



# VALIDATION REPORT

for the CDM Programme of Activities

## Small-scale Hydropower Programme of Activities in Guizhou Province

in

P. R. China

Report No. 01 997 9105073514

Version No.02.1, 2013-04-24

Designated Operational Entity (DOE)

**TÜV Rheinland (China) Ltd**

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**I. PoA description:**

PoA title:	Small-scale Hydropower Programme of Activities in Guizhou Province		Report No.: 01 997 9105073514
Host Country:	P. R. China		Current revision No.: 02.1
Methodology:	AMS-I.D, Version 17, "Grid-connected Renewable Electricity Generation"	<input type="checkbox"/> Large Scale <input checked="" type="checkbox"/> Small Scale	Date of current revision: 2013-04-24
			Date of first issue: 2013-03-15
Annual average emission reductions:			Not applicable for PoA itself
GHG reducing measure/technology:	Displacing fossil fuel based grid power generation with renewable hydropower energy		

Party	Project Participants	Party considered a project participant	Contract project participant
P. R. China (Host)	Beijing YuanDa Carbon Assets Investment Management Co., Ltd.	Yes	<input checked="" type="checkbox"/>

**II. Validation Team:**

Validation Team			Role									
Full name	Affiliation TÜV Rheinland	Appointed for Sectoral Scopes (Technical Areas)	Team leader	Acting Team Leader	Local Expert	Team Member (Auditor)	Technical Expert	Acting Tech. Expert	Trainee Auditor	Technical Reviewer	Expert to TR	Trainee TR
JIN Hua	China	1.2, 13.1, 13.2	X									
TAN Yi	China	1.2, 13.1								X		
Walter Tang	China	1.1, 1.2, 2.1, 2.2, 3.1, 4.3, 4.5, 13.1								X		

**Validation Phases and Validation Status:**

☒ Desk Review
 ☒ Follow up interviews
 ☒ Resolution of outstanding issues  
☒ Corrective Actions / Clarifications Requested
 ☒ Full Approval and Submission for Registration
 ☐ Rejected

**III. Validation Report:**

Final approval			Released		Distribution	
<input checked="" type="checkbox"/>			By: Mr.Henri Phan		<input checked="" type="checkbox"/> No distribution without permission from the Client or responsible organizational unit	
Date: 2013-04-26					<input type="checkbox"/> Unrestricted distribution	

## Executive Summary – Validation Opinion

The Validation Team of the DOE (TÜV Rheinland (China) Ltd.), hereafter called TRC, has been assigned by 'Beijing YuanDa Carbon Assets Investment Management Co., Ltd.' to perform the validation of the programme 'Small-scale Hydropower Programme of Activities in Guizhou Province'. The validation was performed on the basis of UNFCCC criteria for the Clean Development Mechanism. The scope of the validation is defined as an independent and objective review of the programme design document, the programme's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against CDM Validation and Verification Standard (Version 3.0), Kyoto Protocol requirements, CDM Executive Board/UNFCCC rules.

The report is based on the assessment of the programme design document undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews, site visit, and stakeholder interviews, review of the applicable methodology and its underlying formulae and calculations.

### **Validation methodology and process**

The validation has been performed as described in the VVS Version 3.0 and constitutes the following steps so far:

- Publication of the PoA-DD of Version 01, 03 Feb. 2013 on the UNFCCC website (from 05 Feb. 2013 to 06 Mar. 2013)
- Desk review of the PoA-DD of Version 01, 03 Feb. 2013 and the relevant documents
- On-site assessment (from 07 Mar. 2013 to 08 Mar. 2013)
- Issue of checklist with corrective action requests (CARs) and clarification requests (CLs) and the draft validation report & protocol
- Desk review of the revised PoA-DD of Version 04, 23 Apr. 2013
- Review of the proposed corrections and clarifications
- Issue of the final validation report & protocol

### **Validation criteria**

The following CDM requirements have been considered:

- Article 12 of the Kyoto Protocol,
- Modalities and procedures for CDM (Marrakech Accords)
- Subsequent decisions by the COP/MOP and CDM Executive Board
- Host country criteria
- Criteria given to provide for consistent project operations, monitoring and reporting.

The proposed PoA is a unilateral PoA project. The host party is P. R. China and the party fulfills the participation criteria and has approved and authorized the project and the project participant i.e. CME (Beijing YuanDa Carbon Assets Investment Management Co., Ltd.) for its coordination of the proposed PoA. The DNA from P. R. China confirms that the PoA assists in achieving its sustainable development.

Emission reductions attributable to the PoA (eligible CPAs of the PoA) are additional to any that would occur in the absence of the proposed eligible CPAs. Given that the PoA is implemented as designed, the CPAs are likely to achieve the emission reductions by displacing fossil fuel based grid power generation with renewable hydropower energy.

The Validation Team did not reveal any information that indicates the PoA can be seen as a diversion of Official Development Assistance (ODA) funding towards the P.R. China.

The monitoring arrangements described in the monitoring plan are feasible within the project design and it is TRC's opinion that the CME is able to implement the monitoring plan.

The validation protocol describes a total of 8 findings which include:

- 6 Corrective Action Requests (CARs);
- 2 Clarification Requests (CLs);
- 0 Forward Action Requests (FARs).

The TRC concludes that the CDM Programme of Activity "Small-scale Hydropower Programme of Activities in Guizhou Province" in P. R. China, as described in the PoA-DD (Version 04, 23 Apr. 2013), meets all relevant requirements of the UNFCCC for CDM project activities including article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakesh Accords) and the subsequent decisions by the COP/MOP and CDM Executive Board.

The selected baseline and monitoring methodology AMS-I.D, Version 17, "Grid-connected Renewable Electricity Generation" is applicable to the PoA and correctly applied. The TRC thereforerequests the registration of the PoA as a CDM PoA project activity.

Mr. JIN Hua (Team Leader)

Signature:



TÜV Rheinland (China) Ltd.  
Beijing, 2013-04-24

Mr. Henri Phan (DOE Manager)

Signature:



TÜV Rheinland (China) Ltd.  
Beijing, 2013-04-26

**Abbreviations**

BM	Build Margin
CAR	Corrective Action Request
CCPG	Central China Power Grid
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CDM PCP	Clean Development Mechanism Project Cycle Procedure
CDM PS	Clean Development Mechanism Project Standard
CDM VVS	CDM Validation and Verification Standard
CER	Certified Emission Reduction(s)
CH <sub>4</sub>	Methane
CL	Clarification request
CM	Combined Margin
CME	Coordinating/Managing Entity
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
CPA	Component Project Activity
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EIA	Environmental Impact Assessment
ERPA	Emission Reduction Purchase Agreement
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	Greenhouse gas(es)
GNI	Gross National Income
GSC	Global Stakeholder Consultation
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
LoA	Letter of Approval
NDRC	National Development and Reform Commission
NGO	Non-governmental Organization
ODA	Official Development Assistance
OM	Operating Margin
O&M	Operation and Maintenance

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OSV	On-site Visit
PD	Power Density
PDR	Preliminary Design Report
PoA	Programme of Activities
PP	Project Participant
PPA	Power Purchase Agreement
QA/QC	Quality Assurance and Quality Control
SCPG	Southern China Power Grid
SUZ	Special Underdeveloped Zone
tCO <sub>2e</sub>	Tonnes of CO <sub>2</sub> equivalents
TRC	TÜV Rheinland (China) Ltd.
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

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## 1 INTRODUCTION

The organization 'Beijing YuanDa Carbon Assets Investment Management Co., Ltd.' has commissioned the DOE TÜV Rheinland (China) Ltd. to perform a validation of the proposed CDM Programmes of Activity (PoA) 'Small-scale Hydropower Programme of Activities in Guizhou Province' in P. R. China (hereafter called "the PoA"). This report summarises the findings of the validation of the PoA identified in the PoA Design Document (PoA-DD) with generic information relevant to all Component Project Activities (CPAs) to be included in the PoA. The validation was performed on the basis of UNFCCC criteria for the PoAs under the CDM, as well as criteria given to provide for consistent programme operations, monitoring and reporting. The term "UNFCCC criteria" refers to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project activities, standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities and the subsequent decisions by the CDM Executive Board. In addition to these criteria, host country criteria are also taken into account.

### 1.1 Objective

The purpose of a validation is to have an independent, professional, ethical and fair third party assessment of the PoA design. In particular, the eligibility criteria for inclusion and demonstration of additionality of CPAs, the programme's baseline determination, monitoring plan, and the programme's compliance with relevant UNFCCC and host Party criteria are validated in order to confirm that the programme design, as documented, is sound and reasonable and meets the identified criteria. Validation is a requirement for all CDM PoAs and is seen as necessary to provide assurance to stakeholders of the quality of the programme and its intended generation of certified emission reductions (CERs).

### 1.2 Scope

The validation scope is defined as an independent and objective review of the PoA design document (PoA-DD). The PoA-DD is reviewed against the relevant criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project/ programme activities, standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology AMS-I.D.(Version 17).

The Validation Team has, based on the requirements contained in the Validation and Verification Standard, Project Standard and the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities employed a rules-based approach, focusing on the identification of significant risks for programme implementation and the generation of CERs.

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

While carrying out the validation, TRC determines if the programme of activities complies with the requirements of Para 37 of the CDM M&P and also assess the claims and assumptions made in the PoA-DD without limitation on the information provided by the PoA participants.

The scope of the validation is:

- To apply TRC's own quality management system integrated with the VVS standard along with the recent decisions and guidance provided by the UNFCCC board to determine if the programme of activities meets all applicable CDM requirements, including those specified in the PoA standard, relevant methodologies, tools and guidelines and processing the same with CDM project cycle procedure;
- Asses the accuracy, conservativeness, relevance, completeness, consistency and transparency of the information provided by the PoA participants;
- Determine whether information provided by the PoA participants are reliable and credible;
- Present information in the form of validation report in a factual, neutral, coherent manner and document all assumptions, provide references to the background material and identify changes made to the documentation;
- Base the findings and conclusions on objective evidence and conduct all validation in accordance with CDM rules and procedures;
- Apply consistent validation criteria in providing expert judgments to the requirements of applicable approved methodologies, tools and also cross check the same with projects of similar characteristics, technology, time period and region; and
- Safeguard the confidentiality of all information's obtained or created during validation.
- Where sampling is involved, the standard for sampling and surveys are applied.

## 2 METHODOLOGY

The validation consists of the following four phases:

- I. A desk review of the PoA design documents
  - Publication of PoA-DD in UNFCCC for global stakeholder consultation;
  - A review of data and information;
  - Cross checking between information provided in PoA-DD with all necessary means without limitations to the information provided by the PoA proponent;
- II. On-site visit and follow-up interviews with project stakeholders
  - Interviews with relevant stakeholders in host country with personnel's having knowledge with the PoA development via telephone, email or direct on-site visits;
  - Cross checking between information provided by interviewed personnel with all necessary means without limitations to the information provided by the project proponent;
- III. Reference to available information's relating to projects or technologies similar projects under validation and review based on the approved methodology being applied of the appropriateness of formulae and accuracy of calculations.
- IV. The resolution of outstanding issues and the issuance of the final validation report and opinion.

The following sections outline each step in more detail.

### 2.1 Desk Review of the PoA Design Documentation

The following table outlines the documentation reviewed during the validation:

Ref no.	Reference Document
<b>PoA-DD/Form/Methdology/Tools</b>	
/1/	PoA-DD for GSP of Version 01, 03 Feb. 2013
/2/	Revised PoA-DD of Version 04, 23 Apr. 2013
/3/	National Development and Reform Commission (DNA of the P. R. China), Letter of Approval (Ref.4701) for the PoA, Oct. 2012
/4/	National Development and Reform Commission (DNA of the P. R. China), Approval Note on Change of Project Participants (Ref.237) for the PoA, 21 Feb. 2013
/5/	Modalities of Communication Statement, signed on 26 March 2013
/6/	CDM Executive Board, Programme design document form for small-scale CDM programmes of activities (F-CDM-SSC-PoA-DD), Version 02.0
/7/	CDM Executive Board, Guidelines for completing the programme design document form for small-scale CDM programmes of activities, Version 02.1
/8/	CDM Executive Board, Validation and Verification Standard, Version 3.0
/9/	CDM Executive Board, Project Standard, Version 02.1
/10/	CDM Executive Board, Project Cycle Procedure, Version 03.1
/11/	CDM Executive Board, Glossary of CDM Terms, Version 07.0
/12/	CDM Executive Board, Guidelines on the Assessment of Investment Analysis, Version 05
/13/	CDM Executive Board, Guidelines for the Reporting and Validation of Plant Load Factors, Version 01
/14/	CDM Executive Board, Guidelines on Assessment of Debundling for SSC Project Activities, Version 03
/15/	CDM Executive Board, Guidelines on the demonstration of additionality of small scale project activities, Version 09.0
/16/	CDM Executive Board, Guidelines for demonstrating additionality of microscale project activities, Version 04.0
/17/	CDM Executive Board, Demonstration of additionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1
/18/	CDM Executive Board, General Guidelines for SSC CDM Methdologies, Version 19.0
/19/	CDM Executive Board, AMS-I.D, Version 17, "Grid-connected Renewable Electricity Generation"
/20/	CDM Executive Board, Tool to calculate the emission factor for an electricity system, Version 03.0.0
/21/	CDM Executive Board, Tool for the demonstration and assessment of additionality, Version 07.0.0
/22/	CDM Executive Board, ACM0002 Consolidated baseline methodology for grid-connected electricity generation from renewable sources Version 13.0.0.

