecast installed capacities, load factors and efficiencies. The monitoring equipments and their location in the systems is of particular interest;</p> <p>(b) The emissions sources and the greenhouse gases involved in the project activity, according to the methodology used; and existing and forecast energy and mass flows and balances of the systems and equipments included in the project activity;</p> <p>(c) The types and levels of services (normally in terms of mass or energy flows) provided by the systems and equipments that are being modified and/or installed under the project activity and their relation, if any, to other manufacturing/production equipments and systems outside the project boundary. The types and levels of services provided by those manufacturing/production systems and equipments outside the project boundary may also constitute important parameters of the description. The description should clearly explain how the same types and levels of services provided by the project activity would have been provided in the baseline scenario.</p> <p>Finally, avoid adding information, which is not essential to under-</p>		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
		stand the purpose of the project activity and how it reduces greenhouse gases emissions. Information related to equipments, systems and activities that are auxiliary to the main scope of the project activity and do not interfere directly or indirectly with emissions of greenhouse gases and/or with mass and energy balances in the project activity should not be included.		
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, 8, 9, 25	Yes, the project activity comprises the use of water power for the substitution of grid supplied electricity mainly from coal fired plants. Therefore three units of HL290-LJ-280 turbines and three units of SF13.4-36/470 generators matched with turbine with total installed capacity of 40.2MW are utilized. 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, 8, 9, 25	No, it doesn't. There is no 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, 8, 9, 25	Yes. As the project is a hydro power project. It's clear that the technology implemented by the project activity is environmentally safe.	<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	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.6. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	1,2	Because the technology of installing a new hydropower plant has been fully developed and successfully implemented over China for decades, the technology applied in the proposed project is not different compared to that of other similar hydropower plants.	<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	It is not expected that there will be a substitution because the project will be operational in 2009. 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	1,2	With relevance to the CDM monitoring, a monitoring officer will receive training on the monitoring methodologies, procedures and	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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to be carried out as scheduled during the project period?		archiving. Then, the monitoring officer will train the project staff in charge for CDM monitoring.		
A.4.3.9. Is information available on the demand and requirements for training and maintenance?	1,2	The effort to train the employees initially and during the operation phase was described by the project owner during the audit and the demand and requirements were defined in written form.	<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	The planning schedule in the past and for the future was clearly described by the project owner during the audit, and there are no risks for any delays based on the description of project owner and onsite investigation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.4. Estimated amount of emission reductions over the chosen crediting period				
A.4.4.1. Is the form required for the indication of projected emission reductions correctly applied?	1,2	<u>Corrective Action Request No.6</u> The expression of first (Jul 2009) and last year (June 2019) in the year column is not correct, please correct it (i.e. dd/mm/yyyy). Furthermore, it is not consistent with Table B.6.4-1 of section B.6.4, please resolve the inconsistency.	CAR 6	<input checked="" type="checkbox"/>
A.4.4.2. Are the figures provided consistent with other data presented in the PDD?	1,2	Yes, they are. The yearly emission reduction is estimated to amount 138,919 tCO ₂ e. The same figure is quoted throughout the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.5. Public funding of the project activity				
A.4.5.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	1,2	According to the statement in A.4.5. of the PDD there is no public funding for the project activity. By reviewing the financial documents on-site this statement could be verified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.5.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	1,2	Yes, it is consistent with the information provided in Annex 2.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B. Application of a baseline and monitoring methodology					
B.1. Title and reference of the approved baseline and monitoring methodology					
B.1.1.	Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	1,2,3	Yes, it is ACM0002/Version 07 along with the Tool for the Demonstration and Assessment of Additionality (version 5.2) and Tool to Calculate the Emission Factor for an Electricity System(version 01.1)	<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?	1,2,3	Version 7 of ACM0002: "Consolidated baseline methodology for grid-connected electricity generation from renewable source", and version 01.1 of Tool to Calculate the Emission Factor for an Electricity System are applied, and they are most recent ones at the time of uploading for GSP. Version 5.2 of "the Tool for the Demonstration and Assessment of Additionality" are applied too.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.1.3.	Does the methodology refer to the following tools with its latest approved versions: <ul style="list-style-type: none"> - Tool to calculate the emission factor for an electricity system - Tool for the demonstration and assessment of additionality - Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion 	1, 2	Please see comments on B.1.2.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.2. Justification of the choice of the methodology and why it is applicable to the project activity					
B.2.1.	Is the applied methodology considered the most appropriate one?	1,2	Yes, the baseline and monitoring methodology ACM0002 version 7 is applicable to the proposed project, because the project meets all the applicability criteria stated in the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fill in the required amount of sub checklists for applicability criteria as given by the methodology applied and comment at least every line answered					

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CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PDD in GSP	Final PDD										
with “No”															
B.2.2.	Criterion 1: Type of electricity capacity addition by grid-connected renewable power generation The following types are possible: hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir), wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit.	1,2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	Yes	Compliance verified?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No														
Criterion discussed in the PDD?	Yes														
Compliance provable?	Yes														
Evidences provided in the PDD?	Yes														
Compliance verified?	Yes														
B.2.3.	Criterion 2 (in the case of hydro plants): -The project activity is implemented in an existing reservoir, with no change in the volume of reservoir or -The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity is greater than 4 W/m2 or -The project activity results in new reservoirs and the power density of the power plant is greater than 4 W/m2.	1,2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table> <p>The proposed project activity results in new reservoirs and power density is greater than 4W/m2.</p>	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 (in the case of modification/retrofit in existing power plants): 5 years of historical data (or 3 years in the case of non hydro project activities) are available	1,2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>N/A</td></tr><tr><td>Compliance provable?</td><td>N/A</td></tr><tr><td>Evidences provided in the PDD?</td><td>N/A</td></tr><tr><td>Compliance verified?</td><td>N/A</td></tr></table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	N/A	Compliance provable?	N/A	Evidences provided in the PDD?	N/A	Compliance verified?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No														
Criterion discussed in the PDD?	N/A														
Compliance provable?	N/A														
Evidences provided in the PDD?	N/A														
Compliance verified?	N/A														

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B.2.5. Criterion 4: Defined electricity grid boundaries	1,2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	Yes	Compliance verified?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	Yes													
Compliance provable?	Yes													
Evidences provided in the PDD?	Yes													
Compliance verified?	Yes													
B.2.6. Criterion 5: Approved inclusion in other methodologies (if applied only)	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
B.2.7. Criterion 6: Exclusion of fuel switching activities	1,2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>Yes</td></tr><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.2.8. Criterion 7: Exclusion of biomass fired power plants	1,2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	Yes	Compliance verified?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	Yes													
Compliance provable?	Yes													
Evidences provided in the PDD?	Yes													
Compliance verified?	Yes													