/23/	UNFCCC secretariat, 14 <sup>th</sup> Teleconference Meeting Minutes (Post EB71), 6 <sup>th</sup> March 2013
/24/	National Development and Reform Commission, 2012 Baseline Emission Factors for Regional Power Grids in China, October 2012
/25/	CDM Executive Board, Guidance for request for deviation titled "Application of AM0005 and AMS.I.D in China", <a href="http://cdm.unfccc.int/Projects/deviations">http://cdm.unfccc.int/Projects/deviations</a>
/26/	IPCC 2006 Guidelines for National Greenhouse Gas Inventories
/27/	China Electric Power Yearbook 2007~2011
/28/	China Energy Statistics Yearbook 2009~2011
/29/	UNEP Risoe Centre, CDM pipeline overview, updated on 1 <sup>st</sup> March 2013
/30/	UNEP Risoe Centre, PoA pipeline overview, updated on 1 <sup>st</sup> March 2013
/31/	Beijing YuanDa Carbon Assets Investment Management Co., Ltd.(CME), Business license, 5 <sup>th</sup> December 2011
/32/	Beijing YuanDa Carbon Assets Investment Management Co., Ltd., Declaration of voluntary participation for the PoA, 1 <sup>st</sup> March 2013
/33/	Termination of ERPA between project participant and the previous buyer Sinoda Carbon Capital Pty Ltd, 20 <sup>th</sup> September 2012
/34/	Beijing YuanDa Carbon Assets Investment Management Co., Ltd., Training plan and records for the implementation of the PoA
/35/	Ministry of Water Resources, Plan on New Rural Hydropower Electrification during China's 12th Five-year Plan Period
/36/	Ministry of Water Resources, Plan of Engineering on Substituting Fuel with Small Hydropower Electricity during the Period from 2009 to 2015
/37/	Chinese Government, Renewable Energy Law, 1 <sup>st</sup> January 2006
/38/	Low electricity tariff and low electricity generation efficiency, <a href="http://news.xinhuanet.com/fortune/2012-08/13/c_123575671.htm">http://news.xinhuanet.com/fortune/2012-08/13/c_123575671.htm</a> <a href="http://blog.sina.com.cn/s/blog_5d55fe3e0102e167.html">http://blog.sina.com.cn/s/blog_5d55fe3e0102e167.html</a> <a href="http://news.xinhuanet.com/fortune/2012-06/18/c_123298497.htm">http://news.xinhuanet.com/fortune/2012-06/18/c_123298497.htm</a>
/39/	Economic evaluation code for small hydropower projects, issued by Ministry of Water Resources, 2 <sup>nd</sup> June 1995

## 2.2 Follow-up Interviews with Project Stakeholders

TÜV Rheinland Validation Team carried out an on-site visit dated from 07 Mar. 2013 to 08 Mar. 2013 and performed interviews with the PoA representatives and stakeholders. The site visit was conducted to validate the accuracy and completeness of the PoA description as specified in the webhosted PoA-DD.

During the site visit, the Validation Team reviewed the available programme of activity designs, feasibility studies, and conducted documentation check and comparison analysis with equivalent projects as appropriate.

Prior to the interview salient points to be discussed were planned. Date of interview, interviewee and points discussed are given in the following table. Validation Team considered the views obtained in these interviews while arriving at Validation Opinion.

	Date	Name	Organization	Topic
/i/	07/03/2013	Ms SONG Xiaona	Beijing YuanDa Carbon Assets Investment Management Co., Ltd. (CME)	- PP's background
/ii/	07/03/2013	Mr GAO Yanping		- PoA implementation and management system
/iii/	07/03/2013	Mr WEI Keyong		- Water sources
				- Public funding
				- CDM consideration
/iv/	07/03/2013	Mr ZHAI Renchuan	Guizhou Xinrenyuan Hydro-electric Co., Ltd (CPA implementer)	- Project design
				- Baseline identification
				- ER calculation
				- Additionality issues
				- Grid connection
				- Monitoring plan
/v/	07/03/2013	Mr CHEN Yingcheng	Zheng'an County Development and Reform Bureau (Local authority)	- Project approval
				- Impacts on local economic, social and sustainable development
				- Preferential policy
				- Financial subsidy
/vi/	07/03/2013	Mr WANG Hong	Zheng'an County Environmental Protection Bureau (Local authority)	- Environmental impacts
				- Mitigation measures
				- Environmental approval
/vii/	07/03/2013	Mr WANG Shuxing	Local farmer	- Job opportunities
				- Land compensation
/viii/	07/03/2013	Mr WANG Ming	Local farmer	- Opinion on the PoA

## 2.3 Resolution of Outstanding Issues

The objective of this phase of the validation is to resolve any outstanding issues (issues that require further elaboration, research or expansion) which need be clarified prior to TÜV Rheinland's positive conclusion on the PoA design. In order to ensure transparency a validation protocol is customized for the PoA. The protocol shows in transparent manner criteria (requirements), means of validation and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes, details and clarifies the requirements a CDM project is expected to meet CDM requirements;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.
- It ensures that the issues are accurately identified, formulated, discussed and concluded in the validation report.
- It ensures the determination of achieving credible emission reductions from the programme of activity.

The validation protocol consists of three tables. The different columns in these tables are described in the figure below. The completed validation protocol for this project is enclosed in Appendix A to this report.

Findings established during the validation can either be seen as a non-fulfillment of CDM criteria or where a risk to the fulfillment of project objectives is identified. Corrective action requests (CAR) are issued, where:

- Mistakes have been made with a direct influence the ability of the programme of activity to achieve on project results like real, measurable, verifiable and additional emission reductions;
- CDM and/or methodology specific requirements have not been met; or
- There is a risk that the PoA would not be accepted as a CDM project or that emission reductions will not be certified.

A request for clarification (CL) may be used where additional information is needed to fully clarify an issue.

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

<b>Table 1: Validation requirements</b>				
<b>Checklist Question</b>	<b>Reference</b>	<b>Means of Validation (MoV)</b>	<b>Findings, comments</b>	<b>Draft and/or Final Conclusion</b>
The various UNFCCC requirements as specified in the VVS are linked to checklist questions the PoA should meet. The checklist is organized in different sections, following the logic of the VVS.	Gives reference to documents where the answer to the checklist question or item is found.	Explains how conformance with the checklist question is investigated. Examples of means of validation are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (OK), or a corrective action request (CAR) due to non-compliance with the checklist question (See below). A request for clarification (CL) is used when the Validation Team has identified a need for further clarification.

<b>Table 2: List of Requests for Corrective Action (CAR) and Clarification (CL)</b>			
<b>Clarifications and corrective action requests</b>	<b>Ref. to checklist question in table 1</b>	<b>Summary of project owner response</b>	<b>Validation Team's conclusion</b>
If the conclusions from the draft Validation are either a CAR or a CL, these should be listed in this section.	Reference to the checklist question number in Table 1 where the CAR or CL is explained.	The responses given by the PoA participants during the communications with the Validation Team should be summarized in this section.	This section should summaries the Validation Team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final Conclusion".

Table 3: List of forward action requests (FARs)			
FAR number	Reference	Summary of project owner response	Validation Team conclusion
Forward action request (FAR) to be raised during validation to highlight issues related To project implementation that requires review during the first verification of the programme of activity. FARs Shall not relate to the CDM requirements for registration.	Reference to the checklist question number in Table where the CAR or CL is explained.	The responses given by the PoA participants during the communications with the Validation Team should be summarized in this section.	This section should summaries the Validation Team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final Conclusion".

## 2.4 Internal Quality Control

The final validation report underwent a technical review by two qualified independent reviewers before requesting registration of the programme of activity. The technical review was performed by a technical reviewer qualified in accordance with TÜV Rheinland's qualification scheme for CDM validation and verification that meets the criteria of EB guidelines for qualification.

## 2.5 Validation Team

Before the assessment begins, members of the Validation Team are ensured to cover the technical area(s), sectoral scope(s) and relevant host country experience including local language ability for evaluating the CDM programme of activity. The qualification of the team is as per the criterias defined by the EB guidelines for qualification.

Validation Team			Type of Involvement						
Full name	Affiliation TÜV Rheinland	Appointed for Sectoral Scopes (Technical Areas)	Supervising the work	Desk review	Site Visit + Interview	Report and protocol Writing	Technical Expert Input	Reporting Support	Technical Reviewer
JIN Hua	China	1.2, 13.1, 13.2	X	X	X	X			
TAN Yi	China	1.2, 13.1							X
Walter Tang	China	1.1, 1.2, 2.1, 2.2, 3.1, 4.3, 4.5, 13.1							X

### 3 VALIDATION FINDINGS

The findings of the validation are stated in the following sections. The validation criteria (requirements), the means of validation and the results from validating the identified criteria are documented in more detail in the validation protocol in Appendix A.

The final validation findings relate to the programme design as documented and described in the PoA-DD.

#### 3.1 Approval and Participation

Based on the PoA-DD, the PoA is a unilateral one, with P. R. China as the host party. The project participant from the host party is Beijing YuanDa Carbon Assets Investment Management Co., Ltd.. The P. R. China is a party to the Kyoto Protocol, which can be verified by referring to website of 'www.unfccc.int'.

##### 3.1.1 Letter of Approval

The Letter of Approval (LoA)/3/, issued by the DNA of China i.e. National Development and Reform Commission, has been received from the project participant directly. This LoA/3/ authorizes 'Beijing YuanDa Carbon Assets Investment Management Co., Ltd.' as the voluntary project participant and also the coordinating/managing entity (CME) for the coordination of the proposed PoA. The LoA refers to the precise PoA title in the PoA-DD (Version 04, 23 Apr. 2013). The authenticity of this LoA/3/ has been validated effective by checking on Chinese DNA's website.

It should be explained that in this LoA/3/, Beijing YuanDa Carbon Assets Investment Management Co., Ltd. was permitted to transfer a certain amount of CERs to the entity "Sinoda Carbon Capital Pty Ltd." which is to be authorized by the Government of Australia. After having reviewed "Approval Note on Change of Project Participants for the PoA"/4/ issued by the NDRC, the Validation Team confirms that the PoA has been changed from the previous bilateral project to unilateral project with no change of other elements of the LoA; as a result, the previous CER buyer "Sinoda Carbon Capital Pty Ltd" was excluded from the participation of this PoA. Instead, all CERs to be generated by the PoA will be firstly transferred into the China's national account in the CDM registry, and these CERs can be only transferred to other account once the CER buyer is determined with the consent of the P. R. China's Designated National Authority for CDM. As reported in PoA-DD (Version 04, 23 Apr. 2013), P. R. China as the host Party is thus considered as a project participant. Thus, the DNA of China, i.e. National Development and Reform Commission representing China, is involved in the PoA as one project participant.

After having reviewed "Termination of ERPA between project participant and the previous buyer Sinoda Carbon Capital Pty Ltd"/33/, the Validation Team is able to confirm that the previous buyer i.e. Sinoda Carbon Capital Pty Ltd has withdrawn from participation of the PoA voluntarily.

Furthermore, the below table summarizes the project participant and party involved. The authenticity of the Letters of Approval has been validated by the Validation Team as indicated in the table below.

<b>Project participants</b>	1. Beijing YuanDa Carbon Assets Investment Management Co., Ltd.	2. National Development and Reform Commission of the People's Republic of China
-----------------------------	-----------------------------------------------------------------	---------------------------------------------------------------------------------

<b>Parties involved</b>	P. R. China	P. R. China
<b>APPROVAL</b>		
LoA received	Yes	Not applicable
Date of LoA	Oct. 2012	Not applicable
Reference to document	Ref.4701	Not applicable
LoA received from	Project participant	Not applicable
Validation of authenticity	The authenticity of the letter of approval from host party has been validated by checking on Chinese DNA's website. No doubts are found toward this letter.	Not applicable
Validity of LoA	<p>All approved CDM projects by DNA of China NDRC will be published on: 'http://cdm.ccchina.gov.cn/'.</p> <p>The PoA is indicated as approved by China DNA, source: 'http://cdm-en.ccchina.gov.cn/website/cdm/pdf/Item_new/Item_new9730.pdf'.</p> <p>The Validation Team has assessed this website on 22 March 2013 and confirms that the LoA is valid.</p>	Not applicable
<b>PARTICIPATION</b>		
Party is party to Kyoto Protocol	Yes	Not applicable
Voluntary participation	Yes	Not applicable
Diversion of official development aid towards host country	Not applicable	Not applicable
Project contribution to Sustainable Development	Yes. It confirms in Chinese LoA that the PoA assists China in achieving sustainable development.	Not applicable

The LoA is therefore regarded as valid and meeting the requirements.

### 3.1.2 ODA Validation

It is claimed in the section A.7 of the PoA-DD (Version 04, 23 Apr. 2013) that no public funding from Annex I countries is provided to the PoA. During on-site interview with Mr. GAO Yanping/ii/, the Vice Director from Beijing YuanDa Carbon Assets Investment Management Co., Ltd., the Validation Team was introduced that the development of all component project

activities (CPAs) will be financed by the CPA implementers themselves and/or loan from commercial banks. And no evidence has been revealed that the PoA can be seen as a diversion of ODA funding from Annex I parties.

### 3.1.3 Modalities of Communications

Requirement of MoC	Criteria fulfilled	Determination by the Validation Team
Is the focal point identified?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Yes, both the DNA of host country (i.e. National Development and Reform Commission) and CME (i.e. Beijing YuanDa Carbon Assets Investment Management Co., Ltd.) have been identified as the joint focal point for the PoA.
Is the MoC signed by all project participant (including focal point identified entity/personal)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Yes, the MoC has been signed by all project participants (including identified focal points). For the section 3 "Statement of Agreement" of the MoC, only the CME has signed this statement of agreement on behalf of all project participants, which is in line with the requirements of filling out MoC.
Is the written confirmation obtained by the PP's stating the authorization, specimen signatures and personal details, employment status are valid and accurate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The Modalities of Communication Form (MoC) signed on 26 March 2013 was received from the project participant directly. The Validation Team has contacted Mr. HE Junyuan from Beijing YuanDa Carbon Assets Investment Management Co., Ltd. through the Email address as indicated in the MoC, which is attached in the Email, to confirm the authenticity of the MoC. The Validation Team was confirmed by above person through replying Validation Team's Email that the contact details and signatories were authorized and credible. Besides that, the Validation Team confirms the contact information contained in the Appendix 1 of the PoA-DD (Version 04, 23 Apr. 2013) is consistent with that in the MoC and within PoA-DD (Version 04, 23 Apr. 2013) itself.
Is the MoC received by the Validation Team from the PP with whom DOE has the contractual relationship?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Yes, the MoC was received from the CME (i.e. Beijing YuanDa Carbon Assets Investment Management Co., Ltd.), which has the contractual relationship with TRC.

The Validation Team confirms that the applicable latest template has been used by the project participant for the MoC. The MoC was received from the DOE's contractual project participant. All the personal who have duly signed the MoC have been confirmed from the written communication regarding their personal identity, specimen signatures and employment status. In conclusion, the Validation Team confirms it has performed due

diligence on the MoC statement in accordance with the requirements of Para. 58, VVS of Version 3.0.

### 3.2 Programme of Activities Design Document

The Validation Team confirms that the PoA-DD of Version 04, 23 Apr. 2013, is prepared based on the latest PoA-DD template “Programme design document form for small-scale CDM programmes of activities (F-CDM-SSC-PoA-DD), Version 02.0” and is completed in accordance with the latest “Guidelines for completing the programme design document form for small-scale CDM programmes of activities, Version 02.1”.

### 3.3 Programme Description

The programme description in the PoA-DD (Version 04, 23 Apr. 2013) has been validated by on-site physical inspection, document review, and on-site stakeholder interview, including project management representative, local resident and local officers.

The proposed PoA is developed by the coordinating/managing entity (CME) namely ‘Beijing YuanDa Carbon Assets Investment Management Co., Ltd.’. This programme aims to promoting the development of small-scale hydropower projects in Guizhou province, and the physical/geographical boundary of the PoA is limited within Guizhou province with its geographical coordinates are east longitude of 103.6000°-109.5833° and northern latitude of 24.6167°-29.2167°. After having reviewed “Declaration of voluntary participation for the PoA”/32/ and on-site interviews with the CME, the Validation Team confirms that the PoA is a voluntary co-ordinated action by the CME. It is described in the PoA-DD (Version 04, 23 Apr. 2013) that there are three possible types of CPAs under the PoA as follows:

Project scenario	Description of project scenario
Scenario 1	Green-field hydropower project
Scenario 2	Capacity addition of an existing hydropower project
Scenario 3	Retrofit of an existing hydropower project

The above-mentioned 3 scenarios are described by 3 separate generic CPAs in the section of Part II, Part III and Part IV respectively in the PoA-DD (Version 04, 23 Apr. 2013), which is in line with the EB secretariat’s clarifications listed in the Para 15 of 14<sup>th</sup> Teleconference Meeting Minutes (Post EB71)/23/ and Para. 143 of “Project Standard, Version 02.1”/9/.

Each CPA under the programme involves implementation of small-scale hydropower project with the capacity of less than 15 MW and supplies electricity to the grid. The PoA will achieve emission reductions by supplying zero-emission electricity to Southern China Power Grid (SCPG), which is dominated by fossil fuel fired power plants according to recent China Electric Power Yearbook/27/.

#### Selection of Crediting Period of the PoA:

As per the PoA-DD (Version 04, 23 Apr. 2013), the starting date of the PoA is identified as 05 Feb. 2013, which is the date of publication of the PoA-DD (Version 01, 03 Feb. 2013) for global stakeholder consultation (GSC) in line with the Para 159 of Clean Development Mechanism Project Standard, Version 02.1/9/. The length of the PoA is taken as 28 years.

To the Validation Team's opinion, the description of the proposed programme as contained in the PoA-DD (Version 04, 23 Apr. 2013) sufficiently covers all relevant elements, is accurate and complete and it can provide the reader with a clear understanding the nature of the proposed programme of activities.

Herewith, the Validation Team summarizes major changes between webhosted PoA-DD and final version of PoA-DD for submission as follows:

Subject	Webhosted PoA-DD	<b>Correction to webhosted PoA-DD in the final PoA-DD submission for registration with DOE assessment and reason of acceptance.</b>
PoA-DD (project title / participants involved/ project location /project technology etc.)	In the webhosted PoA-DD, there is only one generic CPA (Part II) including 3 project scenarios.	In the final version of PoA-DD, the 3 project scenarios (i.e. green-field, capacity addition and retrofit) have been properly described in the section of Part II, Part III and Part IV respectively in the PoA-DD. For details, please refer to CAR 5 listed in the Table 2 of Appendix A of this report.
Methodologies and tools applied ( scope and version numbers)	N/A, no change for this part.	
CER calculations (formula applied/ amount of emission reduction)	N/A, no change for this part.	
Eligibility criteria including demonstration of additionality	In the webhosted PoA-DD, the conditions to check the start date of the CPA was not defined in the format of dd/mm/yyyy.	In the final version of PoA-DD, the conditions to check the start date of the CPA have been clearly defined in the format of dd/mm/yyyy. For details, please refer to CAR 2 listed in the Table 2 of Appendix A of this report.
CME's Management system	In the webhosted PoA-DD, the records and documentation control process for each CPA under the PoA was insufficiently defined.	In the final version of PoA-DD, the the records and documentation control process for each CPA under the PoA have been clearly described. For details, please refer to CAR 3 listed in the Table 2 of Appendix A of this report.
Monitoring (parameters / frequency )	In the webhosted PoA-DD, the parameters CAP <sub>BL</sub> and A <sub>BL</sub> were not included as ex-ante parameters for CPAs with a capacity addition or retrofit of an	In the final version of PoA-DD, the parameters CAP <sub>BL</sub> and A <sub>BL</sub> have been added as ex-ante parameters for the CPAs with a capacity addition or retrofit of an

	existing hydropower plant.	existing hydropower plant. For details, please refer to CAR 6 listed in the Table 2 of Appendix A of this report.
Crediting period ( type / start date)	In the webhosted PoA-DD, the start date of the PoA was not defined in the format of dd/mm/yyyy.	In the final version of PoA-DD, the start date of the PoA has been clearly defined as 05/02/2013, which is the date of publication of the PoA-DD for global stakeholder consultation (GSC). For details, please refer to CAR 4 listed in the Table 2 of Appendix A of this report.
<p>Please refer to Appendix A of this report for details of each change between webhosted PoA-DD and the final PoA-DD for submission. The Validation Team has carried out the validation process based on the Webhosted PoA-DD and raised CARs/CLs against the PoA by issuing the validation protocol.</p> <p>With the updated information and corrections done on final PoA-DD, the PP has addressed all the CARs /CLs that were raised by the Validation Team.</p> <p>It is concluded that the Validation Team has reviewed the PoA in line with the VVS (Version 3.0) and all the evidence, corrections, justifications and updating done on the final PoA-DD with respect to CARs /CLs raised are accepted and closed by the Validation Team, issuing the positive validation opinion for project registration.</p>		

### 3.4 Eligibility Criteria for CPA Inclusion

After having reviewed the PoA-DD (Version 04, 23 Apr. 2013) and on-site interview with representatives of CME, the Validation Team confirms that the CME establishes objective, comprehensive and verifiable criteria for the inclusion of the CPAs.

The detailed assessment on the eligibility criteria for inclusion of a CPA is demonstrated in line with the Para 16 of "Demonstration of additionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1" in the table below:

No.	Eligibility criteria for inclusion of a CPA in the PoA	Compliance	Possible documentation to substantiate compliance	Validation opinion
(a)	The CPA is located within the boundary of Guizhou Province.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> <li>FSR and its approval, or PDR and its approval;</li> <li>Evidence of geographical coordinates positioning.</li> </ul>	Yes, the PoA-DD (Version 04, 23 Apr. 2013) requires that the CPA shall be located within the boundary of Guizhou province and the cited documentation is sufficient to confirm the compliance with this criteria, which is in line with the Para 16(a) of

				“Demonstration of addtionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1”/17/.
(b)	The CPA has a unique geographic coordinates and it is neither a CPA of another PoA nor registered (incl. application for registration) as a CDM project activity.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> <li>– Check with the UNFCCC website CDM pipeline and PoA pipeline;</li> <li>– Declaration from the CPA implementer.</li> </ul>	Yes, the cited documentation is sufficient to confirm the compliance with the defined condition, which is in line with the Para 16(b) of “Demonstration of addtionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1”/17/.
(c)	The CPA is either a green-field hydropower plant, or capacity addition or retrofit of an existing hydropower plant.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> <li>– FSR and its approval, or PDR and its approval;</li> <li>– If available, purchase contracts/orders of equipments or retrofit contract.</li> </ul>	Yes, the cited documentation is sufficient to confirm the compliance with the defined criteria, which is in line with the Para 16(c) of “Demonstration of addtionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1”/17/.
(d)	The start date of CPA is after 05/02/2013 (i.e. the date of publication of the PoA-DD for global stakeholder consultation and therefore identified as the start date of the PoA).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> <li>– Purchase contracts/orders of equipments;</li> <li>– Construction contract/Retrofit contract and other available contracts etc.</li> </ul>	Yes, the cited documentation is sufficient to confirm the start date of CPA and the defined criteria is in line with the Para 16(d) of “Demonstration of addtionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version

				02.1"/17/.
(e)	The CPA meets the applicable conditions of AMS-I.D Grid connected renewable electricity generation, Version 17.0	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> <li>– FSR and its approval, or PDR and its approval;</li> <li>– If applicable, grid connection approval or PPA.</li> <li>– Other relevant available documentation</li> </ul>	<p>Yes, the cited documentation is used to confirm the project scenario and the applicability of using AMS-I.D version 17.0, and the defined criteria is in line with the Para 16(e) of "Demonstration of additionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1"/17/.</p>
(f)	The CPA is demonstrated additional either in line with "Guidelines on the demonstration of additionality of small scale project activities, Version 09.0" or "Guidelines for demonstrating additionality of microscale project activities, Version 04.0"	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> <li>– FSR and its approval, or PDR and its approval for the CPA's financial attractiveness;</li> <li>– If applicable, evidence for local income with proportion of population</li> <li>– Other relevant available documentation</li> </ul>	<p>Yes, the cited documentation is sufficient to confirm the compliance with the defined criteria, which is in line with the Para 16(f) of "Demonstration of additionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1"/17/.</p> <p>The CPA's additionality assessment approach has been discussed in the section 3.7. Approach for demonstrating CPA's additionality of this report. And the detailed assessment shall be done at the specific CPA level.</p>
(g)	Local stakeholder consultation and environmental impact assessment have been conducted, as a result, no one is	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> <li>– Questionnaire or meeting records for the stockholder's consultation;</li> <li>– Environmental impact assessment</li> </ul>	<p>Yes, the cited documentation is sufficient to confirm the defined criteria, which is in line with the Para 16(g) of "Demonstration</p>

	against the development of the CPA and the CPA is in line with the relevant environmental regulations.		(EIA) report and its approval. – Other relevant available documentation	of additionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1"/17/.
(h)	The CPA does not involve any public funding from Annex I countries	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	– Declaration from CPA's implementer; – Other relevant available documentation	Yes, the defined criteria is in line with the Para 16(h) of "Demonstration of additionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1"/17/.
(i)	The CPA supplies electricity to a regional grid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	– FSR and its approval, or PDR and its approval; – If applicable, grid connection approval or PPA. – Other relevant available documentation	Yes, the cited documentation is used to confirm the compliance with the defined criteria, which is in line with the Para 16(i) of "Demonstration of additionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1"/17/.
(j)	Sampling is not required for the CPA	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Not applicable.	It is not applicable for the CPA, which is in line with the Para 16(j) of "Demonstration of additionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1"/17/.
(k)	The CPA (in aggregate if it comprises of independent sub units) meets the small-scale threshold	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	– FSR and its approval, or PDR and its approval; – If applicable, purchase contract of	Yes, the cited documentation is used to confirm the compliance with the defined criteria, which is in line with the Para

	of 15MW or microscale threshold of 5MW throughout the crediting period		main equipment; – Other relevant available documentation	16(k) of “Demonstration of addtionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1”/17/.
(l)	The CPA is not a de-bundled component of a large scale project activity	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	– Check with the UNFCCC website CDM pipeline; – Declaration from the CPA implementer.	Yes, the cited documentation is sufficient to confirm the compliance with the defined condition, which is in line with the Para 16(l) of “Demonstration of addtionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1”/17/.
Additional eligibility criteria to be fulfilled for inclusion of CPA in PoA				
(m)	The implementation of the CPA is in line with relevant national and local regulations	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	– FSR and its approval, or PDR and its approval; – EIA approval; – Construction permission; – Grid connection approval and etc.	Yes, the cited documentation is sufficient to confirm the compliance with the defined condition. The Validation Team considers that this defined criteria is required to be fulfilled for inclusion of CPA into PoA.
(n)	The CPA implementer agrees the inclusion of its CPA in the PoA and follows the monitoring requirements outlined in the PoA-DD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	– Agreement between CPA implementer and CME.	Yes, the cited documentation is sufficient to confirm the compliance with the defined condition. The Validation Team considers that this defined criteria is required to be fulfilled for inclusion of CPA into PoA.
(o)	The energy generating equipment	<input checked="" type="checkbox"/> Yes	– FSR and its approval, or PDR	Yes, the cited documentation is

	employed by the CPA is not transferred from/to another activity	<input type="checkbox"/> No	and its approval; <ul style="list-style-type: none"> <li>– Purchase contract of main equipment.</li> <li>– Other relevant available documentation</li> </ul>	sufficient to confirm the compliance with the defined condition. The Validation Team considers that this defined criteria is required to be fulfilled for inclusion of CPA into PoA.
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### 3.5 Operational and Management Plan

After having reviewed the PoA-DD (Version 04, 23 Apr. 2013) and on-site interview with representatives of CME, the Validation Team confirms that the CME has the competencies to check the features of potential CPAs and ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA.

The Validation Team concludes that the management system outlined in the PoA-DD (Version 04, 23 Apr. 2013) is clear, transparent and valid. The detailed assessment on the management system is demonstrated in line with the Para 19 of "Demonstration of additionality, development of eligibility criteria and applicable of multiple methodologies for programmes of activities, Version 02.1" in the table below:

No.	Elements of the management system	Compliance with PoA Standard	Validation opinion
(a)	A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The CME has clearly defined the roles and responsibilities of personnel (including PoA manager, PoA and CPA development group, CPA management group, QA/QC group, financial department and a review of their competencies) involved in the process of inclusion of CPAs in the section C of PoA-DD (Version 04, 23 Apr. 2013). The Validation Team considers that this element is made available and eligible in the PoA-DD (Version 04, 23 Apr. 2013).
(b)	Records of arrangements for training and capacity development for personnel	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As outlined in the PoA-DD (Version 04, 23 Apr. 2013), the CME shall organize comprehensive trainings for its staff, which is further evidenced by the "Training plan and records for the implementation of the PoA"/34/. The Validation Team considers that this element is made available and eligible in the PoA-DD (Version 04, 23 Apr. 2013).