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B.2.9. Criterion 8: Exclusion of hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the power plant is less than 4 W/m2.	1,2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>No</td></tr><tr><td>Compliance provable?</td><td>No</td></tr><tr><td>Evidences provided in the PDD?</td><td>No</td></tr><tr><td>Compliance verified?</td><td>No</td></tr></table> <u>Corrective Action Request No.7</u> The proposed project is newly built based on the onsite investigation, please mention it in the B.1of the PDD.	Applicability checklist	Yes / No	Criterion discussed in the PDD?	No	Compliance provable?	No	Evidences provided in the PDD?	No	Compliance verified?	No	CAR 7	☑
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	No													
Compliance provable?	No													
Evidences provided in the PDD?	No													
Compliance verified?	No													
B.3. Description of the sources and gases included in the project boundary														
Integrate the required amount of sub-checklists for sources and gases as given by the methodology applied and comment on at least every line answered with “No”														
B.3.1. Source: Fugitive Emissions from non-condensable gases contained in geothermal steam (geothermal power plants only) Gas(es): CO ₂ , CH ₄ Type: Project Emissions	1,2	<table><tr><th>Boundary checklist</th><th>Yes / No</th></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> The project consists of a grid-connected electricity generation from a hydropower station. Thus, B.3.1. is not applicable.	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	☑	☑
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.3.2. Source: Emissions from combustion of fossil fuels required to operate the geothermal power plant (geothermal power plants only) Gas(es): CO ₂ Type: Project Emissions	1,2	<table><tr><th>Boundary checklist</th><th>Yes / No</th></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	☑	☑
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.3.3. Source: Emissions from the reservoir (hydro power plants only) Gas(es): , CH ₄ Type: Project Emissions	1,2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed by the PDD?</td><td>Yes</td></tr><tr><td>Inclusion / exclusion justified?</td><td>Yes</td></tr><tr><td>Explanation / Justification sufficient?</td><td>Yes</td></tr><tr><td>Consistency with monitoring plan?</td><td>Yes</td></tr></table> <p>The power density of proposed project is greater than 10W/m2, thus emissions from the reservoir can be excluded.</p>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	Yes	Consistency with monitoring plan?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	Yes													
Inclusion / exclusion justified?	Yes													
Explanation / Justification sufficient?	Yes													
Consistency with monitoring plan?	Yes													
B.3.4. Source: Emissions from electricity generation in fossil fuel fired power plants that is displaced due to the project activity Gas(es): CO ₂ Type: Baseline Emissions	1,2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed by the PDD?</td><td>Yes</td></tr><tr><td>Inclusion / exclusion justified?</td><td>Yes</td></tr><tr><td>Explanation / Justification sufficient?</td><td>Yes</td></tr><tr><td>Consistency with monitoring plan?</td><td>Yes</td></tr></table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	Yes	Consistency with monitoring plan?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	Yes													
Inclusion / exclusion justified?	Yes													
Explanation / Justification sufficient?	Yes													
Consistency with monitoring plan?	Yes													
B.3.5. Source: Emissions from electricity generation in fossil fuel fired power plants of any connected electricity system Gas(es): CO ₂ Type: Baseline Emissions	1,2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed by the PDD?</td><td>Yes</td></tr><tr><td>Inclusion / exclusion justified?</td><td>Yes</td></tr><tr><td>Explanation / Justification sufficient?</td><td>Yes</td></tr><tr><td>Consistency with monitoring plan?</td><td>Yes</td></tr></table>	Boundary checklist	Yes / No	Source and gas(es) discussed by the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	Yes	Consistency with monitoring plan?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed by the PDD?	Yes													
Inclusion / exclusion justified?	Yes													
Explanation / Justification sufficient?	Yes													
Consistency with monitoring plan?	Yes													
B.3.6. Source: Emissions from electricity generation in fossil fuel fired power plants of imported electricity (project electricity consumption) Gas(es): CO ₂	1,2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed by the PDD?</td><td>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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		There are no imports from other power grids. Thus B.3.6 is not applicable.		
B.3.7. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by the PDD?	1,2	<p>Yes. The project boundary for the proposed project is represented by the Northwest China Power Grid. The Northwest China Grid is a larger regional grid, which consists of five sub-grids: Shaanxi Province, Gansu Province, Qinghai Province, Ningxia Autonomous Region and Xinjiang Autonomous Region. Furthermore the project boundary includes the project site.</p> <p><u>Corrective Action Request No.8</u></p> <p>As per the latest PDD guidelines, in addition to the table, please present a flow diagram of the project boundary, physically delineating the project activity, based on the descriptions provided in section "A.4.3. Technology to be employed by the project activity". Include in the flow diagram all the equipments, systems and flows of mass and energy described in that section. Particularly, represent in the diagram the emissions sources and gases included in the project boundary and the monitoring variables.</p>	CAR 8	<input checked="" type="checkbox"/>
B.4. Description of how the baseline scenario is identified and description of the identified baseline scenario				
B.4.1. Is it clearly described that the baseline is represented by the combined margin of the grid the activity will be connected to?	1,2	<p>Yes, the baseline is represented by the combined margin of the grid the activity will be connected to. It is the equivalent annually generated electricity supplied by the Northwest China Power Grid.</p> <p><u>Corrective Action Request No.9</u></p> <p>1) The project's IRR without CDM revenues in the section B.4 is 4.32%, but it is 5.55% in the section B.5 of the PDD, please resolve the inconsistency.</p> <p>2) Some words in the footnote 1 are wrongly spelled, please correct it.</p>	CAR 9	<input checked="" type="checkbox"/>

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B.4.2.	In case of any modification or retrofit of existing facilities: Is data available to determine the historic production level?	1,2	N/A	<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	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Changes required for methodology implementation in 2 nd and 3 rd crediting periods					
B.4.4.	Has the continued validity of the baseline been correctly assessed?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.5.	Has the baseline been updated with new data?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (assessment and demonstration of additionality):					
B.5.1.	In case the project activity started before the validation activity, how is demonstrated that the CDM was seriously taken into account for the decision to start the project?	1,2, 19	<p>The project already started before the validation activity based onsite investigation.</p> <p><u>Corrective Action Request No.10</u></p> <p>As per the latest PDD guidelines, please discuss the early CDM consideration in this section of the PDD.</p> <p>In such cases project proponents shall provide an implementation timeline of the proposed CDM project activity. The timeline should include, where applicable, the date when the investment decision was made, the date when construction works started, the date when commissioning started and the date of start-up (e.g. the date when commercial production started). In addition to this im-</p>	CAR 10 CR 1	<input checked="" type="checkbox"/>

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		<p>plementation timeline project participants shall provide a timeline of events and actions which have been taken to achieve CDM registration, with description of the evidence used to support these actions. These timelines will allow the DOE to assess the serious consideration of the CDM in the project decision making process and project implementation.</p> <p>As per the latest guidance on early CDM consideration (EB41, Annex 46), it should be demonstrated clearly that that the CDM was seriously considered in the decision to implement the project activity. Such demonstration requires the following elements to be satisfied:</p> <p>(a) The project participant must indicate awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project. Evidence to support this would include, inter alia, minutes and/or notes related to the consideration of the decision by the Board of Directors, or equivalent, of the project participant, to undertake the project as a CDM project activity.</p> <p>(b) The project participant must indicate, by means of reliable evidence, that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation. Evidence to support this should include, inter alia, contracts with consultants for CDM/PDD/methodology services, Emission Reduction Purchase Agreements or other documentation related to the sale of the potential CERs (including correspondence with multilateral financial institutions or carbon funds), evidence of agreements or negotiations with a DOE for validation services, submission of a new methodology to the CDM Executive Board, publication in newspaper, interviews with DNA, earlier correspondence on the project with the DNA or the UNFCCC secretariat;</p> <p><u>Clarification Request No.1</u></p>		

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			Please deliver the evidences that demonstrate that the CDM was seriously taken into account for the decision to start the project to the DOE.		
Step 1					
B.5.2.	Are alternative scenarios defined that provide outputs or services comparable with the proposed CDM project activity?	1,2	Yes, the alternative scenarios defined provide outputs that are comparable with this project activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.3.	Can be the list of alternatives considered to be complete, why? Is the scenario project activity without being registered as CDM project included?	1,2	<u>Corrective Action Request No.11</u> The list in section B.5 (step 1) is not consistent with the list presented in section B.4 of the PDD. Please revise and be consistent.	CAR 11	<input checked="" type="checkbox"/>
B.5.4.	In case several different facilities, technologies, outputs or services are present in the project, are separately alternative scenarios for each of them included? Have realistic combinations been considered as project scenario?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.5.	Describe why the alternative scenarios are credible and realistic?	1,2	All alternatives are common in China. Therefore, they can be considered as plausible and realistic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.6.	Do the alternative scenarios comply with mandatory laws and regulations?	1,2, 32, 36	Only alternative scenario i, iii and iv do comply with the laws and regulations of China	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.7.	If an scenario does not comply with the mandatory laws and regulations, it is clearly demonstrate that the law and/or regulation is systematically not enforced in the country?	1,2	All the laws quoted in the PDD are enforced in this project; hence, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Step 2 (could be optional if step 3 is used)					

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B.5.8. Is the analysis method identified appropriately?	1,2	3 analysis methods are provided according to the additionality tool. Because the proposed project generates economic benefits through the sales of electricity other than CDM revenue, it deems that Option III (benchmark analysis) is the only applicable one (as option II (investment comparison analysis) only applies to projects where alternatives should be similar investment projects.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.9. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?	1,2	The simple cost analysis is not applicable for the proposed project because the project activity will produce economic benefit (from electricity sale) other than CERs income.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.10. 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	Option III is chosen for the investment analysis. So this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.11. In case of use of IRR, it is clearly demonstrated why is equity of project IRR used?	1,2	The project IRR was used in the FSR and PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.12. 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, 8, 9	Yes, the project IRR is selected as the most suitable financial indicator.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.13. How is demonstrate that the benchmark represents standard returns in the market, considering the specific risk of the project type, but not linked to the subjective profitability The benchmark is to represent standard returns in the market, considering the specific risk of the project type, but not linked to the subjective profitability expectation or risk profile of a	1, 2, 8, 9, 40	<p>The benchmark IRR used in the PDD is 8%, and its source is Interim Rules on Economic Assessment of Electrical Engineering Retrofit issued by China Electric Power Press in 2003.</p> <p><u>Clarification Request No.2</u></p> <p>1) Please make explanation in the PDD why this benchmark IRR document and benchmark IRR of 8% can be applied for the proposed project.</p> <p>2) Please deliver this benchmark IRR document with translation</p>	CR 2	<input checked="" type="checkbox"/>

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particular project developer?		to the DOE.		
B.5.14. In case of company internal benchmark, is it clearly demonstrate that there is only one potential project developer and that the benchmark has been consistently used in the past?	1, 2, 8, 9, 40	The company internal benchmark is not applied, thus the section B.5.14 is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.15. 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?	1,2,8,9	<p><u>Corrective Action Request No.12:</u></p> <p>According to EB 39, only the relevant information that were available at the time of the investment decision can be used in all investment analysis, hence, please exclude any information that were not available at the time of the investment decision from the investment analysis in section B.5 of the PDD.</p> <p><u>Clarification Request No.3</u></p> <p>1) The relevant documents that indicate the input values used for investment analysis should be provided in English and delivered to the DOE.</p> <p>2) IRR calculation spreadsheet should be delivered to the DOE, and all data quoted in the sheet should be carefully checked with the data source.</p>	CAR 12 CR 3	<input checked="" type="checkbox"/>
B.5.16. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	1,2,8,9	Please see CAR 12 and CR 3	See CAR 12 and CR 3	<input checked="" type="checkbox"/>
B.5.17. Are all assumptions and input data clearly presented, documented, evidenced and consistent with the rest of the PDD?	1,2,8,9	Please see CAR 12 and CR 3	See CAR 12 and CR 3	<input checked="" type="checkbox"/>
B.5.18. Does the sensitivity analysis shows that the conclusion is robust to reasonable	1,2	<u>Corrective Action Request No.13</u>	CAR 13	<input checked="" type="checkbox"/>