			2013).
(c)	A procedure for technical review of inclusion of CPAs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As outlined in the PoA-DD (Version 04, 23 Apr. 2013), the procedures for technical review of inclusion of CPAs shall be established. The Validation Team considers that this element is made available and eligible in the PoA-DD (Version 04, 23 Apr. 2013).
(d)	A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As outlined in the PoA-DD (Version 04, 23 Apr. 2013), a procedure to avoid double counting shall be established and the CME will check with the EB website, CDM pipeline/29/ and PoA pipeline/30/ to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA. The Validation Team considers that this element is made available and eligible in the PoA-DD (Version 04, 23 Apr. 2013).
(e)	Records and documentation control process for each CPA under the PoA	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>As outlined in the PoA-DD (Version 04, 23 Apr. 2013), the CME shall maintain an electronic database called PoA database, which lists out the detailed information about the PoA and each CPA. And the relevant documentation control process has also been properly specified in the PoA-DD (Version 04, 23 Apr. 2013).</p> <p>The Validation Team considers that this element is made available and eligible in the PoA-DD (Version 04, 23 Apr. 2013).</p>
(f)	Measures for continuous improvements of the PoA management system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>As outlined in the PoA-DD (Version 04, 23 Apr. 2013), the PoA management system shall be reviewed annually to identify shortcomings, find solutions to shortcomings, and finally to improve the PoA management performance.</p> <p>The Validation Team considers that this element is made available and eligible in the PoA-DD (Version 04, 23 Apr. 2013).</p>
(g)	Any other relevant elements, e.g. QA/QC procedures and de-	<input checked="" type="checkbox"/> Yes	As outlined in the PoA-DD (Version 04, 23 Apr. 2013), the CME shall establish

	bundling check.	<input type="checkbox"/> No	<p>a QA/QC group, which is responsible for cross-checking the PoA database, basic information, related documents, IRR spreadsheet and monitoring data and etc.</p> <p>In addition, the QA/QC group will conduct the de-bundling check to ensure that the CPA is not a de-bundled component of a large-scale project activity.</p> <p>The Validation Team considers that these two elements are made available and eligible in the PoA-DD (Version 04, 23 Apr. 2013).</p>
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### 3.6 Baseline and Monitoring Methodology

#### 3.6.1 Applicability of the selected methodology

The proposed PoA applies the approved methodology AMS-I.D, Version 17-"Grid-connected Renewable Electricity Generation", which is valid since 17<sup>th</sup> June 2011 onwards<sup>1</sup>. Hence the Validation Team confirms the used version of the selected methodology is valid for the proposed project activity. The applicable conditions of the applied AMS-I.D, Version 17 are justified as follows:

Applicability criteria of the methodology AMS-I.D, Version 17	Criteria fulfilled	Validation Team's opinion
<p>This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</p> <p>(a) Supplying electricity to a national or a regional grid; or</p> <p>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>As described in the PoA-DD (Version 04, 23 Apr. 2013), the proposed PoA will include 3 types of small-scale hydropower plants to generate electricity and supply it to the grid: greenfield, capacity addition and retrofit of an existing plant. The Validation Team confirms that any type of CPA is to utilize hydropower to generate electricity and supply it to a regional grid.</p>
<p>Illustration of respective situations under which each of the methodology (i.e. AMS-I.D, AMS-I.F and AMS-I.A<sup>2</sup>) applies is included in Table 2 of AMS-I.D, Version 17</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>As demonstrated above, the CPA shall supply electricity to a regional grid, and therefore it is applicable to use AMS-I.D, Version 17 as per the Table 2 of the methodology AMS-I.D, Version 17.</p>
<p>This methodology is applicable to project activities that:</p> <p>(a) Install a new power plant at a site</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>As demonstrated above, the CPA is either a green-field power plant, or retrofit or capacity addition of an</p>

<sup>1</sup> <http://cdm.unfccc.int/methodologies/DB/RSCTZ8SKT4F7N1CFDXCSA7BDQ7FU1X>

<sup>2</sup> AMS-I.D Grid connected renewable electricity generation, AMS-I.F Renewable electricity generation for captive use and mini-grid" and AMS-I.A Electricity generation by the user"

<p>where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant);</p> <p>(b) Involve a capacity addition;</p> <p>(c) Involve a retrofit of (an) existing plant(s);</p> <p>(d) Involve a replacement of (an) existing plant(s).</p>		existing power plant.
<p>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</p> <ul style="list-style-type: none"> <li>• The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</li> <li>• The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>;</li> <li>• The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>.</li> </ul>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The CPA shall be either implemented in an existing reservoir with no change in the volume of reservoir or with the power density greater than 4 W/m<sup>2</sup>.</p>
<p>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>The CPA has only renewable component, and with the capacity of less than 15 MW.</p>
<p>Combined heat and power (co-generation) systems are not eligible under this category.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	<p>Not applicable</p>
<p>In the case of project activities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>According to the PoA-DD (Version 04, 23 Apr. 2013), in case of capacity addition at an existing hydropower plant, the added capacity by the project shall be lower than 15MW and physically distinct from existing units.</p>
<p>In the case of retrofit or replacement, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<p>According to the PoA-DD (Version 04, 23 Apr. 2013), in case of retrofit of an existing hydropower plant, the total output of the retrofitted unit shall not exceed the limit of 15 MW.</p>

In conclusion, the Validation Team has assessed each applicability condition listed in the applied methodology and it is to the Validation Team's opinion the applied methodology is applicable for any type of CPA under the proposed PoA.

### 3.6.2 PoA geographical boundary

As per the PoA-DD (Version 04, 23 Apr. 2013), the PoA will be implemented within the geographical boundary of Guizhou province, China. The boundary of the potential/future CPAs for the PoA has been assessed by considering information gathered from the OSV, interviews, and from description of the gas and sources involved as contained in the PoA-DD (Version 04, 23 Apr. 2013). According to the applied AMS-I.D, Version 17, 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. The electricity generated by any CPA under the proposed PoA will be delivered to SCPG, which covers Guangdong Power Grid, Guangxi Power Grid, Yunnan Power Grid, Guizhou Power Grid, Hainan Power Grid in accordance with the latest guidance/24/ issued by China DNA in October 2012. Therefore the PoA boundary is defined as the project power plant and all power plants connected physically to SCPG.

The system boundary and the selected sources and gases are justified transparently and are presented as below:

Emissions	GHGs involved	Description
<b>Baseline emissions</b>	CO <sub>2</sub>	In the absence of the PoA, the same quantity of electricity will be imported from SCPG that is dominated by fossil fuel fired power plants.
	CH <sub>4</sub>	Excluded – minor emission source
	N <sub>2</sub> O	Excluded – minor emission source
<b>Project emissions</b>	CO <sub>2</sub>	Excluded – minor emission source
	CH <sub>4</sub>	Included only if the power density of the project activity (PD) is greater than 4 W/m <sup>2</sup> and less than or equal to 10 W/m <sup>2</sup> .
	N <sub>2</sub> O	Excluded – minor emission source
<b>Leakage</b>	N/A	Neglected as per AMS-I.D, Version 17.

In addition to the above, the CME has defined in the PoA-DD (Version 04, 23 Apr. 2013) that all CPAs which will be included in the PoA are all located only in the Guizhou province, China. Based on the local expert & team experience, the Validation Team confirms that there are no mandatory regulations on the development of small scale hydropower plants in China that mandate the CME to implement the proposed PoA or participating project units to undertake the project activity. The implementation of the PoA remains as a voluntary action.

The Validation Team confirms that the project boundary and selected sources of greenhouse gases have been identified in a clear manner for the project activity in the PoA-DD (Version 04, 23 Apr. 2013) according to the applied methodology.

### 3.6.3 Baseline Identification

As discussed in Section 3.6.1 of this report, the simplified baseline and monitoring

methodology AMS-I.D, Version 17 is applicable for the proposed PoA.

The baseline scenario has been described in the AMS-I.D that is Electricity delivered to the grid by the programme of activities would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid , as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system". As per article 115 of the VVS Version 3.0, no alternatives are to be discussed since the baseline scenario has been prescribed clearly in the baseline methodology.

The grid emission factor of the SCPG is estimated as the combined margin (CM), which is the weighted average of the operating margin (OM) emission factor and the build margin (BM) emission factor.

All the assumption and data used by the project participant are listed in the PoA-DD (Version 04, 23 Apr. 2013). All documentation relevant for establishing the baseline scenario are correctly quoted and interpreted in the PoA-DD (Version 04, 23 Apr. 2013). Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable. Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD (Version 04, 23 Apr. 2013).

Validation Criteria	Check	Validation Team's Comments
The approved baseline methodology applicable to the PoA - explicit criteria - implicit criteria (e.g. available scenarios, applicability of formulas for BE/PE/LE calculations)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The applied AMS-I.D, Version 17 has been justified to be applicable to this PoA in the section 3.6.1 of this report.
PoA-DD includes all assumptions and data used by project participants	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The PoA-DD (Version 04, 23 Apr. 2013) includes all assumptions and data according to "AMS-I.D, Version 17"/19/ and "Tool to calculate the emission factor for an electricity system, Version 03.0.0"/20/.
All the references and documents used are relevant for establishing the baseline scenario	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	China Electric Power Yearbook 2007~2011/27/, China Energy Statistical Yearbook 2009~2011/28/ and "2012 Baseline Emission Factors for Regional Power Grids in China"/24/ issued by China DNA on October 2012 are relevant for establishing the baseline scenario according to AMS-I.D, Version 17/19/.
All the references and documents used are correctly quoted and conservatively interpreted in the PoA-DD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	All references and documents are confirmed to be correctly quoted and conservatively interpreted in the PoA-DD (Version 04, 23 Apr. 2013).
All relevant policies / regulations considered are listed in the PoA-DD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The baseline scenario of the PoA is clearly prescribed in the applied AMS-I.D, Version 17/19/ and confirmed during site visit.

Identified potential baseline scenarios reasonably represent what would/could occur in the absence of the proposed project activity	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The baseline scenario of the PoA is clearly prescribed in the applied AMS-I.D, Version 17/19/ and confirmed during site visit.
The baseline scenario selection is appropriate and determined according to the methodology	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The baseline scenario of the PoA is clearly prescribed in the applied AMS-I.D, Version 17/19/.
The approved methodology used is applicable to the identified baseline scenario	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The selected AMS-I.D, Version 17/19/ has clearly prescribed the baseline scenario for the PoA.

To the Validation Team's opinion, the selected baseline methodology AMS-I.D, Version 17 has been correctly applied to identify the baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed project activity.

### 3.6.4 GHG Emission Reductions from 3 typical scenarios of CPA

As per Para.23 of AMS-I.D, Version 17, the emission reductions achieved by the CPA are calculated by:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

$ER_y$	Emission reductions in year y (tCO <sub>2</sub> /y)
$BE_y$	Baseline emissions in year y (tCO <sub>2</sub> /y)
$PE_y$	Project emissions in year y (tCO <sub>2</sub> /y)
$LE_y$	Leakage emissions in year y (tCO <sub>2</sub> /y)

#### Baseline Emissions

- 1) Scenario 1: for a green-field hydropower project that supplies electricity to the grid, the baseline emissions ( $BE_y$ ) are calculated in line with Para.11 of AMS-I.D, Version 17 as follows:

$$BE_y = EG_{BL,y} \times EF_{CO_2,grid,y}$$

Where:

$BE_y$	Baseline Emissions in year y (tCO <sub>2</sub> )
$EG_{BL,y}$	Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y (MWh)
$EF_{CO_2,grid,y}$	CO <sub>2</sub> emission factor of the grid in year y (tCO <sub>2</sub> /MWh)

- 2) Scenario 2: for capacity addition of an existing hydropower project that supplies electricity to the grid, the baseline emissions ( $BE_{CapacityAddition,CO_2,y}$ ) are calculated in line with Para.15 of AMS-I.D, Version 17 as follows:

$$BE_{CapacityAddition,CO_2,y} = [EG_{BL,CapacityAddition,y}] \times EF_{CO_2,grid,y}$$

Where:

$$EG_{BL, CapacityAddition, y} = EG_{PJ, facility, y} - (EG_{historical} + \sigma_{historical})$$

$$EG_{BL, CapacityAddition, y} = 0 \text{ on/after DATE}_{BaselineCapacityAddition}$$

Where:

$EG_{BL, CapacityAddition, y}$	Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y (MWh)
$EG_{PJ, facility, y}$	Quantity of net electricity supplied to the grid by the project plant/unit in year y (MWh)
$EG_{historical}$	Annual average historical net electricity generation by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity (MWh)
$\sigma_{historical}$	Standard deviation of the annual average historical net electricity supplied to the grid by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity (MWh)
$DATE_{BaselineCapacityAddition}$	Point in time when the installation capacity of the existing equipment would need to be added in the absence of the project activity (date)

- 3) Scenario 3: for retrofit of an existing hydropower project that supplies electricity to the grid, the baseline emissions ( $BE_{retrofit, CO_2, y}$ ) are calculated in line with Para.15 of AMS-I.D, Version 17 as follows:

$$BE_{retrofit, CO_2, y} = [EG_{BL, retrofit, y}] \times EF_{CO_2, grid, y}$$

Where:

$$EG_{BL, retrofit, y} = EG_{PJ, facility, y} - (EG_{historical} + \sigma_{historical})$$

$$EG_{BL, retrofit, y} = 0 \text{ on/after DATE}_{BaselineRetrofit}$$

Where:

$EG_{BL, retrofit, y}$	Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y (MWh)
$EG_{PJ, facility, y}$	Quantity of net electricity supplied to the grid by the project plant/unit in year y (MWh)
$EG_{historical}$	Annual average historical net electricity generation by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity (MWh)
$\sigma_{historical}$	Standard deviation of the annual average historical net electricity supplied to the grid by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity (MWh)

DATE<sub>BaselineRetrofit</sub>

Point in time when the existing equipment would need to be replaced in the absence of the project activity (date)

#### Assessment of CM emission factor:

According to 'Tool to calculate the emission factor for an electricity system, Version 03.0.0', the combined margin emission factor for the CPAs as 0.65675 tCO<sub>2</sub>/MWh in the PoA-DD (Version 04, 23 Apr. 2013) has been assessed by the Validation Team as follows:

- 1.) The electricity generated by any CPA under the PoA will be supplied to the SCPG. According to the delineation of power grids, i.e. 2012 Baseline Emission Factors for Regional Power Grids in China published by NDRC on October 2012, the power plants physically connected to the SCPG can be dispatched without significant transmission constraints. Thus, the SCPG is identified as the project electricity system of any CPA under the PoA. There is electricity import from Central China Power Grid (CCPG) to SCPG according to the China Energy Statistics Yearbook 2009 to 2011/28/, China Electric Power Yearbook 2009 to 2011/27/, and therefore the connected electricity system is identified as CCPG that should be involved in determining the operating emission factor;
- 2.) The Validation Team has assessed the calculation of the Operating Margin (OM) in the PoA-DD (Version 04, 23 Apr. 2013) as follows:
  - I. the simple OM emission factor calculation method is appropriately selected because low cost/must run projects constitute less than 50% of the total grid generation of the SCPG according to the China Electric Power Yearbook 2007 to 2011/27/;
  - II. a 3-year generation-weighted average, based on the most recent available date at the time of commencement of validation (i.e. 5<sup>th</sup> Feb. 2013), is properly calculated. Those applied data are derived from the China Energy Statistics Yearbook 2009 to 2011/28/, China Electric Power Yearbook 2009 to 2011/27/ and 2006 IPCC Guidelines for National Greenhouse Gas Inventories/26/;
  - III. the Option B is properly selected for calculation of the simple OM considering the data on fuel consumption and net electricity generation of each power plant/unit is not publicly available in China;
  - IV. the calculation of the OM is correctly conducted in the PoA-DD (Version 04, 23 Apr. 2013) in line with the 'Tool to calculate the emission factor for an electricity system, Version 03.0.0'. The data and parameters used are appropriately derived from the data sources/26//27//28/.
- 3.) The Validation Team confirms that the Build Margin (BM) is calculated correctly as follows:
  - I. because plant specific fuel consumption and electricity generation data is not publicly available in China, the approved deviation of the baseline methodology of AM0005/25/ is appropriately applied in the PoA-DD (Version 04, 23 Apr. 2013);
  - II. the cohort of power units necessary of the BM calculation has been properly selected in the PoA-DD (Version 04, 23 Apr. 2013), according to the above deviation. The installed capacity addition from year 2008 through 2010 was selected as it stands for 22.35% of the total installed capacity of year 2010, which

satisfies the specification of over 20% in the 'Tool to calculate the emission factor for an electricity system, Version 03.0.0';

- III. the BM emission factor is ex-ante calculated in the PoA-DD (Version 04, 23 Apr. 2013), has been applied correctly as per the above approved deviation and the 'Tool to calculate the emission factor for an electricity system, Version 03.0.0'. The data and parameters used are appropriately derived from the data sources.

As a result, the Validation Team confirms that the OM emission factor calculated as 0.9344 tCO<sub>2</sub>e/MWh and BM emission factor calculated as 0.3791 tCO<sub>2</sub>e/MWh in the PoA-DD (Version 04, 23 Apr. 2013), are fully in line with the 'Tool to calculate the emission factor for an electricity system, Version 03.0.0'.

The Validation Team confirms that the Combined Margin (CM) is calculated correctly as follows:

The default weights of 50% OM and 50% BM for the first crediting period have been correctly selected and properly applied in the PoA-DD (Version 04, 23 Apr. 2013), and the default weights of 25% OM and 75% BM for the second and third crediting period will be applied instead in accordance with the 'Tool to calculate the emission factor for an electricity system, Version 03.0.0'.

In conclusion, the Validation Team confirms that the CM emission factor for the CPAs under the PoA is appropriately calculated as 0.65675 tCO<sub>2</sub>e/MWh in the PoA-DD (Version 04, 23 Apr. 2013), based on the most recent data available at the time of PoA-DD (Version 01, 03 Feb. 2013) published for GSC on 5<sup>th</sup> Feb. 2013 at the UNFCCC website.

## Project Emissions

As per Para.20 of AMS-I.D, Version 17, project emissions from hydro power plants have to be considered following the procedure described in the most recent version of ACM0002 Version 13.0.0 at the time of validation and the detailed calculation is shown as follows:

$$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$$

Where:

$PE_y$	Project emissions in year y (tCO <sub>2</sub> e/yr)
$PE_{FF,y}$	Project emissions from fossil fuel consumption in year y (tCO <sub>2</sub> e/yr)
$PE_{GP,y}$	Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year y (tCO <sub>2</sub> e/yr)
$PE_{HP,y}$	Project emissions from water reservoirs of hydro power plants in year y (tCO <sub>2</sub> e/yr)

The CPAs under the PoA are to utilize renewable hydro power to generate electricity without consuming any fossil fuel, and it's obvious that the CPA doesn't relate to the operation of geothermal power, therefore according to the referred ACM0002 Version 13.0.0, the project emission can be simplified by using the following equation:

$$PE_y = PE_{HP,y}$$

- (a) If the power density of the project activity (PD) is greater than 4 W/m<sup>2</sup> and less than or equal to 10 W/m<sup>2</sup>:

$$PE_{HP,y} = \frac{EF_{Res} \times TEG_y}{1000}$$

Where:

$EF_{Res}$	Default emission factor for emissions from reservoirs of hydro power plants in year y (kgCO <sub>2</sub> e/MWh)
$TEG_y$	Total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year y (MWh/yr)

(b) If the power density of the project activity (PD) is greater than 10 W/m<sup>2</sup>:

$$PE_{HP,y} = 0$$

The power density of the project activity (PD) is calculated as follows:

$$PD = \frac{Cap_{PJ} - Cap_{BL}}{A_{PJ} - A_{BL}}$$

Where:

PD	Power density of the project activity (W/m <sup>2</sup> )
Cap <sub>PJ</sub>	Installed capacity of hydro power plant after the implementation of the project activity (W)
Cap <sub>BL</sub>	Installed capacity of the hydro power before the implementation of the project activity (W). For new hydro power plants, this value is zero
A <sub>PJ</sub>	Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (m <sup>2</sup> )
A <sub>BL</sub>	Area of the reservoir measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m <sup>2</sup> ). For new reservoirs, this value is zero

## Leakage

As per the eligibility criteria for inclusion of a CPA into the PoA contained in the PoA-DD (Version 04, 23 Apr. 2013), the energy generating equipment by any CPA is not transferred from another activity, therefore the leakage is not necessarily to be considered in line with the Para. 22 of the applied AMS-I.D, Version 17.

## Emission Reductions

Based on the calculations presented in the sections above the implementation of the PoA will result in emission reduction during the crediting period.

All assumptions and data used by the project participant are listed in the PoA-DD (Version 04, 23 Apr. 2013) and/or supporting documents, including their references and sources. All documentation used by the project participant as the basis for assumptions and source of data is correctly quoted and interpreted in the PoA-DD (Version 04, 23 Apr. 2013). All values used in the PoA-DD (Version 04, 23 Apr. 2013) are considered reasonable and conservative in the context of the proposed CDM project activity. The baseline methodology has been

applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions. All estimates of the baseline, project and leakage emissions can be replicated using the data and parameter values provided in the PoA-DD (Version 04, 23 Apr. 2013). The table below summarizes Validation Team's determination of emission reduction:

Validation Criteria	Check	Validation Team's Comments
All assumptions made for estimating GHG are listed in the PoA-DD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	All the assumptions made for estimating GHG have been confirmed to be listed in the PoA-DD (Version 04, 23 Apr. 2013). The main assumptions are in line with the published "2012 Baseline Emission Factors for Regional Power Grids in China"/24/.
All data used by project participants are listed in the PoA-DD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per Appendix 4 of the PoA-DD (Version 04, 23 Apr. 2013).
Their references and sources are also listed in the PoA-DD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per Appendix 4 of the PoA-DD (Version 04, 23 Apr. 2013).
Formulas, parameters, values are complete, accurate, transparent and conservative	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per Appendix 4 of the PoA-DD (Version 04, 23 Apr. 2013).
All the references and documents used are correctly quoted and conservatively interpreted in the PoA-DD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per Appendix 4 of the PoA-DD (Version 04, 23 Apr. 2013).
Methodology has been applied correctly to calculate project emissions, baseline emissions, leakage emissions and emission reductions	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per Appendix 4 of the PoA-DD (Version 04, 23 Apr. 2013).
All the emissions of baseline emissions can be replicated using information provided in the PoA-DD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per Appendix 4 of the PoA-DD (Version 04, 23 Apr. 2013).

To the Validation Team's opinion, the emission reductions are calculated according to the baseline methodology. The parameters and data for the calculations are sourced from public available data sources and are clearly listed out in the PoA-DD (Version 04, 23 Apr. 2013).

### 3.7 Additionality

#### 3.7.1 Prior Consideration of the CDM

As per VVS, Version 3.0/8/, the assessment of prior consideration of the CDM for the PoA could apply the provisions of paragraph 194&107 in VVS.

The start date of the PoA is determined as the date of the GSC, i.e. 05 February 2013, which is after 02 August 2008. Since the PoA and any CPA had not started when the PoA-DD (Version 01, 03 Feb. 2013) was published for GSC on 05 February 2013, the PP did not need to submit notifications about CDM prior consideration.

Therefore the Validation Team considers that CDM benefits were seriously considered before the decision to undertake the project as a CDM project activity.

### 3.7.2 Additionality of the PoA as a whole

After having reviewed “Letter of Approval”/3/ and on-site interview with the representatives’ /i/ii/iii/ of the CME, the Validation Team confirms that participating in the proposed PoA is a voluntary coordinated action by CME. There are no mandatory requirements in China requiring any individuals or entities to utilize hydro power for electricity generation.

Although the Validation Team noticed that the Chinese Ministry of Water Resources has issued the “*Plan on New Rural Hydropower Electrification during China’s 12th Five-year Plan Period*” and “*Plan of Engineering on Substituting Fuel with Small Hydropower Electricity during the Period from 2009 to 2015*” respectively, both of which are supposed to promote the development of hydro power plants. However, as sufficiently demonstrated in the section B.1 of the PoA-DD (Version 04, 23 Apr. 2013), the small-scale hydro power projects in Guizhou province are experiencing serious financial crisis due to low electricity tariff and low electricity generation efficiency/38/. As a result, it is unlikely to attract investors and get loan from the commercial bank for the development of small-scale hydro power plants in Guizhou province, China. The Validation Team is convinced that none of the implemented CPAs would occur in the absence of CDM.

Nevertheless, the additionality of a specific CPA will be further demonstrated at the CPA level.

### 3.7.3 Approach for demonstrating CPA’s additionality

The additionality for a specific CPA will be assessed at CPA level before the inclusion of the CPA in the PoA.

Detailed demonstration is as follows:

1. For CPAs up to 5 MW located in a special underdeveloped zone (SUZ) of the host country, additionality shall be demonstrated in line with “Guidelines for demonstrating additionality of microscale project activities, Version 04.0”.

As per the Para 2 of “Guidelines for demonstrating additionality of microscale project activities, Version 04.0”, if the installed capacity of the CPA is no more than 5MW and the geographic location of the project activity is located in a special underdeveloped zone(SUZ) of the host country, the project activity is considered additional automatically.

Further as per the Para 2(a) of “Guidelines for demonstrating additionality of microscale project activities, Version 04.0”, SUZ is a region in the host country (zone, municipality or any other designated official administrative unit) identified by the Government in official notifications for development assistance including for planning, management, and investment satisfying any one of the following conditions using most recent available data:

- a. The proportion of population with income less than USD 2 per day in the region is greater than 50%;
- b. The GNI per capita in the country is less than USD 3000 and the population of the region is among the poorest 20% in the poverty ranking of the host country as per the applicable national policies and procedures;

As described in the PoA-DD (Version 04, 23 Apr. 2013), the additionality of the CPA up to 5 MW will be substantiated by satisfying the first condition above for the definition of a SUZ.

2. For the CPA >5 MW and ≤15MW or CPA<5MW but not located in a SUZ identified as per the “Guidelines for demonstrating additionality of microscale project activities, Version 04.0”, the CPA’s additionality will be demonstrated in line with “Guidelines on the demonstration of additionality of small scale project activities, Version 09.0”. The PoA-DD (Version 04, 23 Apr. 2013) selects that an investment barrier shall be demonstrated, by means of an investment analysis in line with “Guidelines on the Assessment of Investment Analysis, Version 05” and any other relevant guidance from the board pertaining to investment analysis.

The PoA-DD (Version 04, 23 Apr. 2013) further specifies that a benchmark analysis (post-tax project IRR) shall be used. The post-tax project IRR benchmark determined in the PoA-DD (Version 04, 23 Apr. 2013) is 10%, which is confirmed to in line with the sectoral standard “Economic evaluation code for small hydropower projects”/39/, which is specific and widely applied for the financial analysis of small-scale hydropower projects in China.

The PoA-DD (Version 04, 23 Apr. 2013) indicates that a sensitivity analysis shall be carried out and four key factors shall be included in the sensitivity analysis:

- Total static investment;
- Annual electricity delivered to the grid;
- Electricity tariff;
- Annual O&M cost;

The typical range of the sensitivity analysis is chosen to be -10% ~ 10% as per the “Guidelines on the Assessment of Investment Analysis, Version 05”/12/.

The PoA-DD (Version 04, 23 Apr. 2013) defines that the CPA is additional if both of the conditions below are satisfied:

- 1) Without income from selling CERs, the project post-tax IRR of the project is lower than the benchmark IRR 10%;
- 2) +/- 10% variation in any of the 4 parameters does not lead to the IRR reaching the benchmark.

This is considered to be reasonable and in line with the “Guidelines on the Assessment of Investment Analysis, Version 05” and the VVS.

### 3.8 Monitoring Plan of 3 typical CPAs

As described in the PoA-DD (Version 04, 23 Apr. 2013), there are 3 typical CPAs involved in the PoA: Greenfield, capacity addition and retrofit of an existing hydropower project. The monitoring plans for 3 typical CPAs, as described individually in the Part II to Part IV of the PoA-DD (Version 04, 23 Apr. 2013), are confirmed to be documented in line with the requirements of AMS-I.D, Version 17.

#### 3.8.1 Parameters determined ex-ante of 3 typical CPAs

The following data and parameters were available during the validation and will remain fixed throughout the first crediting period of CPA:

##### Scenario 1: Greenfield hydropower project

<i>Parameter</i>	<i>Value</i>	<i>Means of Validation</i>
A <sub>BL</sub>	To be specified for individual	Confirmed in line with the referenced

	CPA.	ACM0002 version 13.0.0
Cap <sub>BL</sub>	0	Confirmed in line with the referenced ACM0002 version 13.0.0
EF <sub>CO<sub>2</sub>,grid,y</sub>	0.65675 tCO <sub>2</sub> e/MWh	The baseline grid emission factor is determined ex-ante, based on the most recent information available, and is calculated as a combined margin, consisting of the weighted average of the OM and BM emission coefficients. This combined margin emission coefficient will remain fixed during the first crediting period. The ex-ante parameters applied in the calculation have been validated and discussed in the section 3.6.4 of this report, and the Validation Team confirms that the calculation of the OM, BM and CM is applicable and valid at the time of starting validation.

### Scenario 2: Capacity addition of an exsiting hydropower project

<i>Parameter</i>	<i>Value</i>	<i>Means of Validation</i>
EG <sub>historical</sub>	To be specified for individual CPA.	Confirmed in line with the applied AMS-I.D, Version 17
σ <sub>historical</sub>	To be specified for individual CPA.	Confirmed in line with the applied AMS-I.D, Version 17
DATE <sub>BaselineCapacityAddition</sub>	To be specified for individual CPA.	Confirmed in line with the applied AMS-I.D, Version 17
A <sub>BL</sub>	To be specified for individual CPA.	Confirmed in line with the referenced ACM0002 version 13.0.0
Cap <sub>BL</sub>	To be specified for individual CPA.	Confirmed in line with the referenced ACM0002 version 13.0.0
EF <sub>Res</sub>	90 kgCO <sub>2</sub> e/MWh	Confirmed in line with the referenced ACM0002 version 13.0.0
EF <sub>CO<sub>2</sub>,grid,y</sub>	0.65675 tCO <sub>2</sub> e/MWh	The baseline grid emission factor is determined ex-ante, based on the most recent information available, and is calculated as a combined margin, consisting of the weighted average of the OM and BM emission coefficients. This combined margin emission coefficient will remain fixed during the first crediting period. The ex-ante parameters applied in the calculation

		have been validated and discussed in the section 3.6.4 of this report, and the Validation Team confirms that the calculation of the OM, BM and CM is applicable and valid at the time of starting validation.
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### Scenario 3: Retrofit of an existing hydropower project

<i>Parameter</i>	<i>Value</i>	<i>Means of Validation</i>
$EG_{\text{historical}}$	To be specified for individual CPA.	Confirmed in line with the applied AMS-I.D, Version 17
$\sigma_{\text{historical}}$	To be specified for individual CPA.	Confirmed in line with the applied AMS-I.D, Version 17
$DATE_{\text{BaselineRetrofit}}$	To be specified for individual CPA.	Confirmed in line with the applied AMS-I.D, Version 17
$A_{\text{BL}}$	To be specified for individual CPA.	Confirmed in line with the referenced ACM0002 version 13.0.0
$Cap_{\text{BL}}$	To be specified for individual CPA.	Confirmed in line with the referenced ACM0002 version 13.0.0
$EF_{\text{Res}}$	90 kgCO <sub>2</sub> e/MWh	Confirmed in line with the referenced ACM0002 version 13.0.0
$EF_{\text{CO}_2, \text{grid}, y}$	0.65675 tCO <sub>2</sub> e/MWh	The baseline grid emission factor is determined ex-ante, based on the most recent information available, and is calculated as a combined margin, consisting of the weighted average of the OM and BM emission coefficients. This combined margin emission coefficient will remain fixed during the first crediting period. The ex-ante parameters applied in the calculation have been validated and discussed in the section 3.6.4 of this report, and the Validation Team confirms that the calculation of the OM, BM and CM is applicable and valid at the time of starting validation.