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variations in the critical assumptions?		Please include variation of electricity generation as parameter into sensitivity analysis.		
B.5.19. How is demonstrate that this variations have been adequately taken (range is adequate)?	1,2	<u>Clarification Request No.4</u> Justification for variations range should be explained in the PDD.	CR 4	<input checked="" type="checkbox"/>
Step 3 (is mandatory if step 2 is not used or does not shows additionality)				
B.5.20. Is a complete list of barriers developed that prevent the different alternatives to occur?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.21. Is transparent and documented evidence provided on the existence and significance of these barriers?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.22. Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.23. How is confirmed that the CDM does alleviate the barriers presented?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Step 4				
B.5.24. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD?	1,2, 44	<u>Corrective Action Request No.14.</u> 1) The justification for selected geographical boundary, capacity boundary should be provided in the PDD. 2) The latest version of Yearbook of China Water Resources should be applied. 3) Similar scale defined in the Table B.5-5 is 25MW -80MW, but it is 25MW-60MW defined in the paragraph above the Table B.5-5, please resolve the inconsistency. <u>Clarification Request No.5</u>	CAR 14 CR 5	<input checked="" type="checkbox"/>

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		Reference documents and data sources should be delivered to the DOE.		
B.5.25. 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	See B.5.24, CAR 14 and CR 5.	See CAR 14 and CR 5	<input checked="" type="checkbox"/>
B.6. Emissions reductions				
<i>B.6.1. Explanation of methodological choices</i>				
B.6.1.1. Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	1, 2, 3	The following steps are described in a transparent manner: -Step 1: calculation of emission reduction -Step 2: calculation of baseline emissions -Step 3: calculation of project emissions -Step 4: calculation of leakage emissions.	<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, 3	Yes, every selection of options offered by the methodology is correctly justified and this justification is in line with the situation verified on-site.	<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, 3	Not applicable The project activity is a hydropower project. Therefore, according to the ACM0002 methodology, greenhouse gas emissions from the project activity are zero, i.e. $PE_y = 0$.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.4. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1, 2, 3	Yes, see Equation in section B.6.1 of the PDD. $BE_y = EG_y \times EF_y$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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nitored?		Yes, the formulae are correctly presented.		
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, 3	Yes, the choice of options to determine the Emission Factor is fully justified in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.6. Are the six steps as defined per the "Tool for calculation of emission factor for electrical systems" correctly applied by the project participants?	1, 2, 3	Yes, the six steps are correctly applied.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.7. 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, 3	Not applicable. The default weights for hydro power projects in the 7 th version of ACM0002 (OM 0.5 and BM 0.5 respectively) are used.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.8. 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, 3	Not applicable. See B.6.1.7.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.9. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1, 2, 3	No leakage is considered according to the methodology. Based on ACM0002, project participants do not need to consider leakage in applying ACM0002 methodology, i.e. $L_y=0$.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tool to calculate project or leakage CO2 emissions from fossil fuel combustion				
B.6.1.10. Is the formula required for the determination of CO2 project emissions from fossil fuel combustion correctly presented, enabling a complete identification of parameter to be used and / or monitored	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.11. Is option A (preferred approach) or option	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B chosen for the determination of the CO ₂ emission coefficient COEF _{i,y} and is COE-F _{i,y} correctly determined?				
B.6.1.12. Are formulae required for the determination of emission reductions correctly presented?	1,2	Yes, see Equation in the section B.6.1 of the PDD. $ER_y = BE_y - PE_y - L_y$	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.2. Data and parameters that are available at validation				
B.6.2.1. Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the applied methodology?	1,2	Yes. A list of parameters is presented according to ACM0002.	<input checked="" type="checkbox"/>	<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	For the calculation of the emission reductions the ex-ante approach has been used.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fill in the required amount of sub checklists for monitoring parameter and comment any line answered with "No"				
B.6.2.3. Parameter Title: GWP _{CH₄} Global warming potential of methane valid for the relevant commitment period (tCO ₂ /tCH ₄)	1,2	Data Checklist	Yes / No	<input checked="" type="checkbox"/>
		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	

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B.6.2.4. Parameter Title: $EG_{\text{historical}}$ (only applicable to modification/retrofit of an existing grid-connected renewable power plant/unit) Average of historical electricity delivered by the existing facility to the grid (MWh)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><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?</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></table> <p>The project is a new hydropower plant, hence, this parameter is not applicable.</p>	Data Checklist	Yes / No	Title in line with methodology?	N/A	Data unit correctly expressed?	N/A	Appropriate description?	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?	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.6.2.5. Parameter Title: $DATE_{\text{BaselineRetrofit}}$ (only applicable to modification/retrofit of an existing grid-connected renewable power plant/unit) Point in time when the existing equipment would need to be replaced in the absence of the project activity	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><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?</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></table> <p>The project is a new hydropower plant, hence, this parameter is not applicable.</p>	Data Checklist	Yes / No	Title in line with methodology?	N/A	Data unit correctly expressed?	N/A	Appropriate description?	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?	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.6.2.6. Parameter Title: EF_{Res} (only applicable to hydro-power plants with reservoir) Default emission factor for emissions from reservoirs (kgCO2e/MWh)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><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></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	<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																					

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		<table><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></table> <p>The project is a new hydropower plant , and its power density is-greater than 10W/m2, hence, no project emission is considered according to the applied methodology, thus, this parameter is not applicable.</p>		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												
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.6.2.7. Parameter Title: CAP _{BL} (W) (only applicable to modification/retrofit of an existing grid-connected renewable power plant/unit) Installed capacity of the hydro power plant before the implementation of the project activity. For new hydro power plants, this value is zero.	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><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></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.																						

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B.6.2.8. Parameter Title: A _{BL} (only applicable to hydropower plant projects with reservoir) Area of the reservoir measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m2). For new reservoirs, this value is zero (m ²).	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><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></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.6.2.9. Parameter Title: Emission factor of the grid (EF _{CM} in tCO ₂ /MWh)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table> <p><u>Corrective Action Request No.15:</u> This factor should be included in the table in section B.6.2 of the PDD.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	CAR 15	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					
B.6.2.10. Parameter Title: Operating margin (EF _{OM} in tCO ₂ /MWh) emission factor of the grid	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description?</td><td>Yes</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description?	Yes	CAR 16	<input checked="" type="checkbox"/>										
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description?	Yes																					

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		<table> <tr><td>Source clearly referenced?</td><td>Yes</td></tr> <tr><td>Correct value provided?</td><td>Yes</td></tr> <tr><td>Has this value been verified?</td><td>Yes</td></tr> <tr><td>Choice of data correctly justified?</td><td>Yes</td></tr> <tr><td>Measurement method correctly described?</td><td>Yes</td></tr> </table> <p>The simple OM method was chosen to calculate the OM.</p> <p><u>Corrective Action Request No.16:</u> This factor should be included in the table in section B.6.2 of the PDD. The value of this factor should be equal to the latest emission factors published by the NDRC for the NW China Power Grid.</p>	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes											
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.11. Parameter Title: Build margin ($EF_{BM}^{intCO_2}/MWh$) emission factor of the grid	1,2	<table> <tr> <th>Data Checklist</th> <th>Yes / No</th> </tr> <tr><td>Title in line with methodology?</td><td>Yes</td></tr> <tr><td>Data unit correctly expressed?</td><td>Yes</td></tr> <tr><td>Appropriate description of parameter?</td><td>Yes</td></tr> <tr><td>Source clearly referenced?</td><td>Yes</td></tr> <tr><td>Correct value provided?</td><td>Yes</td></tr> <tr><td>Has this value been verified?</td><td>Yes</td></tr> <tr><td>Choice of data correctly justified?</td><td>Yes</td></tr> <tr><td>Measurement method correctly described?</td><td>Yes</td></tr> </table> <p>$EF_{BM,y}$ is calculated as the generation weighted average emission factor (measured in tCO₂e/MWh) of a sample of m power plants.</p> <p><u>Corrective Action Request No.17:</u> This factor should be included in the table in section B.6.2 of the PDD. The value of this factor should be equal to the latest emission factors published by the NDRC for the NW China Power Grid at the commencement of this validation.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes		CAR 17	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						