The Validation Team has verified the value used against the sources & conclude that all ex-ante parameters to calculate the GHG emissions reductions of the project have been sufficiently considered, real, measurable & conservative.

### 3.8.2 Parameters determined ex-post of 3 typical CPAs

The following parameters shall be monitored ex-post respectively for 3 typical CPAs:

#### Scenario 1: Greenfield hydropower project

<i>Parameter</i>	<i>Description</i>
$EG_{\text{export},y}$	Quantity of electricity supplied to the SCPG by the proposed project in year y
$EG_{\text{import},y}$	Quantity of electricity imported from the SCPG to the proposed project in year y
$EG_{\text{facility},y}$	Quantity of net electricity supplied to the grid in year y
$Cap_{PJ}$	Installed capacity of the hydropower plant after the implementation of the project activity
$A_{PJ}$	Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full

#### Scenario 2 & 3: Retrofit/capacity addition of an existing hydropower project

<i>Parameter</i>	<i>Description</i>
$EG_{PJ,\text{export},y}$	Quantity of electricity supplied to the SCPG by the project plant/unit in year y
$EG_{PJ,\text{import},y}$	Quantity of electricity imported from the SCPG to the project plant/unit in year y
$EG_{PJ,\text{facility},y}$	Quantity of net electricity supplied to the grid by the project plant/unit in year y (MWh)
$Cap_{PJ}$	Installed capacity of the hydropower plant after the implementation of the project activity
$A_{PJ}$	Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full

The monitoring of emission reductions generated by the CPAs will be carried out systematically according to the monitoring plan. All relevant parameters are monitored closely as required by methodology throughout the CPA's implementation.

All parameters required by the methodology including the accuracy of the measurement have been included in the PoA-PDD. All monitoring data will be electronically archived for a period of 2 years after crediting period. Monitoring of leakage emissions is not required as the CPA's equipment are not transferred from another project activity.

### **3.8.3 Management System and Quality Assurance**

According to the PoA-DD (Version 04, 23 Apr. 2013), the project's monitoring plan outlines the followings:

- Purpose;
- Management structure of monitoring;
- Equipment and installation of monitoring;
- Data collection management;
- Quality assurance and quality control;

According to the document review and onsite interview/i/, the Validation Team considers that the monitoring plan described in the PoA-DD (Version 04, 23 Apr. 2013) is feasible with the project design.

Sufficient procedures have been identified in the PoA-DD (Version 04, 23 Apr. 2013) and the implementation of those procedures will enable that the emission reductions of the project can be reported ex-post. The staff training plan/34/ has been checked to be comprehensively documented that the monitoring staff will receive sufficient trainings to ensure the appropriate operation and maintenance. Thus, the Validation Team's opinion is that the project owner is able to implement the monitoring plan as described in the PoA-DD (Version 04, 23 Apr. 2013).

## **3.9 Sustainable Development**

The Letter of Approval/3/ issued by the China DNA in October 2012, confirms that the PoA contributes to sustainable development in China.

### **3.10 Environmental Impacts**

Environmental impacts will be assessed at a CPA level, which has been appropriately described in the PoA-DD (Version 04, 23 Apr. 2013).

### **3.11 Local Stakeholder Consultation**

The local stakeholder consultation will be conducted at a CPA level, which has been appropriately described in the PoA-DD (Version 04, 23 Apr. 2013).

### **3.12 Comments by Parties, Stakeholders and NGOs**

The PoA-DD of 'Version 01, 03 Feb. 2013' was made publicly available for global stakeholder consultation on UNFCCC website from 05 Feb. 2013 to 06 Mar. 2013 in order to invite comments from public stakeholders. The PoA-DD of 'Version 01, 03 Feb. 2013' was published prior to commencement of the validation and the Validation Team has taken a due note on the outcome of its result. No public comments have been received during that period.

## Appendix A

The Validation Protocol for CDM Programme of Activities:  
Small-scale Hydropower Programme of Activities in Guizhou Province  
in  
P. R. China

Based on CDM Validation and Verification Standard,  
Report No. 01 997 9105073514

**Table 1: Validation requirements**

(CDM-SSC-PoA-DD Requirements Checklist is based on § 37 of the CDM Modalities and Procedures and on VVS ver 03.0, Project Standard and Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1).

Checklist question	Ref.	MoV <sup>3</sup>	Findings, comments, references, data sources	Draft conclusion	Final Conclusion
<b>Part I. Programme of activities (PoA)</b>					
<b>1. Title of the PoA</b>					
1.1 Are title, version number and the date of completion of PoA-DD given in section A.1 of the PoA-DD?	/1//7/	DR	Yes, the title, version number and the date of completion have been clearly given in the PoA-DD correctly.		OK
<b>2. Description of the PoA</b>					
2.1 Does PoA-DD in section A.2 contains the description of the policy/measure or stated goal that the PoA seeks to promote in a transparent manner with sufficient reference of the policy/measure/stated goal if any?	/1//7/	DR	Yes, the section A.2 of the PoA-DD contains the description of the policy/measure in a transparent manner.		OK
2.2 Does PoA-DD in section A.2 contain a sufficient description of Framework for the implementation of the proposed PoA?	/1//7/	DR	Yes, it contains a sufficient description of framework for the implementation of the proposed PoA.		OK
2.3 Has a confirmation been given that the proposed PoA is a voluntary action by the coordinating/managing entity?	/1//7/	DR	Yes, a confirmation has been given for the voluntary participation of the PoA by CME.		OK
2.4 Does PoA-DD in section A.2 contain a brief description of how the proposed PoA contributes to sustainable development?	/1//7/	DR	Yes, it contains a brief description of contributing to sustainable development by		OK

<sup>3</sup> MoV = Means of Validation, DR = Document Review, I = Interview, www = internet search, OSV = On-site visit

			the PoA.		
2.5 Does the PoA qualify as a small-scale CDM project activity as defined in decision 4 / CMP.1 annex II?	/1//18/	DR	Yes, the installation capacity of any CPA under the PoA will be no more than 15MW and therefore qualifies as a small-scale CDM project activity.		OK
2.6 Has the latest version of the PoA-DD been applied?	/1//6//7/	DR	Yes, it uses the latest version of the PoA-DD.		OK
2.7 Has the PoA-DD been duly filled in accordance with the latest guidances and procedures and all information are consistently described?	/1//6//7/	DR	Yes, the PoA-DD has been correctly filled in accordance with the latest guidances and procedures.		OK
<b>3. CME and Participants of PoA</b>					
3.1 Has CME/s and all participant in listed in the section A.3 of the PoA-DD? Note: The CME of the proposed PoA, as the entity which communicates with the Board; Project participants to the PoA (project participants may or may not be involved in one of the component project activities (CPAs) related to the PoA).	/1//6//7/	DR	Yes, the CME as the only PP has been listed in the section A.3 of the PoA-DD correctly.		OK
<b>4. Party (ies)</b>					
4.1 Have all host countries been correctly listed?	/1//6//7/	DR	Yes, the host country has been correctly listed.		OK
4.2 Is there any party directly involved as project participant, and if yes, is that Party's contact details included in Annex I of the PoA-DD?	/1//6//7/	DR	Yes, the DNA of China has been involved as the project participant and its contact details has been included in Annex I of the PoA-DD.		OK
4.3 Has the coordinating/managing entity obtained letters of approval for the implementation of the PoA from each Host Party and Annex I party	/1//3//4/	DR	Yes, the CME has obtained the LoA for the implementation of the PoA.		OK

involved in the PoA?					
4.4 Do the written approvals confirm that the corresponding party is a Party to the Kyoto Protocol?	/1//3//4/	DR	Yes, the written approval confirms that the China's DNA is a Party to the Kyoto Protocol.		OK
4.5 Are the approvals issued from organizations listed as DNAs on the UNFCCC CDM website? Indicate the means of validation employed to assess the authenticity, i.e. in case of doubt whether LoA has been verified with the DNA. Further describe which entity submitted the LoA for validation.	/1//3//4/	DR	Yes, the approval was issued from the China's DNA and its authenticity has been verified by checking the official website of China's DNA. The LoA is received from the PP directly for validation.		OK
4.6 Do the written approvals confirm that the participation is voluntary?	/1//3//4/	DR	Yes, the approval confirms that the participation is voluntary.		OK
4.7 Does the written approval from the host country confirm that the project contributes to the sustainable development in the /PoA DD/country?	/1//3//4/	DR	Yes, the approval confirms that the project contributes to the sustainable development of the host country.		OK
4.8 Do the written approvals refer to the precise project title in the PoA-DD submitted for registration or an additional specification of the project activity, e.g. PoA-DD version number?	/1//3//4/	DR	Yes, the approval refers to the same project title to it indicated in the PoA-DD.		OK
4.9 Are the written approvals unconditional with regard to 4.3 to 4.7?	/1//3//4/	DR	Yes, it is.		OK
4.10 Has the coordinating/managing entity obtained letters of authorization of its coordination of the PoA from each Host Party? The authorizations for the coordination of the PoA can be granted via the letters of approval from each Host Party.	/1//3//4/	DR	Yes, the CME has obtained letters of authorization of its coordination of the PoA from each Host Party.		OK
4.11 Is the information regarding the project	/1//6//7/	DR	Yes, the information regarding		OK

participants listed in section A3 and in Annex 1 of the PoA-DD internally consistent to each other?			the PP is consistent with each other internally in the PoA-DD.		
4.12 Has the participation to the PoA of each project participant listed in the PoA-DD been approved by at least one Party involved? Indicate whether the participation of the project participant(s) has been approved by a Party to the Kyoto Protocol. Describe the means of validation employed to draw this conclusion.	/1//3//4/	DR	Yes, the only PP has been approved by the DNA of host country.		OK
4.13 Are there any other project participants approved but not listed in the PoA DD?	/1//6//7/	DR	CL 1 After having reviewed the "Letter of Approval for the PoA" and "Approval Note on Change of Project Participants for the PoA" issued by the DNA of host country, the Validation Team understood that the PoA has been changed from the previous bilateral project to unilateral project; as a result, the previous buyer "Sinoda Carbon Capital Pty Ltd" (authorized by the Government of Australia) is excluded from the participation of this PoA. Please clarify whether or not it is voluntary action for "Sinoda Carbon Capital Pty Ltd" to withdraw from the participation of the PoA? Relevant evidence is to be provided	CL-1	OK, please refer to table 2
4.14 Is the title of the PoA as given in the PoA-DD identical with the title given in all LoAs and	/1//5//6//7/	DR	CAR 1 The signed MoC was not	<del>CAR-1</del>	OK, please refer to table

Modalities of Communication?			provided to the Validation Team yet, which is to be checked and confirmed valid at the time of requesting for the registration of the PoA.		2
<b>5. Location of PoA</b>					
5.1 Has the location in terms of a geographical area for e.g. municipality, region within a country, country or several countries within which all CPAs to be included of the PoA been correctly described?	/1//6//7/	DR	Yes, the geographical location for the CPA to be included in the PoA has been correctly described.		OK
5.2 Does the CDM-PoA-DD include a definition of the boundary for the PoA in terms of a geographical area (e.g., municipality, region within a country, country or several countries) within which all CPAs included in the PoA will be implemented?	/1//6//7/	DR	Yes, the boundary of the PoA is within the administrative territory of Guizhou province.		OK
5.3 Are all applicable national and/or sectoral policies and regulations within that chosen boundary reflected in the determination of the baseline?	/1//6//7/	DR	Yes, all applicable policies have been reflected in the determination of the baseline.		OK
<b>6. Technologies/measures of the PoA</b>					
6.1 Does the PoA-DD contain a clear, accurate and complete description of the CPAs with regard to the technology / measures to be used?	/1//6//7/	DR	Yes, the PoA-DD contains a clear, accurate and complete description of the CPAs with regard to the technology / measures to be used		OK
6.2 Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	/1/	DR	No, the project applies commonly use technologies.		OK
<b>7. Public funding of PoA</b>					
7.1 Is the PoA involves public funding?	/1/	DR OSV	No, the PoA is not involved in public funding.		OK

7.2 Is there a confirmation that official development assistance has not been diverted to the implementation of the PoA in case public funding is used?	/1/	DR OSV	Not applicable.		OK
<b>8. Demonstration of additionality for PoA</b>					
8.1 Has it been demonstrated by the CME that describe how in the absence of CDM, none of the implemented CPAs would occur. Note: Refer to “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1.	/1//8/ /16/	DR	CL 2 For the assessment and demonstration of additionality of a typical CPA in the section B.1 of the webhosted PoA-DD, please use the most recent available data to clarify whether or not the so-called national poverty county fulfills the definition of a SUZ region in accordance with the Para 2(a) of the “Guidelines for demonstrating additionality of micro-scale project activities” satisfying either of the following conditions: 1) the proportion of population with income less than USD 2 per day (PPP) in the region is greater than 50%; 2) the GNI per capita in the country is less than USD 5000 and the population of the region is among the poorest 20% in the poverty ranking of the host country as per the applicable national policies and procedures.	CL-2	OK, please refer to table 2

8.2 If the PoA was not published and the starting date is on or after 2nd August 2008, was it possible to receive from UNFCCC secretariat and DNA a written confirmation that PPs previously informed the above entities on commencement of the PoA and of their intention to seek CDM status?	/1//8/ /9/	DR	The PoA was published on 5 <sup>th</sup> February 2013 prior to the start date of CPA; therefore such notifications are not necessary.		OK
8.3 For the PoA with a starting date before 2nd August 2008 and before the actual publication, was there enough evidence presented to prove that CDM benefits have been a decisive factor in the decision to proceed with the PoA?	/1//8/ /9/	DR	Not applicable		OK
8.4 For the PoA with a starting date before 2nd August 2008 and before the actual publication, was there enough evidence presented to prove that PPs were taking continuing and real actions to secure CDM status for the PoA in parallel with its implementation?	/1//8/ /9/	DR	Not applicable		OK
<b>9. Eligibility criteria for inclusion of a CPA in the PoA</b>					
9.1 Has the eligibility criteria for inclusion of a CPA under the PoA included in the PoA DD as per “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1”. <i>Note: Validation team based on its expertise in the sectoral scope and any PoA specific requirement can confirm the requirement of any other eligibility criteria.</i>	/1//8//9/ /17/	DR	CAR 2 The eligibility criteria in terms of “conditions to check the start date of the CPA” was not clearly defined in the format of dd/mm/yyyy in the section B.2 of the PoA-DD according to “Guidelines for completing the programme design document form for small-scale CDM programmes of activities, Version 02.1”. Specifically, the start date of any CPA is to be ensured to be on or after the	CAR-2	OK, please refer to table 2

			start date of the PoA and the start date of the PoA shall be clearly defined.		
<b>10. Application of methodologies</b>					
10.1 Does the PoA DD contains description of the technology/measures and indicated the methodology chosen?	/1//8//17/	DR	Yes, it does.		OK
10.2 In cases of multiple technologies/measures or multiple methodologies are being applied, does the PoA DD list all the combinations of technologies/measures and methodologies that will be used in the PoA?	/1//8//17/	DR	Not applicable		OK
10.3 In case of sampling plan(If applicable), does the PoA DD provide a description to demonstrate how it meets applicable provisions in the Standard for sampling and surveys for CDM project activities and programme of activities.	/1//8//17/	DR	Not applicable		OK
<b>11. Management system</b>					
11.1 Does the PoA DD contain the description of the CME's management system in line with para 19 of "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1".	/1//6//7/ /8//17/	DR	CAR 3 The description of the CME's management system in the PoA-DD is insufficient in line with para 19(e) of "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1".	<del>CAR-3</del>	OK, please refer to table 2
<b>12. Duration of PoA</b>					
12.1 What is the starting date of the PoA? Is it Reasonable and does the PoA DD provide how the	/1//6//7/ /8/	DR	CAR 4 The start date of the PoA was	<del>CAR-4</del>	OK, please refer to

start date was determined?			not clearly defined with the format of dd/mm/yyyy but with expatiatory text description in the section D.1 of the PoA-DD, which is not in line with "Guidelines for completing the programme design document form for small-scale CDM programmes of activities, Version 02.1".		table 2
12.2 What is the length/lifetime of the PoA? Is it reasonable? Note: PoA duration should not exceeding 28 years (60 years for A/R)	/1//6//7/ /8/	DR	Yes, its length is 28 years, which is reasonable.		OK
<b>13. Environmental Analysis</b>					
13.1 Has it been clearly indicated on which level i.e. PoA or CPA an environmental Analysis has been carried out or will be carried out?	/1//6//7/ /8/	DR	Yes, it has been clearly indicated that the environmental analysis will be carried out at CPA level.		OK
13.2 Has an environmental analysis of the PoA as per requirements of the CDM modalities and procedures been undertaken and described in the CDM-PoA-DD?	/1//6//7/ /8/	DR	Not applicable as the EIA analysis will be undertaken and described in the CPA-DD instead.		OK
13.3 Are there any Host Party requirements for an Environmental Impact Assessment (EIA)?	/1//6//7/ /8/	DR	Yes, as per China's environmental protection law, all construction projects will be conducted an environmental impact assessment.		OK
13.4 In case an Environmental Impact Assessment (EIA) is requested by the host party, has it been carried out and if applicable duly approved?	/1//6//7/ /8/	DR	It will be carried out at the CPA level.		OK
13.5 Are trans boundary environmental impacts	/1//6//7/ /8/	DR	Not applicable		OK

considered in the analysis?	/8/				
<b>14. Stakeholder's comments</b>					
14.1 Has it been clearly indicated on which level i.e. PoA or CPA stakeholder comments have been or will be invited?	/1//6//7/ /8/	DR	Yes, it has been clearly indicated that the stakeholder consultation will be carried out at CPA level.		OK
14.2 With regard to the PoA, how have local stakeholders' comments been invited prior to the publication of the DDs and summarized? If applicable, was due account taken of the comments received?	/1//6//7/ /8/	DR	Not applicable		OK
14.3 With regard to the PoA, can the summary provided assessed as adequate?	/1//6//7/ /8/	DR	Not applicable		OK
14.4 With regard to the PoA, can the report provided assessed as adequate?	/1//6//7/ /8/	DR	Not applicable		OK
14.5 With regard to the PoA, can the local stakeholder consultation process in general be assessed as adequate?	/1//6//7/ /8/	DR	Not applicable		OK
<b>15. Approval and authorization</b>					
15.1 Does the PoA DD indicates and included the letter(s) of approval from Party (ies) which wishes to be involved in the PoA, and whether it is available at the time of submitting the PoA-DD to the validating DOE. Note: CME letters of authorization of its coordination of the PoA from each Party shall also been included.	/1//3//4/ /6//7/ /8/	DR	OK, the LoA from the DNA of host country has been available at the time of submitting the PoA-DD to the validating DOE.		OK
<b>Part II. Generic component project activity (CPA)</b>					
<b>16. Purpose and general description of generic CPAs</b>					
16.1 Has PoA DD in section A.1 contained the	/1/	DR	CAR 5	<del>GAR-5</del>	OK, please

description of the description of each generic CPA within the PoA?	/6//7/ /8/		Since the emission reduction calculations for retrofit and capacity addition differ compared to green-field, it is requested to have 3 generic CPAs for each option although technology and methodology use is same in accordance with the Para. 143 and footnote 15 of Project Standard version 02.1.		refer to table 2
<b>17. Application of a baseline and monitoring methodology</b>					
17.1 Does the PoA apply an approved and applicable CDM methodology and a valid version thereof?	/1//6//7/ /8//19/	DR	Yes, the PoA applies the approved and valid methodology AMS-I.D version 17.0.		OK
17.2 Does the typical CPA apply one of the approved small scale categories and any methodology and tool referred therein?	/1//6//7/ /8//19//20/	DR	Yes, the typical CPA applies approved methodology AMS-I.D version 17.0 and Tool to calculate the emission factor for an electricity system, Version 03.0.0.		OK
17.3 Is the justification of the choice of an approved baseline and monitoring methodology for the typical CPA sufficient?	/1//6//7/ /8//19//20/	DR	Yes, it is.		OK
17.4 Does a typical CPA apply a combination of approved methodologies? If so, has such combination been approved only once in accordance with "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1"?	/1//6//7/ /8//19//20/	DR	Not applicable as any CPA under the PoA uses the only methodology AMS.I-D version 17.0.		OK

17.5 Are all applicability criteria in the methodology, the applied tools or any other methodology component referred to therein fulfill? Have the CME Justified the choice of the selected methodology (ies) by showing that each generic CPA meets each applicability condition of the methodology(ies)? Does documentation that has been used as a basis of justification provided or referenced in the PoA DD. If applicable, does the PoA DD provide a general description of the sampling plan?	/1//6//7/ /8//19//20/	DR	Yes, all applicability criteria fulfill the requirements of the applied methodology and tools. The CME has justified the choice of the applied methodology in the PoA-DD.		OK
<b>18. Description of the sources and gases included in the boundary</b>					
18.1 Are the CPA's spatial boundaries (geographical) of the CPAs to be included are clearly defined?	/1//6//7/ /8/	DR	Yes, it has been clearly defined in the CPA-DD.		OK
18.2 Are all sources and GHGs included in the project boundary as required in the applied methodology?	/1//6//7/ /8/	DR	Yes, all sources and GHGs have been included in the project boundary.		OK
18.3 In case the methodology allows to choose whether a source and/or gas is to be included, is the choice sufficiently explained and justified?	/1//6//7/ /8/	DR	Yes		OK
<b>19. Description of how the baseline scenario is identified and description of baseline scenario</b>					
19.1 Does the PoA-DD make provisions to identify possible baseline scenarios to be considered for CPAs?	/1//6//7/ /8//19/	DR	Not applicable as the selected methodology has prescribed the baseline scenario for the CPA scenario.		OK
19.2 Does the PoA-DD make provisions to identify the list of all the alternatives? Is the list of alternatives complete?	/1//6//7/ /8//19/	DR	Not applicable		OK
19.3 Does the PoA-DD make provisions to identify the baseline scenario for each CPA?	/1//6//7/ /8//19/	DR	Not applicable		OK
19.4 Does the PoA-DD make provisions to identify	/1//6//7/	DR	Not applicable		OK

the baseline scenario according to the methodology for each CPA?	/8//19/				
19.5 Does the PoA-DD make provisions that any plausible alternative scenario is not excluded?	/1//6//7/ /8//19/	DR	Not applicable		OK
19.6 Do the baseline alternatives sufficiently take into account relevant national and/or sectoral policies?	/1//6//7/ /8//19/	DR	Not applicable		OK
19.7 Are the provisions for the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced?	/1//6//7/ /8//19/	DR	Not applicable		OK
<b>20. CPA additionality</b>					
20.1 Does the PoA-DD make provision to describe the additionality demonstration approach for each generic CPA to meet the eligibility criteria of the PoA including confirmation of additionality of the generic CPA for its inclusion into the PoA.	/1//6//7/ /8//9/	DR	Yes, it does		OK
20.2 Does the demonstration follow the requirements of the applied methodology and/or other methodological tools? <i>Note: Refer to "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1" for additionality requirement for the PoA. In case of PoA of having small scale CPAs, the demonstration compliance shall be checked against the requirement of attachment A to appendix B. For PoAs utilizing large scale methodology, additionality tool shall be referred.</i>	/1//6//7/ /8//9/ /19//20/	DR	Yes, the demonstration follows the requirements of the applied methodology and tools.		OK
20.3 Which criteria have been established to assess the additionality of CPA under this PoA?	/1//6//7/ /8//9/	DR	"Guidelines on the demonstration of additionality of small scale project activities		OK

			Version 09.0" and "Guidelines for demonstrating additionality of microscale project activities, Version 04.0" are used to assess the additionality of CPA under this PoA.		
<b>Investment analysis</b>					
20.4 Does the PoA-DD provide criteria to assess that the proposed CPA of the PoA would not be the most economically or financially attractive alternative or economically / financially feasible without the revenues from the sale of CERs?	/1//6//7/ /8//9//12/	DR	Yes, the PoA-DD describes that the proposed CPA will not occur in the absence of PoA.		OK
20.5 Is the type of investment analysis selected correctly?	/1//6//7/ /8//9//12/	DR	Yes, benchmark analysis is selected correctly.		OK
20.6 Is the selected financial indicator chosen and applied correctly, if applicable?	/1//6//7/ /8//9//12/	DR	Yes, the selected benchmark as 10% is applied correctly.		OK
20.7 If applicable, were the input values used in the investment analysis valid and applicable at the time of the investment decision and justified?	/1//6//7/ /8//9//12/	DR	Not applicable for generic CPA-DD.		OK
20.8 If CME proposes to use values from Feasibility Study Reports (FSR) is it possible to verify that the period between the FSR date and investment decision was reasonably short and FSR values did not change materially?	/1//6//7/ /8//9//12/	DR	Not applicable for generic CPA-DD.		OK
20.9 Is it reasonable to assume that no investment would be made at a rate of return lower than the benchmark by, for example, assessing previous investment decisions by the project participants or some verifiable circumstances that have lead to a change in the benchmark?	/1//6//7/ /8//9//12/	DR	Yes, it is reasonable to assume that the no investment would be made at a rate of return lower than the benchmark.		OK
20.10 Is the Investment Analysis prepared in	/1//6//7/	DR	Yes, it is prepared in		OK

compliance with the latest version of the "Guidance on the Assessment of Investment Analysis" as provided by the CDM EB?	/8//9//12/		compliance with the latest version of the "Guidance on the Assessment of Investment Analysis".		
<b>Barrier Analysis</b>					
20.11 If applicable, are there any issues addressed in the barrier analysis that have a clear impact on the financial viability of the project activity and that shall be assessed by an investment analysis?	/1//6//7/ /8//9/ /15//16/	DR	Not applicable		OK
20.12 If applicable, do the listed barriers exist and is their existence substantiated? Note: (a) by independent sources of data such as relevant national legislation, surveys of local conditions and national or international statistics and/or (b) by interviews with relevant individuals: including members of industry associations, government officials or local experts if necessary?	/1//6//7/ /8//9/ /15//16/	DR	Not applicable		OK
20.13 Would any of the identified barriers prevent the implementation of the project activity but not equally prevent the implementation of the possible alternatives, in particular the implementation of the identified baseline scenario?	/1//6//7/ /8//9/ /15//16/	DR	Not applicable		OK
<b>Common practice analysis</b>					
20.14 Are the geographical boundaries for the common practice analysis identified correctly?	/1//6//7/ /8//9//15/	DR	Not applicable		OK
20.15 Does the PoA-DD provide an explanation why this region was selected and deemed more appropriate and is this explanation traceable and reliable?	/1//6//7/ /8//9//15/	DR	Not applicable		OK
20.16 Are there similar operational project activities,	/1//6//7/	DR	Not applicable		OK

other than CDM activities, “widely observed and commonly carried out” in the defined region? Note: Use official sources and local and industry expertise?	/8//9//15/				
20.17 In case there are similar commercially operated project activities, other than CDM activities, already “widely observed and commonly carried out” in the defined region, are there essential distinctions between the CDM project activity and the other similar activities?	/1//6//7/ /8//9//15/	DR	Not applicable		OK
<b>21. Estimation of Emission Reductions of CPA</b>					
21.1 In case the methodology allows for different methodological choices, are the equations applied properly justified and have they been used reflecting the other methodological choices (i.e. baseline identification)?	/1//6//7/ /8//9//19/	DR	Yes, the applied equations are properly justified.		OK
21.2 Are the equations applied correctly according to the applied approved methodology?	/1//6//7/ /8//9//19/	DR	Yes, all the equations are applied correctly in line with the applied methodology.		OK
21.3 Have conservative assumptions been used when calculating the project emissions?	/1//6//7/ /8//9//19/	DR	Not applicable		OK
21.4 Are provisions made to identify all data and parameters which remain fixed throughout the crediting period correct, applicable to the project and will lead to a conservative estimation of emission reductions?	/1//6//7/ /8//9//19/	DR	Yes, the relevant provisions have been made to identify all data and parameters that remain fixed throughout the crediting period correctly.		OK
21.5 Does the PoA-DD mention reasonable values for all ex-ante calculation / monitoring parameters?	/1//6//7/ /8//9//19/	DR	Yes, the PoA-DD mentions reasonable values for all ex-ante calculation / monitoring parameters.		OK
<b>22. Application of the monitoring methodology and description of the monitoring plan</b>					

22.1 Has the PoA-DD contains monitoring parameters for the CPAs? Are the means of monitoring of all parameters contained in the monitoring plan feasible and in accordance with the requirements of the applied methodology?	/1//6//7/ /8//9//19/	DR	CAR 6 For CPAs with a capacity addition or retrofit of an existing hydropower plant, CAPBL and ABL were not included as ex-ante parameters in accordance with the applied monitoring methodology.	CAR-6	OK, please refer to table 2
22.2 Does the PoA-DD provide all monitoring parameters as required by the applied methodology required to be implemented by CPA monitoring plan?	/1//6//7/ /8//9//19/	DR	Please refer to CAR 6	CAR-6	OK, please refer to table 2
22.3 Does PoA-DD contain monitoring plan for a CPA in accordance with the approved monitoring methodology, and identified the monitoring provisions and data parameters a CPA has to apply/monitor?	/1//6//7/ /8//9//19/	DR	Please refer to CAR 6	CAR-6	OK, please refer to table 2
22.4 Are the QA/QC procedures described under monitoring appropriate sufficient to ensure the emission reductions achieved from the project activity can be reported ex-post and verified?	/1//6//7/ /8//9//19/	DR	Yes, the QA/QC procedures are sufficient to ensure that the emission reductions achieved from the project activity can be reported ex-post and verified.		OK
22.5 Have all means of implementing the monitoring plan, e.g. equations necessary for ex-post emission reduction calculation, been described clearly and in line with the methodology?	/1//6//7/ /8//9//19/	DR	Yes, all equations necessary for ex-post emission reduction calculation have been described clearly and in line with the methodology.		OK

**Table 2: List of Requests for Corrective Action (CAR) and Clarification (CL)**

Validation / Verification Standard

(25) The DOE shall raise a corrective action request (CAR) if one of the following occurs:

(a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;

(b) The CDM requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

(26) The DOE shall raise a clarification request (CL) if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

The wording of CAR/CL shall clearly address nonconformity or seek clarification, and avoid instructive / consultative language in order to prevent actual or perceived consultancy.