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B.6.2.12. Parameter Title: $FC_{i,m,y}$, $FC_{i,y}$, $FC_{i,j,y}$, $FC_{i,k,y}$, $FC_{i,n,y}$ and $FC_{i,n,h}$ Amount of fossil fuel type i consumed by power plant / unit m,j,k or n (or in the project electricity system in case of $FC_{i,y}$) in year y or hour h (mass or volume unit)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table> <u>Corrective Action Request No.18:</u> There is clearly a mismatch between the parameter and its description, please resolve it.	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	No	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	CAR 18	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	No																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					
B.6.2.13. Parameter Title: $NCV_{i,y}$ Net calorific value (energy content) of fossil fuel type i in year y (GJ / mass or volume unit)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table> <u>Corrective Action Request No.19:</u> There is clearly a mismatch between the parameter and its description, please resolve it.	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	No	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	CAR 19	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	No																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					
B.6.2.14. Parameter Title: $EF_{CO_2,i,y}$ and $EF_{CO_2,m,i,y}$ CO2 emission factor of fossil fuel type i in year y (tCO2/GJ)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>														
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					

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		<table><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>		Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.15. Parameter Title: EG _{m,y} , EG _y , EG _{j,y} , EG _{k,y} and EG _{n,h} Net electricity generated and delivered to the grid by power plant / unit m,j,k or n (or in the project electricity system in case of EG _y) in year y or hour h (MWh)	1,2	<table><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>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table> <u>Corrective Action Request No.20:</u> There is clearly a mismatch between the parameter and its description, please resolve it.		Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	CAR 20	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	No																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.16. Parameter Title: EG _{PJ,h} Electricity displaced by the project activity in hour h of year y (in MWh) (only applicabe for the dispatch data OM)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><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></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	<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																						

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		Choice of data correctly justified?	N/A																				
		Measurement method correctly described?	N/A																				
B.6.2.17. Parameter Title: $\eta_{m,y}$ Average net energy conversion efficiency of power unit m in year y	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><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></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.6.2.18. Parameter Title: fraction of time with low costs /must run plant at the margin (for simple adjusted OM only)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>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></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.6.3. Ex-ante calculation of emission reductions																							
B.6.3.1. Is the projection based on the same procedures as used for future monitoring?	1,2	Yes, it is.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
B.6.3.2. Are the GHG calculations documented in a complete and transparent manner?	1,2	Yes, they are		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
B.6.3.3. Is the calculation of the operating margin and build margin emission factors documented electronically in a	1,2	Yes, it is documented electronically, but the spreadsheet has not been submitted to the validation team.		CR 6	<input checked="" type="checkbox"/>																		

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spreadsheet with the relevant information as defined per the "Tool for calculation of emission factor for electrical systems"? Has this spreadsheet been submitted to the validation team?		<u>Clarification Request No.6.</u> Please deliver the spreadsheet of calculation of the operating margin and build margin emission factors to the DOE.		
B.6.3.4. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1,2	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4. Summary of the ex-ante estimation of emission reductions				
B.6.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1,2	Yes, the project definitely will result in fewer GHG emissions than the baseline scenario.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	1,2	Yes, the form is correctly applied.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1,2	The life time of the project is expected to be 25 years and fixed crediting period of 10 is chosen. The yearly emission reduction and total emission reductions indicated in B.6.4. of the PDD.	<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	No, please see B.4.4.1 CAR 6	See CAR 6	<input checked="" type="checkbox"/>
B.7. Application of the monitoring methodology and description of the monitoring plan				
B.7.1. Data and parameters monitored				
B.7.1.1. Is the list of parameters presented by chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	1,2	Because the ex-ante approach is adopted, the net electricity fed to the grid is required to be monitored. This parameter has been included in table B.7.1 in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Integrate the required amount of sub-checklists for monitoring parameter and comment on any line answered with “No”																												
B.7.1.2. Parameter Title: EGy Electricity supplied by the project activity to the grid (in MWh)	1,2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	No	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes	CAR 21 CR 7	<input checked="" type="checkbox"/>
		Monitoring Checklist	Yes / No																									
		Title in line with methodology?	Yes																									
		Data unit correctly expressed?	Yes																									
		Appropriate description of parameter?	Yes																									
		Source clearly referenced?	Yes																									
		Correct value provided for estimation?	Yes																									
		Has this value been verified?	Yes																									
		Measurement method correctly described?	Yes																									
		Correct reference to standards?	Yes																									
		Indication of accuracy provided?	No																									
		QA/QC procedures described?	Yes																									
		QA/QC procedures appropriate?	Yes																									
		<u>Corrective Action Request No.21</u> 1) The indication of accuracy should be provided. 2) EGout and EGIN presented in the column of comments should be EGout, y and EGIN,y respectively, and the same mistake is shown up in the section B.7.2, please correct it. 3) The data should be kept for at least 2 years after the end of the last crediting period, but not 2 years after the last issuance of CERs for the proposed project activity, please correct it. 4) Any electricity measurement should be continuous, as per the methodology																										
<u>Clarification Request No.7</u> It is not clear to the validation team why the electricity imported from the grid would be considered as project emissions when these emissions are equal to or more than 1% of baseline emissions, please clarify it.																												

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B.7.1.3. Parameter Title: TEGy Total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year y (in MWh).	1,2	<table><tr><th>Monitoring 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 for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table> <u>Corrective Action Request No.22</u> The parameter should be added to the table in section B.7.1 of the PDD.	Monitoring 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 for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR 22	<input checked="" type="checkbox"/>
Monitoring 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 for estimation?	No																											
Has this value been verified?	No																											
Measurement method correctly described?	No																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.1.4. Parameter Title: EF _{grid,CM,y} Combined margin CO2 emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system” (tCO2/MWh)	1,2	Not applicable, as this protocol refers to the ex-ante determination of CM. <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><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></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"/>
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																											

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B.7.1.5. Parameter Title: PEFC _{j,y} CO2 emissions from fossil fuel combustion in process j during the year y (tCO2/yr). Calculated as per the latest version of the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion"	1,2	Monitoring Checklist	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		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		
B.7.1.6. Parameter Title: Cap _{PJ} (only applicable to hydropower plant projects) Installed capacity of the hydro power plant after the implementation of the project activity (W).	1,2	Monitoring Checklist	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Yes / No		
		Title in line with methodology?		
		Yes		
		Data unit correctly expressed?		
		Yes		
		Appropriate description of parameter?		
		Yes		
		Source clearly referenced?		
		Yes		
		Correct value provided for estimation?		
		Yes		
		Has this value been verified?		
		Yes		
		Measurement method correctly described?		
		Yes		
		Correct reference to standards?		
		Yes		
		Indication of accuracy provided?		
		Yes		
		QA/QC procedures described?		
		Yes		
		QA/QC procedures appropriate?		
		Yes		

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B.7.1.7. Parameter Title: A_{PJ} (only applicable to hydropower plant projects with reservoir) Area of the reservoir measured in the surface of the water, after the implemenation of the project activity, when the reservoir is full (m ²).	1,2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	Yes	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	Yes																											
Correct value provided for estimation?	Yes																											
Has this value been verified?	Yes																											
Measurement method correctly described?	Yes																											
Correct reference to standards?	Yes																											
Indication of accuracy provided?	Yes																											
QA/QC procedures described?	Yes																											
QA/QC procedures appropriate?	Yes																											
B.7.1.8. Parameter Title: w_{Main,CO_2} Average mass fraction of CO ₂ in the produced steam tCO ₂ /t steam (for geothermal projects only)	1,2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>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></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"/>
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																											
B.7.1.9. Parameter Title: w_{Main,CH_4}	1,2		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																								

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Average mass fraction of CH ₄ in the produced steam (tCH ₄ /t steam). for geothermal projects only)		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		
B.7.1.10. Parameter Title: M _{S,y} Quantity of steam produced during the year y. (for geothermal projects only)	1,2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		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		
Parameters related to the "Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion"					

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B.7.1.11. Parameter Title: Quantity of fuel type i combusted in process j during the year y FCi,j,y	1,2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><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></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"/>
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																												
B.7.1.12. Parameter title: Weighted average mass fraction of carbon in fuel type i in year y WC,i,y	1,2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><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></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"/>
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																												
B.7.1.13. Parameter title: Weighted average density of fuel type i in year y ρi,y	1,2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><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></table>		Monitoring Checklist	Yes / No	Title in line with methodology?	N/A	Data unit correctly expressed?	N/A	Appropriate description of parameter?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
Monitoring Checklist	Yes / No																												
Title in line with methodology?	N/A																												
Data unit correctly expressed?	N/A																												
Appropriate description of parameter?	N/A																												

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		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		
B.7.1.14. Parameter title: Weighted average net calorific value of fuel type i in year y NCV _{i,y}	1,2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		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		
B.7.1.15. Parameter title: Weighted average CO2 emission factor of fuel type i in year y EF _{CO2,i,y}	1,2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		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		

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		Indication of accuracy provided?	N/A	
		QA/QC procedures described?	N/A	
		QA/QC procedures appropriate?	N/A	
B.7.2. Description of the monitoring plan				
B.7.2.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?	1,2	Yes, it is. See B.7.2 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1,2	Yes, the responsibilities and institutional arrangements for data collection and archiving are clearly provided. See B.7.2 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.3. Does the monitoring plan provide current good monitoring practice?	1,2	<u>Corrective Action Request No.23</u> Please show or describe in the PDD the exact location of the meter(s), who owns the meters and what type of emergency plan is installed if one or both meters fail.	CAR 23	<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	There is no additional information provided in the annex4.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8. Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)				
B.8.1. Is there any indication of a date when the baseline was determined?	1	Yes, the baseline determination is dated 20/12/2007 according to the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.2. Is this consistent with the time line of the PDD history?	1	Yes, it is. See also A.1.3.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.3. Is the information on the person(s) / entity(ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situa-	1	Ms. MSc Ir. Malgorzata Sieniuc and Ms. Huan Wang determined the monitoring methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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tion?					
B.8.4.	Is information provided whether this person / entity is also considered a project participant?	1	<u>Corrective Action Request No.24:</u> The information should be provided whether the persons mentioned in the B.8 of the PDD is also considered a project participant.	CAR 24	<input checked="" type="checkbox"/>
C. Duration of the project activity / crediting period					
C.1. Duration of the project activity					
C.1.1.	Are the project's starting date and operational lifetime clearly defined and reasonable?	1	The project's starting date is given as 12/12/2006 and the operational lifetime is expected to be 25 years. <u>Corrective Action Request No.25:</u> 1) According to the document provided by the project owner, the project's starting date provided in the section C.1.1 is not correct, please correct it. 2) A description of how this start date has been determined, and a description of the evidence available to support this start date should be included in the PDD.	CAR 25	<input checked="" type="checkbox"/>
C.2. Choice of the crediting period and related information					
C.2.1.	Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1	Fixed crediting period of max.10 years is chosen as the crediting period, and it is reasonable because the expected operational lifetime of the project activity is 25 years.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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D. Environmental impacts					
D.1. Documentation on the analysis of the environmental impacts, including transboundary impacts					
D.1.1.	Has the analysis of the environmental impacts of the project activity been sufficiently described?	1, 13, 14	Yes, the environmental impacts of the project activity have been clearly described.	<input checked="" type="checkbox"/>	<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, 13, 14	Yes, the EIA is a must in the P. R. China for new hydro power projects. The EIA of the proposed project was approved by the local Environment Protection Bureau	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.3.	Will the project create any adverse environmental effects?	1, 13, 14	Referred to the EIA and the approval of EIA, the project will create very minor negative environmental impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.4.	Were transboundary environmental impacts identified in the analysis?	1, 13, 14	There is no trans-boundary impact described in EIA report or approval of EIA. <u>Clarification Request No.8:</u> Please clarify if there are transboundary environmental impacts involved with the project activity.	CR 8	<input checked="" type="checkbox"/>
D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party					
D.2.1.	Have the identified environmental impacts been addressed in the project design sufficiently?	1, 13, 14	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"/>
D.2.2.	Does the project comply with environmental legislation in the host country?	1, 13,	Yes, the project is in conformity with the environmental legislation of the P. R. China and the EIA has been approved by authorized	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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	14	organization.		
E. Stakeholders' comments				
E.1. Brief description how comments by local stakeholders have been invited and compiled				
E.1.1. Have relevant stakeholders been consulted?	1, 13, 14	Yes, relevant stakeholders have been consulted in 2007.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	1, 13, 14	Questionnaires, newspaper as well as internet have been used to invite comments by local stakeholders. <u>Corrective Action Request No.26:</u> Please describe in the PDD in more detail when the first survey was taken place to invite the comments by the local stakeholders. Please also describe in more detail what media has been used to invite the comments.	CAR 26	<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, 13, 14	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, 13, 14	Yes, the process is described in a complete and transparent manner. See CAR 26(section E.1.2 of the protocol).	See CAR 26	<input checked="" type="checkbox"/>
E.2. Summary of the comments received				
E.2.1. Is a summary of the stakeholder comments received provided?	1, 13, 30,	Yes, a summary of the stakeholder comments received was provided.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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	31			
E.3. Report on how due account was taken of any comments received				
E.3.1. Has due account been taken of any stakeholder comments received?	1, 13, 30, 31	Referring to the PDD and filled questionnaires which were gathered from participants and reviewed by the auditor on site. The project owner made a quick response in views of the questions reflected in the stakeholder questions and will ensure sufficient investment to be used for fulfilling the requirements established in the EIA and relevant environmental standards.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F. Annexes 1 – 4				
Annex 1: Contact Information				
F.1.1. Is the information provided consistent with the one given under section A.3?	1	No, please see A.3.3 CAR 3	See CAR 3	<input checked="" type="checkbox"/>
F.1.2. Is the information on all private participants and directly involved Parties presented?	1	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Annex 2: Information regarding public funding				
F.1.3. Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?	1	No public funding is involved in this project activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.4. If necessary: Is an affirmation available that any such funding from Annex-I-countries does not result in a diversion of ODA?	1	N.A., see F.1.3.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Annex 3: Baseline information					
F.1.5.	If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	1,2	Yes, the information is consistent with data presented by other section of the PDD.	<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, the data provided is verifiable, and evidence has been provided to the validation team. Nevertheless please see B.6.3.3 CR 6.	See CR 6	<input checked="" type="checkbox"/>
F.1.7.	Does the additional information substantiate / support statements given in other sections of the PDD?	1,2	Yes, it does.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Annex 5: Monitoring information					
F.1.8.	If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	1	No additional background information is provided.	<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	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	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
CARs			
<p><u>Corrective Action Request No.1</u></p> <p>As per the latest PDD guidelines (version 07), this section of the PDD should include:</p> <ol style="list-style-type: none"> 1) The purpose of the project activity with a concise description (a couple of paragraphs) of: <ol style="list-style-type: none"> A) The scenario existing prior to the start of the implementation of the project activity; B) The project scenario, including a summary of the scope of activities/measures that are being implemented within the proposed project activity; C) The baseline scenario, as identified in section "B.4 Description of how the baseline scenario is identified and description of the identified baseline scenario". If the baseline scenario is the same as the scenario existing prior to the start of implementation of the project activity, there is no need to repeat the description of the scenarios, but only to state that both are the same. <p>Explain how the proposed project activity reduces greenhouse gas emissions making reference to the scenarios, emission sources and gases described in sections "A.4.3. Technology to be employed by the project activity" and "B.3. Description of the sources and gases included in the project boundary".</p>	A.2.1	Text modified in the PDD.	<input checked="" type="checkbox"/> <p>Conclusion:</p> <p>The text is modified accordingly and the latest PDD is in line with the current PDD guidelines (Version 07).</p>
<p><u>Corrective Action Request No.2</u></p> <p>The first crediting period is presented in the section A.2, obviously that is in contradiction with section C.2.2 where the fixed crediting period of max.10 years is chosen as crediting period, please resolve this contradiction.</p>	A.2.4	<p>First response:</p> <p>Corrected.</p> <p>Second response (wrt follow-up 1):</p> <p>Corrected.</p>	<input checked="" type="checkbox"/> <p>Follow-up 1:</p> <p>This is not fixed yet.</p> <p>Conclusion:</p>

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
			The PDD was revised accordingly. The fixed crediting period of 10 years is consistently chosen and indicated.
<u>Corrective Action Request No.3</u> The information on participants provided is not completely consistent with details provided in the annex 1, please resolve the inconsistency.	A.3.3 F.1.1	Corrected.	<input checked="" type="checkbox"/> Conclusion: The information is consistent in the revised PDD.
<u>Corrective Action Request No.4.</u> The information provided on the location of the project activity doesn't allow for a clear identification of the site, please submit the GPS coordinates of the power houses and dam with degree, minute and second format.	A.4.1.1	The exact geographical coordinates of the proposed project have been added in section A.4.1.1. The geographical coordinates of the dam are 104°02'11" E and 33°53'18" N, and the geographical coordinates of the powerhouse are 104°03'23" E and 33°53'46" N.	<input checked="" type="checkbox"/> Conclusion: GPS coordinates were provided for the dam and the powerhouse. The data was cross-checked with Google Earth and found to be correct.
<u>Corrective Action Request No.5</u> As per the latest PDD guidelines, this section should further explain the purpose of the project activity, as described in section "A.2. Description of the project activity", taking the information provided in that section as a basis and including a detailed description of: (a) The scenario existing prior to the start of the implementation of the project activity, with a list of the equipment(s) and systems in operation at that time; (b) The scope of activities/measures that are being implemented within the project activity, with a list of the equipment(s) and systems that will be installed and/or modified within the project activity; (c) The baseline scenario, as identified in section "B.4 Description of how the baseline scenario is identified and description of the identi-	A.4.3.1	Text added.	<input checked="" type="checkbox"/> Conclusion: The text is modified accordingly and the latest PDD is in line with the current PDD guidelines (Version 07).

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
<p>fied baseline scenario”, with an indicative list of the equipment(s) and systems that would have been in place in the absence of the project activity. If the baseline scenario is the same as the scenario existing prior to the start of implementation of the project activity, there is no need to repeat the description of the scenarios, but only to state that both are the same.</p> <p>The description of the scenarios should include, inter alia:</p> <p>(a) A list and the arrangement of the main manufacturing/production technologies, systems and equipments involved. Include in the description information about the age and average lifetime of the equipments based on manufacturer’s specifications and industry standards, and existing and forecast installed capacities, load factors and efficiencies. The monitoring equipments and their location in the systems is of particular interest;</p> <p>(b) The emissions sources and the greenhouse gases involved in the project activity, according to the methodology used; and existing and forecast energy and mass flows and balances of the systems and equipments included in the project activity;</p> <p>(c) The types and levels of services (normally in terms of mass or energy flows) provided by the systems and equipments that are being modified and/or installed under the project activity and their relation, if any, to other manufacturing/production equipments and systems outside the project boundary. The types and levels of services provided by those manufacturing/production systems and equipments outside the project boundary may also constitute important parameters of the description. The description should clearly explain how the same types and levels of services provided by the project activity would have been provided in the baseline scenario.</p> <p>Finally, avoid adding information, which is not essential to understanding the purpose of the project activity and how it reduces greenhouse gases emissions. Information related to equipments, systems and activities that are auxiliary to the main scope of the project activi-</p>			

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
ty and do not interfere directly or indirectly with emissions of greenhouse gases and/or with mass and energy balances in the project activity should not be included.			
<u>Corrective Action Request No.6</u> The expression of first (Jul 2009) and last year (June 2019) in the year column is not correct(i.e. dd/mm/yyyy)., please correct it. Furthermore, it is not consistent with Table B.6.4-1 of section B.6.4, please resolve the inconsistency.	A.4.4.1	Corrected.	<input checked="" type="checkbox"/> Conclusion: The latest PDD is revised accordingly.
<u>Corrective Action Request No.7</u> The proposed project is newly built based on the onsite investigation, please mention it in the B.1of the PDD.	B.2.9	Text added.	<input checked="" type="checkbox"/> Conclusion: The text is modified accordingly in the latest PDD version.
<u>Corrective Action Request No.8</u> As per the latest PDD guidelines, in addition to the table, please present a flow diagram of the project boundary, physically delineating the project activity, based on the descriptions provided in section "A.4.3. Technology to be employed by the project activity". Include in the flow diagram all the equipments, systems and flows of mass and energy described in that section. Particularly, represent in the diagram the emissions sources and gases included in the project boundary and the monitoring variables.	B.3.7	First response: A flow diagram of the project boundary, physically delineating the project activity, based on the descriptions provided in section "A.4.3, has been added in the section B.3. Second response (wrt follow-up 1): The PPA has been provided to DOE.	<input checked="" type="checkbox"/> The flow diagram was added to the latest PDD version, however, Follow-up 1: Please provide TÜV SÜD with a copy of the grid connection approval or a copy of the power purchase agreement to show that the project will be connected to the indicated grid. Conclusion: The PPA confirms that the power will be delivered to the indicated grid (see IRL 63).

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<p><u>Corrective Action Request No.9</u></p> <p>1) The project's IRR without CDM revenues in the section B.4 is 4.32%, but it is 5.55% in the section B.5 of the PDD, please resolve the inconsistency.</p> <p>2) Some words in the footnote 1 are wrongly spelled, please correct it.</p>	B.4.1	Corrected /modified.	<p>☑</p> <p>Conclusion:</p> <p>The inconsistencies and typos were revised in the latest PDD.</p>
<p><u>Corrective Action Request No.10</u></p> <p>As per the latest PDD guidelines, please discuss the early CDM consideration in this section of the PDD.</p> <p>In such cases project proponents shall provide an implementation timeline of the proposed CDM project activity. The timeline should include, where applicable, the date when the investment decision was made, the date when construction works started, the date when commissioning started and the date of start-up (e.g. the date when commercial production started). In addition to this implementation timeline project participants shall provide a timeline of events and actions which have been taken to achieve CDM registration, with description of the evidence used to support these actions. These timelines will allow the DOE to assess the serious consideration of the CDM in the project decision making process and project implementation.</p> <p>As per the latest guidance on early CDM consideration (EB41, Annex 46), it should be demonstrated clearly that that the CDM was seriously considered in the decision to implement the project activity. Such demonstration requires the following elements to be satisfied:</p> <p>(a) The project participant must indicate awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project. Evidence to support this would include, inter alia, minutes and/or notes related to the consideration of the decision by the Board of Directors, or equivalent, of the project participant, to undertake the</p>	B.5.1	<p>Text added.</p> <p>Evidence sent to the validator.</p>	<p>☑</p> <p>Conclusion:</p> <p>The text is modified accordingly and the latest PDD is in line with the current PDD guidelines (Version 07).</p>

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<p>project as a CDM project activity.</p> <p>(b) The project participant must indicate, by means of reliable evidence, that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation. Evidence to support this should include, inter alia, contracts with consultants for CDM/PDD/methodology services, Emission Reduction Purchase Agreements or other documentation related to the sale of the potential CERs (including correspondence with multilateral financial institutions or carbon funds), evidence of agreements or negotiations with a DOE for validation services, submission of a new methodology to the CDM Executive Board, publication in newspaper, interviews with DNA, earlier correspondence on the project with the DNA or the UNFCCC secretariat;</p>			
<p><u>Corrective Action Request No.11</u></p> <p>The list in section B.5 (step 1) is not consistent with the list presented in section B.4 of the PDD. Please revise and be consistent.</p>	B.5.3	The text in B.4.1 has been made consistent with the methodology, ACM0002. Accordingly the analysis of alternatives has been replaced by the baseline scenario as prescribed in the methodology.	<input checked="" type="checkbox"/> <p>Conclusion:</p> <p>The inconsistencies and typos were revised in the latest PDD.</p>
<p><u>Corrective Action Request No.12:</u></p> <p>According to EB 39, only the relevant information that were available at the time of the investment decision can be used in all investment analysis, hence, please exclude any information that were not available at the time of the investment decision from the investment analysis in section B.5 of the PDD.</p>	B.5.15 B.5.16 B.5.17	Any information that was not available at the time of the investment decision was excluded in the investment analysis.	<input checked="" type="checkbox"/> <p>Conclusion:</p> <p>The data for the investment analysis were taken from the FSR that was around the same time as the final decision was made to invest and develop this project as a CDM project (for details please see the discussion in our report).</p>
<p><u>Corrective Action Request No.13</u></p> <p>Please include variation of electricity generation as parameter into</p>	B.5.18	Variation of electricity generation has been added as parameter into sensitivity analysis.	<input checked="" type="checkbox"/> <p>Conclusion:</p>

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
sensitivity analysis.			The sensitivity analysis includes all required parameters in the revised PDD and is therefore considered complete.
<u>Corrective Action Request No.14.</u> 1) The justification for selected geographical boundary, capacity boundary should be provided in the PDD. 2) The latest version of Yearbook of China Water Resources should be applied. 3) Similar scale defined in the Table B.5-5 is 25MW -80MW, but it is 25MW-60MW defined in the paragraph above the Table B.5-5, please resolve the inconsistency.	B.5.24 B.5.25	First response: 1) The justification for selected geographical boundary and capacity boundary has been provided in the PDD. 2) In the latest version of the Yearbook of China Water Resources, there is not the same information of the hydropower plants in Gansu. We could not find the data of hydropower plants in other published documents either. So we have to use this old version as data source. 3) The inconsistency has been solved. Second response (wrt follow-up 1): Projects with capacity from 0.5 to 1.5 times of the proposed project are similar with the proposed project. But according to Economic Evaluation Code for Small Hydropower Projects (SL16-95), hydropower plant, with capacity less than 25 MW is defined as small scale hydropower projects and not the similar type to the project. Then we choose projects with 0.5 to 1.5 times capacity of proposed projects and non-small scale projects to make our common practice analysis. Then the capacity boundary is from 20MW to 60MW.	<input checked="" type="checkbox"/> Follow-up 1: The similar range should typically cover the capacity +/- 50%. Please check on the lower limit of the similar capacity range. Conclusion: The justification of the applied capacity range could be verified (i.e. finally +/- 50% was adopted).
<u>Corrective Action Request No.15:</u> This factor should be included in the table in section B.6.2 of the PDD.	B.6.2.9	This parameter has been added to the table in section B.6.2 of the PDD.	<input checked="" type="checkbox"/> Conclusion: The missing parameters

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			were added and the latest table can be considered as complete.
<u>Corrective Action Request No.16:</u> This factor should be included in the table in section B.6.2 of the PDD. The value of this factor should be equal to the latest emission factors published by the NDRC for the NW China Power Grid.	B.6.2.10	First response: This parameter has been added to the table in section B.6.2 of the PDD. Second response (wrt follow-up 1): EF values related and calculations have been change.	<input checked="" type="checkbox"/> Follow-up 1: As per latest guidance, the EF values that were available at the time of commencement of this validation should be applied. The PDD and the CER calculation should be revised accordingly. Conclusion: The correct values were applied in the revised PDD.
<u>Corrective Action Request No.17:</u> This factor should be included in the table in section B.6.2 of the PDD. The value of this factor should be equal to the latest emission factors published by the NDRC for the NW China Power Grid.	B.6.2.11	This parameter has been added to the table in section B.6.2 of the PDD and the value of this factor is equal to the latest emission factors published by the NDRC for the NWCPG.	<input checked="" type="checkbox"/> Conclusion: See follow-up with respect to CAR16.
<u>Corrective Action Request No.18:</u> There is clearly a mismatch between the parameter and its description, please resolve it.	B.6.2.12	This parameter has been added to the table in section B.6.2 of the PDD and the value of this factor is equal to the latest emission factors published by the NDRC for the NW China Power Grid.	<input checked="" type="checkbox"/> Conclusion: The inconsistencies were revised in the latest PDD.
<u>Corrective Action Request No.19:</u> There is clearly a mismatch between the parameter and its description, please resolve it.	B.6.2.13	The mismatch has been solved.	<input checked="" type="checkbox"/> Conclusion: The inconsistencies were revised in the latest PDD.
<u>Corrective Action Request No.20:</u>	B.6.2.15	The mismatch has been solved.	<input checked="" type="checkbox"/>

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
There is clearly a mismatch between the parameter and its description, please resolve it.			Conclusion: The inconsistencies were revised in the latest PDD.
<u>Corrective Action Request No.21</u> 1) The indication of accuracy should be provided. 2) EGout and EGIN presented in the column of comments should be EGout, y and EGIN,y respectively, and the same mistake is shown up in the section B.7.2, please correct it. 3) The data should be kept for at least 2 years after the end of the last crediting period, but not 2 years after the last issuance of CERs for the proposed project activity, please correct it. 4) Any electricity measurement should be continuous, as per the methodology.	B.7.1.2	Text corrected/modified	<input checked="" type="checkbox"/> Conclusion: Accuracy is provided (0.2S), data storage and measuring frequency were revised in the latest PDD.
<u>Corrective Action Request No.22</u> The parameter should be added to the table in section B.7.1 of the PDD.	B.7.1.3	This parameter has been added to the PDD.	<input checked="" type="checkbox"/> Conclusion: The list is now complete.
<u>Corrective Action Request No.23</u> Please show or describe in the PDD the exact location of the meter(s), who owns the meters and what type of emergency plan is installed if one or both meters fail.	B.7.2.3	The exact location of the meters has been show in Figure B.7.2-2 Diagram of monitoring ammeters in section B.7.2. The owner of the meters and the emergency plan has been added in the section B.7.2.	<input checked="" type="checkbox"/> Conclusion: The locations are clearly outlined in the revised PDD.
<u>Corrective Action Request No.24</u> The information should be provided whether the persons mentioned in the B.8 of the PDD is also considered a project participant.	B.8.4	"The person/entity is not project participant listed in Annex 1" has been added to this section.	<input checked="" type="checkbox"/> Conclusion: The relevant information was provided to TÜV SÜD (IRL 62, 63) and is also indicated in the latest PDD.
<u>Corrective Action Request No.25:</u> 1) According to the document provided by the project owner, the project's starting date provided in the section C.1.1 is not cor-	C.1.1	Modified.	<input checked="" type="checkbox"/> Conclusion: The project starting date as

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
<p>rect, please correct it.</p> <p>2) A description of how this start date has been determined, and a description of the evidence available to support this start date should be included in the PDD.</p>			<p>well as the early and on-going CDM consideration was clearly described in the latest PDD. Relevant evidences were provided to TÜV SÜD and confirmed the indicated timeline.</p>
<p><u>Corrective Action Request No.26:</u></p> <p>Please describe in the PDD in more detail when the first survey was taken place to invite the comments by the local stakeholders.</p> <p>Please also describe in more detail what media has been used to invite the comments.</p>	E.1.2	The more detail of the first survey and the more detail of what the media have been used to invite the comments have been added in section E.1.	<p><input checked="" type="checkbox"/></p> <p>Conclusion:</p> <p>The local stakeholder consultation process was clearly described in the latest PDD.</p>
CRs			
<p><u>Clarification Request No.1</u></p> <p>Please deliver the evidences that demonstrate that the CDM was seriously taken into account for the decision to start the project to the DOE.</p>	B.5.1	The evidences has been delivered to DOE.	<p><input checked="" type="checkbox"/></p> <p>Conclusion:</p> <p>Relevant evidences were submitted to TÜV SÜD (see Annex 2 for details).</p>
<p><u>Clarification Request No.2</u></p> <p>1) Please make explanation in the PDD why this benchmark IRR document and benchmark IRR of 8% can be applied for the proposed project.</p> <p>2) Please deliver this benchmark IRR document with translation to the DOE.</p>	B.5.13	With reference to <i>Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects</i> , the benchmark of the China Power Industries is to be 8% of the total investment. Although the book said there are no unified and clear guidelines or laws for the benchmark for China Power Industry, 8% as the benchmark for the total investment has been the common practice in the China Power Industry. Besides, the <i>Economic Evaluation Method and Parameters for Construction Projects</i> as a reference for the <i>Feasibility Study Report of Dalijie hydropower engineering</i> , also define 8% as the benchmark for the hydro-	<p><input checked="" type="checkbox"/></p> <p>Conclusion:</p> <p>The applied benchmark is appropriate.</p>

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
		power project. The proposed project is a newly built hydropower project, so it also adopts 8% as the benchmark for total investment IRR. 2) Benchmark IRR document have been delivered to the DOE.	
<u>Clarification Request No.3</u> 1) The relevant documents that indicate the input values used for investment analysis should be provided in English and delivered to the DOE. 2) IRR calculation spreadsheet should be delivered to the DOE, and all data quoted in the sheet should be carefully checked with the data source.	B.5.15 B.5.16 B.5.17	Follow-up 1: 1) The relevant documents, FSR, that indicate the input values used for investment analysis have been provided with a partial English translation and delivered to the DOE. 2) IRR calculation spreadsheet has been delivered to the DOE, and all data quoted in the sheet have been carefully checked with the data source. Second response (wrt follow-up 1): "Real Investment on Dalijie ch 090623" and price related documents have been provided to DOE.	<input checked="" type="checkbox"/> Follow-up 1: Please provide additional documents that show a) how much money has been spent on the project so far and b) to cross-check on the tariff (such as any public tariff notices, PPA, etc.). Conclusion: The relevant documents were provided and the IRR input data was cross-checked and could be verified.
<u>Clarification Request No.4</u> Justification for variations range should be explained in the PDD.	B.5.19	The 10% variation rang is common rule in the sensitivity analysis and is used in the FSR of the project. On the other hand, the financial plan will be carried out within 3 years, and the variation will be limited within these years. If we assume that the variation range is out of the 10%, it is impossible that the total investment and the operation cost got lower for the increase trend of the price. And according to the tariff policy of Gansu (which fix the tariff since 2004) and government's policy to control the price, it is also impossible to increase the tariff out of 10%. Last, the annual	<input checked="" type="checkbox"/> Conclusion: The 10% variation is plausible and also indicated in the investment analysis guidance.

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Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
		power supply is based on long series of hydrology data, and is impossible to increase out of 10%.	
<u>Clarification Request No.5</u> Reference documents and data sources should be delivered to the DOE.	B.5.24 B.5.25	Reference documents and data sources have been delivered to the DOE.	<input checked="" type="checkbox"/> Conclusion: Relevant evidences were submitted to TÜV SÜD (see Annex 2 for details).
<u>Clarification Request No.6.</u> Please deliver the spreadsheet of calculation of the operating margin and build margin emission factors to the DOE.	B.6.3.3 F.1.6	We have delivered the spreadsheet of calculation of the operating margin and build margin emission factors to the DOE.	<input checked="" type="checkbox"/> Conclusion: Relevant evidences were submitted to TÜV SÜD (see Annex 2 for details).
<u>Clarification Request No.7</u> It is not clear to the validation team why the electricity imported from the grid would be considered as project emissions when these emissions are equal to or more than 1% of baseline emissions, please clarify it.	B.7.1.2	The indicator of 1% has been removed. There is no justification for this statement.	<input checked="" type="checkbox"/> Conclusion: This could be clarified.
<u>Clarification Request No.8:</u> Please clarify if there are transboundary environmental impacts involved with the project activity.	D.1.4	There are no trans-boundary environmental impacts involved with the project activity.	<input checked="" type="checkbox"/> Conclusion: This could be confirmed via the EIA and its approval.
Open issues			
<u>Open issue:</u> The letter of approval from both parties as well MoC has not been provided. They should be provided to the DOE before submitting for registration.	A.3.2	Delivered.	<input checked="" type="checkbox"/> The missing letters were provided to the DOE.

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Annex 2: Information Reference List

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Ref. No.	Issuance and/or submission date (dd/mm/yyyy)	Title/Type of Document	Author/Editor/ Issuer	Additional Information (Relevance in CDM Context)
1.	10/05/2008	PDD of “Bailongjiang Dalijie Hydropower Station”, Version: 01	PP	PDD for GSP
2.	30/11/2007	Approved consolidated baseline and methodology “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”, ACM0002 – Version 07	UNFCCC	
3.	26/08/2008	Tool for the demonstration and assessment of additionality, Version 05.2	UNFCCC	
4.	17/06/2008	Participant list of on-site interviews.	TÜV SÜD	
5.	17-19/06/2008	<p>On-site interviews at the office of GEPIC Darong Electric Power Company Ltd:</p> <p>Validation team: Mr. Tom Xiong Jiangsu TÜV Product Service Ltd., Shenzhen Branch</p> <p>Interviewed persons: Mr. Xian Kaifu GEPIC Darong Electricity Power Company Ltd. Mr. Chen Dongwei GEPIC Darong Electricity Power Company Ltd. Mr. Guo Xiaohua GEPIC Darong Electricity Power Company Ltd. Mr. Chen Liang GEPIC Darong Electricity Power Company Ltd. Mr. Li Changfu GEPIC Darong Electricity Power Company Ltd. Ms. Wang Huan DHV Mr. Mong Huanjun DHV Mr. Sun Xiaojun Xiabazang village Mr. Zhang Shen Xiabazang village Mr. Zhang Linlin Xiabazang village</p>	TÜV SÜD	
6.	18/03/1996	Business Licence	GEPIC Darong Electric Power Company Ltd.	
7.	16/05/2007	Company Statute / Organigram	GEPIC Darong Electric Power Company Ltd.	
8.	August 2006	Feasibility Study Report of “Gansu Bailong River Shuiboxia Hydropower Station”; Version 1	Northwest Hydro Consulting	

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Ref. No.	Issuance and/or submission date (dd/mm/yyyy)	Title/Type of Document	Author/Editor/ Issuer	Additional Information (Relevance in CDM Context)
			Engineers, CHECC	
9.	October 2006	Feasibility Study Report of “Gansu Bailong River Shuiboxia Hydropower Station”; final version after input from local DRC	Northwest Hydro Consulting Engineers, CHECC	
10.	04/09/2006	Expert comments on first version of FSR	experts	
11.	30/10/2006	Report on the submission of Assessment report of the FSR of Bailongjiang Dalijie Hydropower Station; Gan Tou Ping Shen[2006] No. 208	Gansu Provincial Government Investment Review Centre	
12.	30/11/2007	Approval of Feasibility Study Report of “Bailongjiang Dalijie Hydropower Station”; Gan Fa Gai Neng Yuang [2007]1207	DRC of Gansu Province	
13.	April 2007	Environmental Impact Evaluation Report of “Bailongjiang Dalijie Hydropower Station”	Environmental Assessment Research Center of Lanzhou University	
14.	15/05/2007	Approval letter of Environmental Impact Evaluation Report of “Bailongjiang Dalijie Hydropower Station”	Environmental Protection Bureau of Gansu Province	
15.	February 2007	Water & Soil Conservation Program		
16.	01/03/2007	Approval of Water & Soil Conservation Program	Water Sources Bureau of Gansu Province	
17.	05/03/2007	Approval of land usage	Land Sources Bureau of Gansu Province	
18.	26/10/2007	Approval of forest land	Forest Sources Bureau of Gansu Province	
19.	01/06/2006	Minutes of Meeting of GEPIC Darong Electric Power Company; File Number: Ganrongdiansiji[2006]11	GEPIC Darong Electric Power Company Ltd.	Early CDM Consideration
20.	18/11/2007	Permission for Starting Dam Construction		

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21.	01/05/2007	Permission for Starting Power House Construction		
22.	2005, 2006, 2007	Agreement on the compensation for land expropriation.	Villagers; GEPIC Darong Electric Power Company Ltd	
23.	20/11/2006	Dam construction contract		
24.	18/04/2007	Power plant construction contract		
25.	27/11/2006	Turbines, Generators Purchase Contract	GEPIC Darong Electric Power Company Ltd.; Hangzhou Liyuan Generator Device Co. Ltd.	
26.	10/11/2006	Tunnel construction contract; Lanzhou, Gansu.	GEPIC Darong Electricity Power Company Ltd.; China Railway 15th Bureau Group Corporation	
27.	17/08/2005	Intent letter for CDM cooperation	GEPIC Darong Electric Power Company Ltd.; DHV BEEC Ltd. Co.	
28.	06/06/2006	CDM development contract	GEPIC Darong Electric Power Company Ltd.; DHV BEEC Ltd. Co.	
29.	01/08/2006	Compensation Standard for Land Expropriation	Zhouqu County Government	
30.	September 2007	Stakeholders' Questionnaires	GEPIC Darong Electric Power Company Ltd.	
31.	September 2007	Meeting minutes of stakeholders' comments	GEPIC Darong Electric Power Company Ltd.	

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32.	April 2002	Notice on Strictly Prohibiting the Construction of Fuel-fired Power Plants with Installed Capacity of 135MW or below.	General Office of the State Council	
33.	15/05/2008	Emergency Program for Earthquake		
34.	April 2007	Emergency Program for Flood		
35.	June 2008	IRR calculation sheet	DHV BEEC Ltd. Co.	
36.	August 1997	The Management Provisional Regulation on the Construction of small fuel-fired generators		
37.	2003-2007	China Energy Statistical Yearbooks	China Electricity Council	
38.	2002-2007	China Electric Power Yearbooks	China Electricity Council	
39.	2006	National Statistics Express of Power Industry	China Electricity Council	
40.	2003	Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects State Power	China Electric Power Press	Benchmark
41.	28/11/1987	Notice on Implementation Method of Various Electricity Tariff (No. 101 Shuidiancaizi[1987])	Ministry of Water Resources and Electric Power, State Economic Committee and State Price Bureau	Common Practice
42.	23/04/2001	Notice on Standardizing Electricity Tariff Management (No. 701 Jijiage[2001])	State Planning Committee	Common Practice
43.	29/06/2009	Modalities of Communication (MoC) Form, Bailongjiang Dalijie Hydropower Station	GEPIC Darong Electric Power Company Ltd. & N.V. Nuon Energy, Trade & Wholesale	
44.	2006	Yearbook of China Water Resources	China Waterpower Press	Common Practice
45.	June 2008	Letter of Approval (LoA) of China; No. 1583	NDRC of China	
46.	25/06/2008	Letter of Approval (LoA) of Netherlands	Netherlands DNA	

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Ref. No.	Issuance and/or submission date (dd/mm/yyyy)	Title/Type of Document	Author/Editor/ Issuer	Additional Information (Relevance in CDM Context)
47.	25/09/2006	The Approval on Application of the CDM Development of Dalijie Hydropower Station; (2006) Gan Fa Gai Di Qu Han Zi No. 40	DRC of Gansu Province	Early CDM Consideration
48.	23/09/2006	The Referendum on the Application of CDM Development of Dalijie Hydropower Station	GEPIC Darong Electric Power Company Ltd	Early CDM Consideration
49.	29/08/2006	Loan Intent Letter on the Dalijie Hydropower Station Project	Lanzhou Electricity Power Branch of China Construction Bank	Early CDM Consideration
50.	01/06/2006	Minutes of Meeting of GEPIC Darong Electric Power Company; File Number: Ganrongdiansiji[2006]11	GEPIC Darong Electric Power Company Ltd.	
51.	20/09/2006	Minutes of Meeting of GEPIC Darong Electric Power Company; File Number: Ganrongdiansijizi[2006]17	GEPIC Darong Electric Power Company Ltd.	
52.	12/12/2006	Actual construction starting date of this project according to the permission certificate from the Provincial Construction Bureau; Gansu Daily on 15/11/2006	Gansu Construction Bureau; Gansu Daily	
53.	09/01/2008	ERPA	GEPIC Darong Electric Power Company Ltd. & N.V. Nuon Energy, Trade & Wholesale	On-going CDM consideration
54.	12/06/2007	Proposal for the validation of this and other projects	SGS	On-going CDM consideration
55.	17/08/2005	MOU of CDM development cooperation with DHV	GEPIC Darong Electric Power Company Ltd. and DHV Beijing Environmental Engineering Company Ltd.	Early CDM Consideration
56.	24/07/2007	Final MoU	N.V. Nuon Energy, Trade & Wholesale & GEPIC Darong Electric Power Company	On-going CDM consideration

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Ref. No.	Issuance and/or submission date (dd/mm/yyyy)	Title/Type of Document	Author/Editor/ Issuer	Additional Information (Relevance in CDM Context)
			Ltd.	
57.	29/07/2008	Tools to calculate the emission factor for an electricity system, Version 01.1	UNFCCC	
58.	2004	National policy: The Document Fagai Price[2004] No.1125	http://www.fz12358.com/see_zcwj.asp?id=4643	IRR input data source for tariff
59.	20/11/2007	Project approval document obtained (Gan Fa Gai Neng Yuan[2007] No. 1207)	Development and Reform Commission of Gansu Province	
60.	16/07/2008	Electricity Tariff Document (Ganjiadianli (2008)193)	Gansu Price Bureau	
61.	19/09/2007	Announcement on stakeholder consultation meeting	Gansu Daily	Stakeholders' comments
62.	13/09/2007	www.dhv.cn: stakeholder consultation meeting – online announcement	DHV	Stakeholders' comments
63.	April 2009	Power Purchasing Agreement (Agreement No.: SD/HT-2009-07)	GEPIG Darong Electric Power Company Ltd.; Gansu Electricity Co.	
64.	2009	The Finished Investment and Investment Plan for 2009 of Dalijie Hydropower Station	GEPIG Darong Electric Power Company Ltd.	
65.	03/07/2008	PDD of “Bailongjiang Dalijie Hydropower Station”, Version: 02	PP	Final PDD