Observation (CAR/CL)	Ref. to checklist question in table 1	Summary of project owner response	Validation Team's conclusion
<b>CAR 1</b> The signed MoC was not provided to the Validation Team yet, which is to be checked and confirmed valid at the time of requesting for the registration of the PoA.	4.14	The valid MoC is signed and provided to the validation team.	OK, the signed MoC has been assessed by the Validation Team to be valid in accordance with "MOC standard template" ( <a href="http://cdm.unfccc.int/Registry/guidance/moc_standard_tpl.pdf">http://cdm.unfccc.int/Registry/guidance/moc_standard_tpl.pdf</a> ). Therefore CAR 1 is closed.
<b>CAR 2</b> The eligibility criteria in terms of "conditions to check the start date of the CPA" was not clearly defined in the format of dd/mm/yyyy in the section B.2 of the PoA-DD according to "Guidelines for completing the programme design document form for small-scale CDM programmes of activities, Version 02.1". Specifically, the start date of any CPA is to be	9.1	The start date of any proposed CPA is on or after the start date of the PoA (the start date of the PoA is 05/02/2013, the date of GSP). Construction contracts had provided to prove the start date of a CPA.	OK, the relevant description has been revised accordingly in the section B.2 of the PoA-DD of Version 04, 23 Apr. 2013, and therefore CAR 2 is closed.

ensured to be on or after the start date of the PoA and the start date of the PoA shall be clearly defined.			
<b>CAR 3</b> The description of the CME's management system in the PoA-DD is insufficient in line with para 19(e) of "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1".	11.1	The description of the CME's management system has been revised in the PoA-DD version 02 according to the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1.	OK, the records and documentation control process for each CPA under the PoA has been added and properly described in the section C of the PoA-DD of Version 04, 23 Apr. 2013, which is in line with the para 19(e) of "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 02.1". Therefore CAR 3 is closed.
<b>CAR 4</b> The start date of the PoA was not clearly defined with the format of dd/mm/yyyy but with expatiatory text description in the section D.1 of the PoA-DD, which is not in line with "Guidelines for completing the programme design document form for small-scale CDM programmes of activities, Version 02.1".	12.1	The start date of the PoA has been revised to be 05/02/2013(the date of GSC) in the revised PoA-DD.	OK, the start date of the PoA has been clearly defined as 05/02/2013 in the section D.1 of the PoA-DD of Version 04, 23 Apr. 2013, which is the date of publication of the PoA-DD for global stakeholder consultation (GSC). Therefore CAR 4 is closed.
<b>CAR 5</b> Since the emission reduction calculations for retrofit and capacity addition differ compared to green-field, it is requested to have 3 generic CPAs for each option although technology and methodology use is	16.1	Three separate generic CPA-DDs had been prepared for retrofit, capacity addition and green-field projects and provided to the validation team according to the Para. 143 and footnote 15 of Project Standard version 02.1.	OK, the 3 project scenarios (i.e. green-field, capacity addition and retrofit) have been properly described in the section of Part II, Part III and Part IV respectively in the PoA-DD, which is in line with the EB secretariat's clarifications listed in the Para 15 of 14 <sup>th</sup>

same in accordance with the Para. 143 and footnote 15 of Project Standard version 02.1.			Teleconference Meeting Minutes (Post EB71)/23/. Therefore CAR 5 is closed.
<b>CAR 6</b> For CPAs with a capacity addition or retrofit of an existing hydropower plant, CAP <sub>BL</sub> and A <sub>BL</sub> were not included as ex-ante parameters in accordance with the applied monitoring methodology.	22.1 22.2 22.3	The parameters CAP <sub>BL</sub> and A <sub>BL</sub> have been stated as ex-ante parameters in the revised PoA-DD in accordance with the applied monitoring methodology.	OK, the parameters CAP <sub>BL</sub> and A <sub>BL</sub> have been added as ex-ante parameters for the CPAs with a capacity addition or retrofit of an existing hydropower plant. Therefore CAR 6 is closed.
<b>CL 1</b> After having reviewed the “Letter of Approval for the PoA” and “Approval Note on Change of Project Participants for the PoA” issued by the DNA of host country, the Validation Team understood that the PoA has been changed from the previous bilateral project to unilateral project; as a result, the previous buyer “Sinoda Carbon Capital Pty Ltd” (authorized by the Government of Australia) is excluded from the participation of this PoA. Please clarify whether or not it is voluntary action for “Sinoda Carbon Capital Pty Ltd” to withdraw from the participation of the PoA? Relevant evidence is to be provided.	4.13	It is voluntary action for “Sinoda Carbon Capital Pty Ltd” to withdraw from the participation of the PoA and the relevant evidence has been provided to be DOE.	OK, after having reviewed “Termination of ERPA between project participant and the previous buyer Sinoda Carbon Capital Pty Ltd”/33/, the Validation Team is able to confirm that the previous buyer i.e. Sinoda Carbon Capital Pty Ltd has withdrawn from participation of the PoA voluntarily. Therefore CL 1 is closed.
<b>CL 2</b> For the assessment and demonstration of additionality of a	8.1	The relevant evidences for the assessment of additionality have been provided to the validation	OK, although the PP did not successfully approve that all China’s national poverty counties fulfill the

<p>typical CPA in the section B.1 of the webhosted PoA-DD, please use the most recent available data to clarify whether or not the so-called national poverty county fulfills the definition of a SUZ region in accordance with the Para 2(a) of the “Guidelines for demonstrating additionality of micro-scale project activities” satisfying either of the following conditions: 1) the proportion of population with income less than USD 2 per day (PPP) in the region is greater than 50%; 2) the GNI per capita in the country is less than USD 5000 and the population of the region is among the poorest 20% in the poverty ranking of the host country as per the applicable national policies and procedures.</p>		<p>team.</p>	<p>definition of a SUZ region in accordance with the Para 2(a) of the “Guidelines for demonstrating additionality of micro-scale project activities, Version 04.0”, it has deleted the description of <i>“If the geographic location of the CPA falls within the national poverty counties identified by the State Council and installed capacity is below 5 MW, it will be considered as additional.”</i> And the additionality of a typical CPA will be conducted either in line with “Guidelines on the demonstration of additionality of small scale project activities, Version 09.0” or “Guidelines for demonstrating additionality of microscale project activities, Version 04.0”. Therefore CL 2 is closed.</p>
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**Table 3: List of forward action requests (FARs)**

Validation / Verification Standard

(27) The DOE shall raise a forward action request (FAR) during validation to highlight issues related to project implementation that require review during the first verification of the project activity. FARs shall not relate to the CDM requirements for registration.

FAR number	Reference	Summary of project owner response	Validation Team conclusion
Not applicable			

## Appendix B

### Certificates of Competence

## Qualification

Jin, Hua /

### Emission Trading

#### United Nations Framework Convention on Climate Change

Auditor No.:

(AuditorenRegNr)

Appointed:

(Zugelassen)

☒ ja

Qualification Level:

(Qualifikationsstufe)

Lead Auditor

External:

(Externer)

☐ ja

Add. reviewer:

(Zusätzlicher Prüfer)

☐ yes

EAC Scopes:

(EAC Branchen)

CDM 13 - Waste handling and disposal

CDM 01 - Energy industries (renewable - / non-renewable sources)

Add. qualification:

(zus. Qualifikation)

First Appointment:

(Erstberufung)

01/23/2011

Valid to:

(Gültig bis)

01/22/2014

Remarks:

Valid for TA 1.2 and TA 13.1/ 13.2

Languages:

Chinese simplified

English

### Experience Exchange

Date

Location

Remarks

Accreditation(s)

2011-06-18  
Change

Beijing

Beijing CDM Seminar-EB61/62

United Nations Framework Convention on C

### Monitoring

Latest Monitoring:

(letzte Beurteilung)

Next Monitoring:

(nächste Beurteilung)

Remarks:

[View / Edit Monitoring](#)

### History of scope allocation

Date: 2012-11-26  
Change: EAC CDM added; CDM 01 Energy Industries removed  
By: Praveen Urs  
Reason:

Date: 2012-02-09  
Change: EAC 01 removed; CDM 01 Energy Industries added  
By: Praveen Urs  
Reason:

Date: 2012-02-09  
Change: EAC 01 added  
By: Praveen Urs  
Reason:

Date: 2011-01-24  
Change: EAC CDM added  
By: Manfred Brinkmann  
Reason: Valid for TA 13.1

## History

Created:	11/16/2010 04:34:24 PM	Hua Jin/Bj/Chn/TUV
Modified:	11/26/2012 12:53:46 PM	Hua Jin/Chn/TUV
	04/16/2012 07:20:41 PM	Praveen Urs/Chn/TUV
	04/16/2012 07:20:28 PM	Praveen Urs/Chn/TUV
	02/09/2012 07:38:35 PM	
	01/24/2011 11:21:34 AM	ZE9
	01/24/2011 11:19:42 AM	ZE9
	11/16/2010 04:34:39 PM	

## Export to ICMS

Last Export:

## Qualification

Tan, Yi /

### Emission Trading

#### United Nations Framework Convention on Climate Change

Auditor No.:

(AuditorenRegNr)

Appointed:

(Zugelassen)

☒ ja

Qualification Level:

(Qualifikationsstufe)

Lead Auditor

External:

(Externer)

☐ ja

Add. reviewer:

(Zusätzlicher Prüfer)

☒ yes

EAC Scopes:

(EAC Branchen)

CDM 01 - Energy industries (renewable - / non-renewable sources)  
CDM 13 - Waste handling and disposal

Add. qualification:

(zus. Qualifikation)

First Appointment:

(Erstberufung)

09/26/2009

Valid to:

(Gültig bis)

09/24/2015

Remarks:

CDM 01 limited to TA1.2 - Renewable Energies  
CDM 13 limited to TA 13.1- Waste handling & disposal  
+ Part Time TR

Languages:

Chinese  
English  
Japanese

### Experience Exchange

Date

Location

Remarks

Accreditation(s)

2011-06-18  
Change

Beijing

Beijing CDM Seminar-EB61/62

United Nations Framework Convention on C

2010-12-21

Beijing

GC CDM Auditor Experience Exchange, Beijing, 2010-12-21to23  
United Nations Framework Convention on Climate Change

### Monitoring

Latest Monitoring:

(letzte Beurteilung)

Next Monitoring:

(nächste Beurteilung)

Remarks:

## History of scope allocation

Date: 2009-09-27  
Change: EAC CDM, CDM added  
By: Manfred Brinkmann  
Reason:

## History

Created:	03/18/2008 01:50:31 PM	Daxun Li/Bj/Chn/TUV
Modified:	09/28/2012 02:03:51 PM	Praveen Urs/Chn/TUV
	09/28/2012 01:19:59 PM	Daxun Li/Chn/TUV
	09/28/2012 11:52:56 AM	Praveen Urs/Chn/TUV
	09/28/2012 11:52:53 AM	
	09/28/2012 11:34:33 AM	
	03/20/2012 07:37:31 PM	
	01/13/2011 03:17:56 PM ZE9	
	01/13/2011 03:17:19 PM ZE9	
	01/13/2011 03:17:00 PM ZE9	
	09/13/2010 03:01:43 PM ZE9	

## Export to ICMS

Last Export:

## Qualification

Tang, Walter /

### Emission Trading

#### United Nations Framework Convention on Climate Change

Auditor No.:

(AuditorenRegNr)

Appointed:  
(Zugelassen)

☒ ja

Qualification Level:  
(Qualifikationsstufe)

Lead Auditor

External:  
(Externer)

☐ ja

Add. reviewer:  
(Zusätzlicher Prüfer)

☒ yes

EAC Scopes:  
(EAC Branchen)

CDM 01 - Energy industries (renewable - / non-renewable sources)  
CDM 02 - Energy distribution  
CDM 03 - Energy demand  
CDM 13 - Waste handling and disposal  
CDM 04 - Manufacturing industries

Add. qualification:  
(zus. Qualifikation)

First Appointment:  
(Erstberufung)

10/11/2011

Valid to:  
(Gültig bis)

09/11/2015

Remarks:

Appointed as Technical Reviewer for TA 1.1, 1.2, 2.1, 2.2, 3.1 Direct work experience. TA 4.3, 4.5, 13.1 based on Annex D para 9 of the Accreditation Standard

Languages:

Chinese simplified  
English

### Experience Exchange

Date

Location

Remarks

Accreditation(s)

### Monitoring

Latest Monitoring:  
(letzte Beurteilung)

Next Monitoring:  
(nächste Beurteilung)

Remarks:

## History of scope allocation

Date:	2012-02-13
Change:	EAC CDM added
By:	Praveen Urs
Reason:	
Date:	2012-02-13
Change:	EAC CDM, CDM, CDM, CDM added
By:	Praveen Urs
Reason:	

## History

Created:	12/06/2011 05:00:51 PM	Walter Tang/Chn/TUV
Modified:	07/06/2012 04:47:48 PM	Praveen Urs/Chn/TUV
	07/02/2012 03:08:57 PM	Nelly Yong/MY/TUV
	07/02/2012 03:08:48 PM	Walter Tang/Chn/TUV
	05/15/2012 03:30:46 PM	
	02/13/2012 08:00:10 PM	
	12/06/2011 05:01:30 PM	

## Export to ICMS

Last Export: