



# **VALIDATION REPORT**

## **PROGRAMME OF ACTIVITY**

**Micro Hydro Power Plant Promotion Programme in Regions  
on the Upper Reaches of the Yangtze River, China  
(Micro Hydro Power Plant Promotion Programme in Forest  
Regions of Liangshan Prefecture, Sichuan Province)**

14 January 2014

**Japan Consulting Institute**

**REPORT No. JCI-CDM-VAL-11/015**

**REVISION No. 03**

<b>Validation Report No.</b>	JCI CDM VAL-11/015
<b>Date of revision</b>	14 Jan, 2014, revision 03
<b>Project name</b>	Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province)
<b>Project Participant(s) / Organization</b>	World Wide Fund for Nature
<b>Host Country</b>	People's Republic of China
<b>Project site Location</b>	Yuexi County, Liangshan Prefecture, Sichuan Province
<b>Methodology</b>	AMS-I.E. (Version 05)
<b>Scale</b>	<input type="checkbox"/> Large Scale <input checked="" type="checkbox"/> Small Scale
<b>Sectoral Scope/ Technical Area</b>	<b>Sectoral Scope :</b> 1 / <b>Technical Area:</b> 1.2
<b>GHG reducing measure/ Technology</b>	Introduction of micro scale hydro power plant to displace the use of non-renewable biomass
<b>Emission Reduction estimated</b>	(First CPA) 848 t-CO <sub>2</sub> e/year (average)

<b>Validation Team</b>	<i>Name</i>
<b>Team leader</b>	Takayuki Abe
<b>Team member</b>	Toshiaki Takeda
<b>Team member</b>	Shigeo Aoki

<b>Technical Reviewer</b>	Hideyuki Sato
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<b>Conclusion of validation</b>
<input checked="" type="checkbox"/> Positive opinion: JCI's opinion is that the proposed CDM project meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria and correctly applies the methodology. Hence, JCI provides a positive opinion and requests the registration of the proposed project as a CDM project activity.
<input type="checkbox"/> Negative opinion: JCI's opinion is that the proposed CDM project does not meet all relevant UNFCCC requirements for the CDM and all relevant host country criteria and the supportive evidences are not provided sufficiently. Hence, JCI will not provide a positive opinion and requests the registration of the proposed project as a CDM project activity.

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<b>Approved by</b>	<b>Checked by</b>
Akio Yoshida Executive Director , JCI CDM Center	Hideyuki Sato Evaluation Group Manager, JCI CDM Center

## Abbreviations

AMS-I.E.	AMS-I.E. “Switch from non-renewable biomass for thermal applications by the user” (version 5.0)
BM	Build Margin
CAR	Corrective Action Request
CCPG	Central China Power Grid
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CERs	Certified Emission Reductions
CL	Clarification Request
CM	Combined Margin
CME	Coordinating and Managing Entity
CO <sub>2</sub>	Carbon dioxide
CPA	Component Project Activity
DD	Design Document
DOE	Designated Operation Entity
DNA	Designated National Authority
ERPA	Emission Reduction Purchase Agreement
ERs	Emissions Reductions
EB	Executive Board
FAR	Forward Action Request
GHG	Greenhouse Gas
JCI	Japan Consulting Institute
Junenghuili	Junenghuili Carbon Capital Management (Beijing) Co., Ltd.
KP	Kyoto Protocol
LoA	Letter of Approval
OM	Operating Margin
PEAR	PEAR Carbon Offset Initiative, Ltd.
PoA	Programme of Activity
PP	Project Participants
PRC	People’s Republic of China
Shen’ guo zhuang NRMC	Shen’ guo zhuang Nature Reserve Management Center
SKCDMC	Sichuan Kangmei Community Development and Market Company Ltd.
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Clean Development Mechanism Validation and Verification Standard
WWF	World Wide Fund for Nature

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## I. EXECUTIVE SUMMARY - VALIDATION OPINION

Japan Consulting Institute (JCI) has performed a validation of the “Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province)”. The validation was performed on the basis of UNFCCC criteria for the Clean Development Mechanism and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The reviews of the design documentation and the subsequent follow-up interviews have provided JCI with evidences to determine the fulfilment of stated criteria.

The host country is the People’s Republic of China and the Annex I country is Japan. Both countries fulfil the participation criteria.

The project applies AMS-I.E. “Switch from non-renewable biomass for thermal applications by the user” version 05.

The total emission reductions from the first CPA under the proposed PoA are estimated to be on the average **848 tCO<sub>2</sub>e** per year over the 10 year crediting period of which the starting date is **01/01/2014**. The estimated emission reduction has been checked based on the validation work and JCI considers all relevant assumptions for the above estimated emission reduction is appropriate.

In summary, it is JCI’s validation conclusion that the PoA of “Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province)” as described in the latest version of PoA-DD **version 6.0 of 06/01/2014 /4a/** which includes the specific case CPA-DD (CPA-01) **version 6.0 of 06/01/2014 /5b/**, and meets all relevant UNFCCC requirements for PoA and all relevant host country criteria and currently applies the baseline and monitoring methodology AMS-I.E. “Switch from non-renewable biomass for thermal applications by the user” version 05 /63/.

JCI thus provides a positive validation opinion and the requests for the registration of the proposed project as a PoA.

## II. INTRODUCTION OF VALIDATION

World Wide Fund for Nature (WWF) has commissioned JCI to perform a validation of the PoA. This report summarizes the findings of the validation of the PoA performed on the basis of CDM **VVS version 05.0 /62a/**, and related UNFCCC criteria for the PoA, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures and the subsequent decisions by the CDM Executive Board.

### 1. Objective of CDM validation

The purpose of validation is to ensure a thorough, independent assessment of proposed project activities submitted for registration as a proposed PoA project activity against the applicable PoA requirements.

JCI reports the results of its assessment in a validation report. JCI submits this validation report, along with the supporting documents to the CDM Executive Board as part of the request for registration of PoA.

The validation report includes a positive validation opinion as the proposed activity complies with the applicable PoA requirements.

## 2. Validation approach

The CDM is a rules-based mechanism. Therefore, it is the JCI's responsibility to ensure that, in accordance with the Validation and Verification **Standard** version **05.0 /62a/** and PoA requirements, these rules are complied with for any project activities requesting registration as a proposed PoA project activity.

During validation, the JCI assesses whether the project design of the proposed PoA project activity meets the all relevant requirements. For this, JCI, using objective evidence, assesses the completeness and accuracy of the claims and conservativeness of the assumptions made in the design documents (DDs) of the PoA. The evidence used in this assessment is not limited to that provided by the project participants (Junenghuili Carbon Capital Management (Beijing) Co., Ltd. as CME and PEAR Carbon Offset Initiative, Ltd.).

In assessing evidence, JCI does not omit evidence that is likely to alter the validation opinion. In the assessment of evidences, JCI uses the acceptable approaches as specified in section II to IV, below, and JCI ensures that the project activity complies with the relevant requirements set out in the CDM modalities and procedures, the applicability conditions of the selected methodology and guidance issued by the CDM Executive Board before submitting a request for registration.

In case the validation report includes a negative validation opinion, the validation report is sent to the CDM Executive Board.

## 3. Means of validation

JCI applies standard auditing techniques to assess the correctness of the information provided by the project participants, including, where appropriate, but not limited to:

- (a) Document review, involving:
  - (i) Review of data and information to verify the correctness, credibility and interpretation of presented information;
  - (ii) Cross checks between information provided in the DDs and information from sources other than that used, if available, and if necessary independent background investigations
- (b) Follow-up actions (e.g., on site visit and telephone or email interviews), including:
  - (i) Interviews with relevant stakeholders in the host country, personnel with knowledge of the project design and implementation;
  - (ii) Cross-check of information provided by interviewed personnel (i.e. by checking sources or other interviews) to ensure that no relevant information has been omitted from the validation;
- (c) Reference to available information relating to projects or technologies similar to the proposed CDM project activity under validation; and
- (d) Review, based on the approved methodology being applied, of the appropriateness of formulae and correctness of calculations.

### 3.1 Corrective action requests, clarification requests and forward action requests

If, during the validation of a project activity, JCI identifies issues that need to be further elaborated upon, researched or added to in order to confirm that the project activity meets the CDM requirements and can achieve credible emission reductions, JCI ensures that these issues are correctly identified, discussed and concluded in the validation report.

JCI raises 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.

JCI raises a clarification request (CL) if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

JCI raises 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.

JCI resolves or “close out” CARs and CLs only if the project participants modify the project design, rectify the DDs or provide adequate additional explanations or evidence that satisfies the DOE’s concerns. If this is not done, JCI does not recommend the project activity for registration to the CDM Executive Board.

JCI reports on all CARs, CLs and FARs in its validation report. This reporting is undertaken in a transparent and unambiguous manner that allows the reader to understand the nature of the issue raised, the nature of the responses provided by the project participants, the means of validation of such responses and clear reference to any resulting changes in the DDs of the PoA or supporting annexes.

The validation protocol consists of two tables. The different columns in these tables are described as followings.

### Validation protocol tables

**Table 1 (for PoA-DD) & Table 2 (for CPA-DD) : Requirements checklist**

- ✧ Requirement (Checklist Question) :  
The various requirements in Table 1 & 2 are checklist questions the project should meet. The checklist is organised in different sections, following the logic of the latest VVS, the PoA-DD, CPA-DD Guidelines and the PoA-DD, CPA-DD templates. Each section is then further sub-divided.
- ✧ Reference :  
Gives reference to documents where the checklist question or item is found. Paragraph No. of VVS is referred.
- ✧ Check Comment :  
The column is used to elaborate and discuss the checklist question and/or the conformance to the question.
- ✧ ID No. of CAR, CL and FAR :
  - ID No. of **CAR**, **CL** and **FAR** is described.
  - Corrective Action Request (**CAR**) is used due to non-compliance with the checklist question.
  - Clarification Request (**CL**) is used when the validation team has identified a need for further clarification.
  - Forward Action Request (**FAR**) is used to highlight issues related to project implementation that require review during the first verification of the project activity.

**Table 3 (for PoA-DD) & Table 4 (for CPA-DD) : Resolution of Corrective Actions, Clarification Requests and Forward Action Requests**

- ✧ Clarifications and corrective action requests :  
If the conclusions from the draft Validation are a **CAR**, a **CL** or a **FAR**, these should be listed in this section.
- ✧ Ref. to checklist question in Table 1 & 2 :  
Reference to the checklist question number in Table1 where the **CAR**, **CL** or **FAR** is explained.
- ✧ Summary of project owner response :  
The responses given by the project participants during the communications with the validation team should be summarised in this section.
- ✧ Validation team conclusion :  
This section should summarise the validation team’s responses and final conclusions.

The completed validation protocol for “Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province)” is enclosed in Appendix A to this report.



## 4. Global Stakeholder Consultation

JCI made the SSC-PoA-DD version 2.0 dated 21 May 2011, SSC-CPA-DD version 2.0 dated 21 May 2011 for the first real CPA (CPA-01) and SSC-CPA-DD for the generic CPA (CPA-XX) of the project under consideration publicly available on UNFCCC CDM website in accordance with the “Procedures for Processing and Reporting on Validation of CDM Project Activities” version 03. And Parties, stakeholders and NGOs were through the website invited to provide comments during a 30 days period from 25 May 2011 to 23 June 2011.

If any comment is received during the validation of the project activity, JCI takes into account the comments received and the validation report shall include details of actions taken to take due account of the comments during the validation process. And if comments are not sufficiently substantiated or indicate that the project activity does not comply with the CDM requirements, then JCI requests further clarification from the entity providing the comment. However, JCI is not required to enter into a dialogue with Parties, stakeholders or NGOs that comment on the CDM requirements. If no additional information or substantiation is provided in response to a request for clarification, JCI proceeds to assess the comments as originally provided.

No comments were received in relation to this PoA activity.

## III. VALIDATION WORK

JCI carried out the validation work to ensure that the project activity complies with the requirements of paragraph 37 of the CDM modalities and procedures.

### 1. Validation Team

Details of the validation team are shown in below Table 5.

**Table 5 Details of Validation Team members**

Role/Qualification	Name	Qualified Technical Areas related to the Project	On-site Visit
All relevant issues / Team Leader	Takayuki ABE	Hydropower (TA 1.2)	✓
CDM auditor / Team Member	Toshiaki TAKEDA	Hydropower (TA 1.2)	-
CDM auditor / Team Member	Shigeo AOKI	Hydropower (TA 1.2)	-

The certificate of appointment of validation team member is attached in Appendix B to this report.

### 2. Appointment certificate of the DOE’s validation team member

Details of the technical reviewer are shown in below Table 6.

**Table 6 Technical reviewer**

Name	Qualified Technical Areas related to the Project
Hideyuki SATO	Hydropower (TA 1.2)



### 3. Quality Control within the team of the validation process

The validation report worked out by the team underwent an internal review process to ensure the compliance with the applicable requirement of the latest version of VVS.

JCI applies internally established Quality Management Program for the required review process, which is defined as follows;

- 1) Internal Review for the interim check by the internal audit team and the interim technical review by the technical reviewer
- 2) The evaluation of the validation work in the CDM evaluation committee consists of outside experts
- 3) Internal review for the final check by internal audit team and the final technical review by the technical reviewer

The review and evaluation including the technical review are implemented for every validation work by the competent personnel assigned in accordance with JCI's qualification scheme for CDM validation and verification.

### 4. Desk Review

#### 4.1 Document review

The original PoA-DD, generic CPA-DD and specific CPA-DD was submitted to JCI in May 2011. The additional documents related to the PoA have been reviewed to verify the correctness, credibility and interpretation of the presented information. Furthermore, a cross-check between provided information and information from other sources has been done as an initial step of the validation process. A complete document list of all documents and evidence material is shown in below Table 7.

#### 4.2 Document list

All the relevant documentation to be reviewed through the whole validation process is listed in tabular form in the following table 7.

**Table 7 Documents list**

No.	Title
	PDD, F/S Report, EIA Report
/1/	SSC-PoA-DD, Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China, version 2.0 (VVM version), by PEAR, 21/05/2011
/2/	SSC-CPA-DD, Micro Hydro Power Plant Promotion Programme in Yuexi County, Sichuan Province on the Upper Reaches of the Yangtze River, China (CPA-01), version 2.0 (VVM version), by PEAR, 21/05/2011
/3/	Generic SSC-CPA-DD, Micro Hydro Power Plant Promotion Programme in [County's Name, Province's Name] on the Upper Reaches of the Yangtze River, China- [CPA-XX], version x (VVM version), by PEAR, dd/mm/yyyy
/4/	SSC-PoA-DD, Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province), version 3.0 (VVM version), by PEAR, 06/12/2012
/4a/	SSC-PoA-DD, Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province), version 6.0 (VVS version), by PEAR, 06/01/2014
/5/	SSC-CPA-DD, Micro Hydro Power Plant Promotion Programme in Sichuan Shen' guo zhuang Giant Panda Nature Reserve Surrounding (CPA-01), version 3.0 (VVM version), by PEAR, 06/12/2012

No.	Title
/5a/	SSC-CPA-DD, Micro Hydro Power Plant Promotion Programme in Sichuan Shen' guo zhuang Giant Panda Nature Reserve Surrounding (CPA-01), version 3.1 (VVM version), by PEAR, 30/05/2013
/5b/	SSC-CPA-DD, Micro Hydro Power Plant Promotion Programme in Sichuan Shen' guo zhuang Giant Panda Nature Reserve Surrounding (CPA-01), version 6.0 (VVS version), by PEAR, 06/01/2014
/6/	Generic SSC-CPA-DD, Micro Hydro Power Plant Promotion Programme in [Name of a Nature Reserves] of Liangshan Prefecture, Sichuan Province (CPA-XX), version x (VVM version), by PEAR, dd/mm/yyyy
/7/	Feasibility Study Report of Micro Hydro Power Project, by Sichuan Shengguozhuang Nature Reserve, 10/12/2009
/8/	Environmental Checklist, by Sichuan Shengguozhuang Nature Reserve, by Sichuan Shengguozhuang Nature Reserve, 09/12/2009
/9/	Summary of On-site Assessment, by JCI, 15/08/2011
	Letter of Approval
/11/	Letter of Approval by China DNA, 22/11/2012
/12/	Letter of Approval by Japan DNA, 05/06/2012
/12a/	Approval of change of project participant's name and project activities dated on 20/12/2012
/13/	Approval Letter for FSR by Yuexi DRC and Permission to start construction, by Yuexi DRC, 02/12/2009
/14/	Approval Letter for Environmental Checklist, Yuexi EPB, 16/12/2009
/15/	Business License for Project Coordinator, 03/05/2007
/16/	Business License for CPA Implementer, 03/05/2007
/17/	Business License of Junenghuili Carbon Capital Management (Beijing) Co., Ltd. As new CME, 28/09/2011
/18/	Approval Letter of Commencement by Local Government. 26/05/2011
	Contract, Agreement
/21/	Agreement with CDM Consultant with WWF, 28/03/2011
/22/	Construction Contract with WWF, 25/12/2010
/23/	Main Equipment Purchase Agreement with Liangshan Yizu Autonomous Prefecture Wild Animal Preservation Society, 13/01/2011
/24/	Emission Reduction Purchase Agreement with PEAR Carbon Offset Initiative, Ltd., 07/04/2011
/25/	PCDM coordination management contract between the Kang mei as former CME and the Junenghuili, 14/10/2012
	Documentary Evidence, Records
/31/	Introduction of Project Coordinator, by Kang mei,

No.	Title
/32/	Introduction of CPA Implementer, by Shen' guo zhuang nature reserve management center
/33/	Investment decision and CDM application decision by WWF, 01/04/2010
/34/	Explanation of use of non-renewable biomass, by Project Coordinator
/35/	Data of non-renewable biomass and renewable biomass and calculation procedure for emission reduction, by Project Coordinator
/36/	Operation and Maintenance Manual, by Project Coordinator
/37/	Monitoring Manual, by Project Coordinator
/38/	Education/Training Program for Operation and Maintenance, by Project Coordinator
/39/	Specification of the Hydro Turbine/Generator
/40/	Specification of the monitoring system, by Sichuan Agriculture Machine Office, 29/04/2003
/41/	Construction Schedule, by Project Coordinator
/42/	Invitation of Stakeholders Meeting, by Project Coordinator, 21/09/2010
/43/	Record of Stakeholders meeting, by Project Coordinator, 22/09/2010
/44/	Question and Reply (Stakeholders comments)
	<b>Drawings</b>
/51/	Organization Chart of the PoA project
/52/	System flow Diagram including Equipment and Monitoring Meters
/53/	System of electricity line
	<b>Methodology, Tools, Guidance, Guidelines and Manual of UNFCCC</b>
/61/	Glossary of CDM terms (Version 07)
/62/	Clean Development Mechanism Validation and Verification Manual (Version 01.2)
/62a/	Clean Development Mechanism Validation and Verification Standard (Version 05.0)
/63/	AMS-I.E Switch from non-renewable for thermal applications by the use (version 5.0)
/65/	General guidelines for SSC CDM methodologies (Version 20)
/66/	CDM-SSC-PoA-DD Form (Version 02.0), Programme design document form for small-scale CDM programmes of activities
/67/	CDM-SSC-CPA-DD Form (Version 02.0), Component project design document form for small-scale component project activities
/68/	Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (Version 03.0)
/69/	Standard for sampling and surveys for CDM project activities and programme of activities (Version 04.0)
/71/	Guidelines for demonstrating additionality of microscale project activities (Version 05.0)
/72/	Guidelines on assessment of de-bundling for SSC project activities (Version 03.0)

No.	Title
/73/	Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0)
/74/	Clean development mechanism project cycle procedure (Version 05.0)
/75/	Guideline for Sampling and surveys for CDM project activities and programmes of activities (Version 03.0), 04/10/2013
	General local References
/81/	General Guideline for Micro-hydro Power Generating Equipment GB/T 17622-2005
/82/	Official Book issued by the Government on Consumption of Forrest Biomass Resources
/83/	National poverty alleviation and development area by State Council Leading Group Office of Poverty Alleviation and Development of China, 31/08/2006

### 4.3 Main change

Main changes in the PoA, CPA-DDs between the versions published for the 30 days stakeholder commenting period and the final version submitted for registration are summarized in the table 8 below:

**Table 8 Major Changes in the Content of the PoA-DD & CPA-DD**

Subject	Original content in the PoA-DD /1/ & CPA-DD /2/ (VVM version DDs)	Revised content in the PoA-DD /4a/ & CPA-DD /5b/ (VVS version DDs)	Issued CAR or CL. Relevant methodology, tool or guidelines applied.
PoA title	PoA-DD PoA title ; Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China	PoA-DD PoA title ; Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province)	CAR-3
LoA issuances	A.3, PoA-DD Not provided yet.	A.4, PoA-DD LoAs of China as host country and Japan LoA have provided.	CAR-1
CME	A.3, PoA-DD SKCDMC (Sichuan Kangmei Community Development and Market Company Ltd.)	A.4, PoA-DD Junenghuili Carbon Capital Management (Beijing) Co., Ltd.	CL-30
Eligibility criteria	A.4.2.2, PoA-DD Four eligibility criteria	B.2, PoA-DD Twelve eligibility criteria	Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, CAR-6
Starting date of PoA	B.1, PoA-DD 20/04/2011	D.1, PoA-DD 26/05/2011	CAR-4

Applied methodology	<b>E.1 PoA-DD</b>	<b>B.3, PoA-DD</b>	
	AMS-I.E. Version 04	AMS-I.E. Version 05	
Additionality Tool	<b>E.5.1, PoA-DD</b>	<b>B.1, PoA-DD</b>	CAR-2
	Guidelines for demonstrating additionality of microscale project activities	Guidelines on demonstrating additionality of small-scale project activities	
Key criteria	<b>E.5.2, PoA-DD</b>	<b>B.3, PoA-DD</b>	Guidelines on demonstrating additionality of small-scale project activities
	The installed capacity of each independent subsystem is less than 1,500kW and total capacity is less than 5MW	Each plant is 3 kW – 5 kW and total does not exceed 15 MW.	
Estimation of Emission Reductions	<b>E.6.1, PoA-DD</b>	<b>B.6.1, PART II, PoA-DD</b>	CL-17 & CL-18 <b>B<sub>y</sub> ; Quantity of woody biomass that is substitute or displaced in tonnes</b>
	Simple explanation Estimation of E <sub>Ry</sub> ; $E_{Ry} = B_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected\_fossilfuel}$ Determination of B <sub>y</sub> ; Survey results	Detailed explanation Estimation of E <sub>Ry</sub> ; $E_{Ry} = B_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected\_fossilfuel} - LE_y$ Estimation of B <sub>y</sub> ; $B_y = R_{o,y} \times \sum_i^N B_{i,y}^{BL}$	
Data to be monitored	<b>E.7.1, PoA-DD</b>	<b>E.7.1, PART II, PoA-DD</b>	
	N ; Number of micro hydro power plants in operation B <sub>y</sub> ; Quantity of woody biomass that is substituted or displaced by electricity energy H <sub>y</sub> ; Operation hours of micro hydro power plants	R <sub>o,y</sub> ; Ratio of micro hydro power plants in normal operation in a year	
CPA title	<b>CPA-DD</b>	<b>CPA-DD</b>	
	CPA-001; Micro Hydro Power Plant Promotion Programme in Yuexi County, Sichuan Province on the Upper Reaches of the Yangtze River, China	CPA-001; Micro Hydro Power Plant Promotion Programme in Sichuan Shen' guo zhuang Giant Panda Nature Reserve Surrounding	
Ex-ante ER	<b>B.5.3, CPA-DD</b>	<b>B.6.4, CPA-DD</b>	
	924 tonnes of CO <sub>2</sub> e	848 tonnes of CO <sub>2</sub> e	
Starting date of CPA	<b>A.4.2.1, CPA-DD</b>	<b>A.8.1, CPA-DD</b>	CAR-4
	20/04/2011	26/05/2011	
Starting date of crediting period	<b>A.4.3.1, CPA-DD</b>	<b>A.9.1, CPA-DD</b>	CAR-5
	01/05/2012	01/02/2014	

## 5. Follow-up actions (Interviews with relevant stakeholders in the host country)

The on-site assessment and interviews with project stakeholders were held from 01 to 03 August 2011 at the project site in Shen' guo zhuang nature reserve in Yuexi county, Liangshan Yi Autonomous Prefecture, Sichuan province.

The names of interviewees and topics are listed in following Table 9.

Table 9 On-site assessment results

No.	Date	Name	Organization	Topic
/91/	01/08/2011	Mr. Ling Lin Mr Li Ye Mr. Jiang Zeyin	WWF	<b><u>Interview with Project Owner</u></b> <ul style="list-style-type: none"> <li>· Outline of the Company</li> <li>· Outline of the project</li> <li>· Project history/milestones</li> </ul>
/92/	01/08/2011	Mr. Liu Fuwen Mr. Wu Jiawei	Kangmei	<b><u>Interview with PoA coordinator</u></b> <ul style="list-style-type: none"> <li>· Outline of the Company</li> <li>· Outline of the project</li> <li>· Project history/milestones</li> </ul>
/93/	02/08/2011	Mr. Jiwu Guha Ms. Asu Aniumu Mr. Jiyue Lahuo, Mr. Aumu Labi	Farmer Farmer Farmer Farmer	<b><u>Interview with local Residents</u></b> <ul style="list-style-type: none"> <li>· Consultation with stakeholders</li> <li>· Comments on the project</li> <li>· Use of fuels &amp; electricity</li> <li>· Environmental or ecological issues</li> <li>· Future concerns</li> </ul>
/94/	03/08/2011	Mr. Zhou Wenhao	Yuexi EPB	<b><u>Interview with local EPB</u></b> <ul style="list-style-type: none"> <li>· Main role of Yuexi EPB</li> <li>· Environmental issue of the Project</li> <li>· Approval of Environment checklist</li> </ul>
/95/	03/08/2011	Mr. Qumu Moyi	Yuexi Forest Office	<b><u>Interview with local Forest Office</u></b> <ul style="list-style-type: none"> <li>· Main role of Yuexi Forest Office</li> <li>· Administration of Shen Guo Zhuang Nature Reserve</li> <li>· Electrification of the relevant area by the Grid</li> </ul>
/96/	03/08/2011	Mr. Wang Zhengming	Liangshan Yizu Autonomous Prefecture Wild Animal Preservation Society	<b><u>Interview with Wild Animal Preservation Society</u></b> <ul style="list-style-type: none"> <li>· Main role of the Society</li> <li>· Implementation of the project</li> </ul>
/97/	03/08/2011	Mr. Ai Yongbin Mr. Luo Jian	Shen' guo zhuang Nature Reserve Center	<b><u>Interview with CPA Implementer</u></b> <ul style="list-style-type: none"> <li>· Main role of the Society</li> <li>· Implementation of the project</li> <li>· Selection of the project participants</li> </ul>
/98/	03/08/2011	Mr. Chen Guoqing	Technical Specialist	<b><u>Interview with Technical Specialist</u></b> <ul style="list-style-type: none"> <li>· Main role of the Technical Specialist in the project</li> <li>· Machine of micro hydro</li> <li>· Operation and maintenance</li> </ul>
/99/	01-03/08/2011	Mr. Otkur Ghosh Mr. Kazuo Sasaki Ms. Zhu Weisi	PEAR	<b><u>Interview with DDs Author</u></b> <ul style="list-style-type: none"> <li>· Initial findings</li> <li>· Documents</li> </ul>



## IV. 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 the validation process are identified and documented in more detail in the validation protocol in Appendix A.

### Findings issued through the validation

JCI issued six (6) CARs, thirty (30) CLs and zero (0) FAR as shown in the Validation Protocol, Appendix A of this report. All CARs and CLs were resolved and then closed as shown in the Table 3 & 4 of the Appendix A. Major issues and its resolution process through the CARs and CLs are described in following items according to **VVS /62a/**.

The final validation findings related to the project design were documented and described in the revised and resubmitted project design documentations.

## 1. Approval and authorization

### 1) Approval

JCI has received the Letters of Approval from the project participants, who were the PEAR Carbon Offset Initiative, Ltd. (PEAR), which were clearly referenced by the letter itself and all supporting documentations;

- DNA of People's Republic of China issued the LoA dated on 22/11/2012 /11/
- DNA of Japan issued the LoA dated on 05/06/2012 /12/ and the Approval of change of project participant's name and project activities dated on 20/12/2012 /12a/.

JCI has confirmed the approval of the project activity with the website of PRC governmental organization which was the CDM Information Platform sponsored by and given copyright of the information from the Department of Climate Change, NDRC, PRC. Then the LoA is authentic. JCI has concluded that the LoA confirmed the followings;

- 1) DNA of PRC approved the "Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province)".
- 2) The People's Republic of China has ratified the Kyoto Protocol on August 30, 2002.
- 3) The proposed CDM project activity contributes to the sustainable development of the Republic of China, as Host country.
- 4) Participation is voluntary.
- 5) Junenghuili is permitted to transfer Certified Emission Reductions (CERs) to PEAR.
- 6) The LoA refers to the precise proposed CDM project activity title in the PDD being submitted for registration.

JCI has confirmed the approval of the project activity with the website of Japan DNA. Then the LoA is authentic. JCI has concluded that the LoA and the Approval of change of project participant's name and project activities confirmed the followings;

- 1) DNA of Japan approved the "Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province)".
- 2) Japan has ratified the Kyoto Protocol on June 06, 2002.
- 3) Participation is voluntary.
- 4) It authorizes PEAR as a project proponent in the project of "Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province)".
- 5) It refers to the precise proposed CDM project activity title in the PDD being submitted for registration.



There was no indication during the validation process that the project used the official development assistance funding for PRC.

JCI concludes that both LoAs are credible and fully comply with the requirements by the CDM.

## 2) Authorization

JCI confirmed that the project participants are Junenghuili Carbon Capital Management (Beijing) Co., Ltd. of China and PEAR Carbon Offset Initiative, Ltd. of Japan as being listed in tabular form in section A.4 of **PoA-DD /4a/**, and also confirmed that this information is consistent with the contact details provided in Annex 1 of the **PoA-DD /4a/ and CPA-DD /5b/**. It is also confirmed that no entities other than those approved as project participants are included in these sections of the **PoA-DD /4a/ and CPA-DD /5b/**.

The PoA-DD version 2.0 for GSC has reported the SKCDMC (Sichuan Kangmei Community Development and Market Company Ltd.) as the CME of the project, but during validation the CME was changed to the Junenghuili Carbon Capital Management (Beijing) Co., Ltd. JCI has confirmed by the evidence /25/ and the LoAs /11//12//12a/ that this change was done appropriately.

JCI confirmed that the participation of each project participant has been approved by one Party involved, with the Letter of Approvals and the Approval of Change of project participant's name and project activities from the DNAs of both countries.

## 3) Contribution to sustainable development

The PoA-DD stated that Kangmei as the former Program coordinator has done substantial works for rural sustainable development in China.

The PoA-DD stated that Junenghuili has provided a lot of effective technical support and consultation to many programmes, which supported by international organizations, and done substantial works for rural sustainable development in China. However, Junenghuili has not obliged or mandated to implement such kind of programmes; Junenghuili is willing to voluntarily promote the programme as a coordinating entity with a condition of getting help from CDM carbon fund and other carbon fund investment.

The rural sustainable developments are as follows;

- 1) Installation of micro hydro power generators (3kW~6kW) and related equipment provide electricity to off-grid households who have not used electricity.
- 2) A CPA targets ambient area of a nature reserve in upper reaches of the Yangtze River where national/regional grid is not accessible.
- 3) A typical micro hydropower system with 3kW provides electricity to a household for lighting, cooking and heating in house.
- 4) The fuels currently used in households for cooking are biomass (non-renewable and renewable) and they have used edible oils and a small portion of kerosene for lighting. Those fuels will be replaced with electricity of micro electricity.
- 5) GHG emission reductions can be attained through reducing non-renewable biomass.

JCI confirmed above rural sustainable development in the relevant area of the project activity through the documents provided by the project participants and the interview with the stakeholders.

JCI confirmed also that the LoA issued by DNA of the host party /11/; the People's Republic of China confirms the contribution of the proposed CDM project activity to the sustainable development of the host party, which has been already described in the above.

## 2. Modalities of Communication

JCI has validated the corporate identity of all project participants and focal point included in the MoC statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories, through directly checking the evidence for corporate, personal identity and also through interview with the relevant personal of project participants.

JCI has confirmed in writing that it has performed due diligence on the MoC statement in accordance with the requirements established in the VVS. And also JCI has confirmed in writing that the MoC statement complied with all relevant forms and requirements.

### 3. Management System

#### 1) Coordinating/managing entity and participants in a PoA

JCI confirmed that the project participants were listed in tabular form in section A.4 of the PoA-DD and that this information was consistent with the contact details provided in Annex 1 of the PoA-DD.

The PoA DD version 2.0 for GSC has reported the SKCDMC (Sichuan Kangmei Community Development and Market Company Ltd.) as the CME of the project, but during validation the CME changed to the Junenghuili Carbon Capital Management (Beijing) Co., Ltd. JCI has confirmed by the evidence /25/ and the LoAs /11//12//12a/ that this change was done appropriately.

JCI confirmed that no entities other than those approved as project participants were included in these sections of the PoA-DD.

JCI confirmed that the participation of each project participant has been approved by one Party involved, with the Letter of Approvals and the Approval of Change of project participant's name and project activities from the DNAs of both countries.

#### 2) Entity/individual responsible for the first CPA

Each CPA Implementer is selected by Junenghuili and contracts with Junenghuili as the CME of the PoA activity. The role and responsibility of an implementer are shown clearly in the Table 3 of Section C, PoA-DD.

In case of the CPA-01, the Shen' guo zhuang Nature Reserve Management Center will be served as operator and implementer. JCI confirmed that the Shen' guo zhuang NRMC is listed in tabular form in section A.4 and A.6 of the CPA-DD and that this information is consistent with the contact details provided in Annex 1 of the CPA-DD. JCI confirmed that no entities other than those entities shown in the A.6 of the CPA-DD were included in the CPA-01 activity.

#### 3) Management System of the PoA and the first CPA

The distinct and transparent description of the operational and management arrangement for CME and CPA implementer are described in the section C of the PoA-DD /4-a/.

- 1) There is a record keeping system for each CPA under the PoA. The responsibilities and task of the stakeholders of the proposed PoA were clearly stipulated in the PoA-DD.
- 2) The management system/procedure to avoid double counting was clearly stipulated in the PoA-DD. It was consisted of the four steps of which each step was clearly and transparently stipulated.
- 3) Each sub-system under a CPA is designed less than 5 kW, which is no greater than 1% (150kW) of the threshold of small scale CDM (15MW). Then any CPA of the PoA is exempt from performing a de-bundling check according to "Guidelines on Assessment of De-bundling for SSC Project Activities (ver. 03.0)" /72/.
- 4) There were the provisions in the agreements between the project participants and CPA operators to ensure that the operators of CPA are well aware of and agree to their activities under the proposed PoA.

JCI confirmed that the management system described in the PoA-DD is in accordance with the Para.19 of "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities" /68/.

- (a) The PoA-DD specified the roles and responsibilities of as CME for the PoA. JCI has confirmed that they fully cover the roles and responsibilities expected to CME from the initial stage to the last stage of developing each CPA.

- (b) The CME arranged the training and capacity development for the first CPA implementation on CDM with help of the CDM consultant. And the relevant records including training programme is collected and stored as electric and hard copy by the CDM management team of CME.
- (c) Junenghuili as CME developed the procedure for technical review regarding inclusion of any CPAs. The technical review is carried out in accordance with the eligibility criteria specified in the B.2 of the PoA-DD.
- (d) JCI has confirmed that the procedure to avoid double counting was stated in the C of the PoA-DD including four steps, and JCI validated that those steps were appropriate in assessing CPAs of the PoA.
- (e) The PoA-DD and the CPA-DD specified to establish a data collecting system and to maintain a database for the detailed CPA project documents and the monitoring data of each CPA by the CME and each CPA implementer.
- (f) The PoA-DD specified the PDCA cycle of the CME which included an annual review of PoA management system with feedback from CPA implementer and also included a revision of managements system if necessary.

JCI has validated that they were effective in continuously improving the PoA management. JCI also confirmed that the management system for the PoA has sufficient competencies to check the features of potential CPAs and to ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA.

JCI confirmed that the management system described in the PoA-DD is in accordance with the Standard /68/.

JCI has concluded that Shen' guo zhuang NRMC CPA was designated as an implementer for CPA-01 by the CME and the role responsibility of CME and CPA implementer were described distinctly in the PoA-DD and CPA-DD.

## 4. PoA/CPA design document

Along with the amendment of the form of PoA-DD and CPA-DD by the Guidelines of UNFCCC, the PP applied the latest VVS version forms of PoA-DD and CPA-DD modifying from the former VVM form applied for GSC.

JCI confirmed that the final version of PoA-DD and CPA-DD are compliance with the relevant and latest VVS forms and guidance.

### 1) PoA design document

Through desk reviews and Q&A sessions with the DDs author, JCI confirmed that the PoA-DD & CPA-DD were described based on and referring to the following relevant tools, guidance, guidelines, and manual in addition to the applied methodology; AMS-I.E. "Switch from non-renewable biomass for thermal applications by the user" (version 5.0) /63/:

- (1) Glossary of CDM terms (Version 07) /61/
- (2) CDM VVS (Version 05) /62a/
- (3) General guidelines for SSC CDM methodologies (Version 20) /65/
- (4) CDM-SSC-PoA-DD Form (Version 02.0), Programme design document form for small-scale CDM programmes of activities /66/
- (5) CDM-SSC-CPA-DD Form (Version 02.0), Component project design document form for small-scale component project activities /67/
- (6) Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (Version 03.0) /68/
- (7) Standard for sampling and surveys for CDM project activities and programme of activities (Version 04.0) /69/
- (8) Clean development mechanism project cycle procedure (Version 05.0) /74/
- (9) Guidelines for demonstrating additionality of microscale project activities (Version 05.0) /71/
- (10) Guidelines on assessment of de-bundling for SSC project activities (Version 03.0) /72/

(11) Guidelines for demonstrating additionality of small-scale project activities (Version 09.0) /73/

The project design was described using the appropriate template of SSC-PoA-DD version 02.0 /15/ and SSC-CPA-DD version 02.0 /16/, which were confirmed through comparison with the template listed on the UNFCCC website.

As described above, JCI concluded that the DDs (SSC-PoA-DD, SSC-CPA-DD) were compiled with the appropriate format and were described based on appropriate tools, guidelines, manual and guidance which were specified and requested by the CDM PoA procedures.

## 2) CPA design document

JCI confirmed that proposed CPA-01 complied with the eligibility criteria specified in the PoA-DD. The means of validation to determine compliance with this requirement was specific to the PoA-DD.

JCI confirmed it through the desk review of the documentation sufficient, the follow-up interviews with the local stakeholders and the site visit to the one sample of micro hydro power generator installation.

The project design was described using the latest component project design document form for small-scale component project activities, CDM-SSC-CPA-DD Form (Version 02.0) /67/ which was confirmed through comparison with the template listed on the UNFCCC website.

And also, JCI concluded that the CPA-DD was described based on appropriate tools, guidelines, manual and guidance which were specified and requested by the CDM procedures.

## 5. Description of a PoA/CPAs

JCI undertook the following process to validate the accuracy and completeness of the project description;

- |                   |  |
|-------------------|--|
| Process:          | Document review, Follow-up action (On-site visit, interviews), etc.  |
| Document review:  | Findings (CARs, CLs), FSR, Environmental Checklist, Technical specifications, Design data/drawings, relevant laws/regulations/codes, Internet websites |
| Follow-up action: | Observation/inspection of the physical site and/or equipment during on-site visit and Interviews with stakeholders                                     |

As a result of the above process, JCI concluded that the descriptions of the DDs were accurate and its contexts were complete, and well outlined the nature and technical aspects of the project activity.

### 1) Description of the PoA

The major features of the project activity described in the PoA-DD are summarized below:

- Sectoral scope: 01 (Energy industries (renewable / non-renewable sources))
- Project type: Introduction of micro scale hydro power plant to displace the use of non-renewable biomass
- CME: Junenghuili Carbon Capital Management (Beijing) Co., Ltd.
- Equipment: Micro scale hydro power plant, 3 - 5 kW (typical plant is 3 kW) hydro turbine/generator
- Total capacity of each CPA: not exceeding 15 MW (Small scale CDM project)
- Project location: Liangshan Yi Autonomous Prefecture, Sichuan Province
- Starting date of the PoA: 26/05/2011
- Length of LoA: 28 years

JCI has confirmed the accuracy and completeness of the PoA description by crosscheck of the related documents and interviews with the stakeholders.

### 2) Description of the CPA-01

The major features of the project activity described in the DDs for the first specific CPA (CPA-01) are summarized below:

- Sectoral scope: 01 (Energy industries (renewable / non-renewable sources))

- Project type: Introduction of micro scale hydro power plant to displace the use of non-renewable biomass
- CPA Implementor: Shen' guo zhuang nature reserve management center
- Equipment: Micro scale hydro power plant, 3 kW hydro turbine/ generator
- Plant number: 120 plants for 120 households
- Project location: Shen' guo zhuang nature reserve in Yuexi county, Liangshan Yi Autonomous prefecture, Sichuan province
- Estimated emission reductions: 848 t-CO<sub>2</sub>e/year
- Starting date of the CPA: 26/05/2011
- Starting date of the Crediting period: 01/02/2014 or the date of registration of the PoA, whichever is later
- Crediting period: 10 years

JCI has confirmed the accuracy and completeness of the CPA-01 description by crosscheck of the related documents and interviews with the stakeholders.

Regarding de-bundled component the CPA-DD (CPA-01) explains in A.12. that the 3 kW of each subsystem capacity is obviously less than 1% of the small scale CDM threshold 15MW and then the CPA is exempted from de-bundling check. JCI concluded that this justification on de-bundled component is conformed to the paragraph 10 of the guideline on assessment of de-bundling for SSC project activities /72/.

## 6. Additionality of a project activity

### 6.1 Demonstration of additionality of the PoA as a whole

#### (1) Additionality of the PoA

JCI assessed on the additionality of the Project through the review of the PoA-DD and the CPA-DD and cross-checking of the evidences with the public information as well as discussion and observations during the on-site assessment.

The assessment has been implemented by applying the relevant additionality-related guidelines such as “Guidelines on the demonstration of additionality of small-scale project activities” (version 09.0) /73/, “General guidelines for SSC CDM methodologies” (version 20) /65/, “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities” (version 03.0) /68/.

The PoA-DD demonstrated the additionality for the PoA in B.1. in accordance with the “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities”.

*Paragraph 7. Additionality shall be demonstrated by establishing that in the absence of CDM PoA, none of the implemented CPAs would occur.*

The PoA-DD described that households under the PoA were indigent and were hardly to afford installation cost and operation cost of micro hydro power plant and then that, without the PoA, the voluntary action of promoting micro hydro power plants in the mountainous area of the Liangshan prefecture would not occur.

Furthermore JCI crosschecked with Chinese laws related to electrification in vast remote mountainous area and justified that there was no law or mandatory requirement that private entity conducted such kind of activities. Therefore JCI concluded that it was a credible statement for the above requirement.

The PoA-DD described also the positive list in the paragraph 2 of the Guidelines on the demonstration of additionality of small-scale project activities. “Micro/pico-hydro (with power plant size up to 100 kW)” is included in the positive list not to be required a demonstration of additionality. The micro hydropower plant used in the PoA is 3kW to 5 kW (typical plant is 3 kW) and then it is conformed to meet above threshold of the positive list.



Therefore JCI concluded that the PoA was additional.

## (2) Additionality of a CPA

The PoA-DD specified the following eligibility criteria for inclusion of a CPA in the PoA.

- 1) A CPA locates in Liangshan Prefecture in Sichuan Province on the upper reaches of the Yangtze River.
- 2) A CPA includes installation/construction of micro hydro power plants and their related equipment.

And,

- 3) For additionality demonstration, “Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0)” is applied. The number of micro hydro power plants shall be controlled to sure the total capacity of power plants not exceeding 15MW.

The Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0) /73/ shows as follows;

The paragraph 2 of the Guidelines provided the following positive list of technologies and project activity types that are defined as automatically additional;

- (b) The following off-grid electricity generation technologies where the individual units do not exceed the thresholds indicated in the parenthesis with the aggregate project installed capacity not exceeding the 15MW threshold:
  - (i) Micro/pico-hydro (with power plant size up to 100 kW)
  - (ii) ...

As mentioned above the project activity is designed to provide electricity to off grid households for lighting and cooking. The each measure in the project activity are the micro-hydro power plant of which capacity is not larger than 5kW and the aggregate project installed capacity is not exceeding 15 MW (not more than 3000 micro hydros in a CPA).

From those information and investigations, JCI validated that the generic CPA and CPA-01 satisfied the relevant provision of above Guidelines and then those projects were additional.

## 6.2 Start date of a PoA/CPA

### (1) Timeline of the project

The timeline of major key activity relevant to the project implementation and serious consideration of CDM are tabulated below, according to the Clean Development Mechanism project cycle procedure /74/ (former Guideline of CDM prior consideration).

The Project Participants have submitted the relevant evidences related events in the Table 10 and of the related event with the project. The Project Participants explained the below timeline and submitted the relevant evidences. JCI has confirmed that the serious consideration of CDM and the secured CDM status were made appropriately by the project participants.

The timeline summarizes how the project participant made prior consideration of CDM step by step. The main events are explained in the following section.

**Table 10 Timeline of major key activity**

Date	Key Activity	Evidence
09/12/2009	Completion of Environmental Checklist	Checklist /8/
10/12/2009	Completion of FS Report	FSR /7/
15/12/2009	Approval of Environmental Checklist	Approval Letter /14/
20/12/2009	Approval of FS Reports	Approval Letter /13/
01/04/2010	Decision of investment and CDM application	Agreement /33/

25/12/2010	Contract with Construction Company	Contract agreement /22/
13/01/2011	Main equipment procurement agreement	Contract /23/
07/04/2011	Contract of ERPA with PEAR	ERPA /24/
25/05/2011	DDs uploaded on the website of UNFCCC for Global Stakeholder Consultation	
25/06/2011	Construction start of micro hydro power plants <b>(The starting date of the programme project activity )</b>	Approval Letter of Commencement /18/
05/06/2012	LoA of Japan	LoA by Japan DNA /12/
22/11/2012	LoA of China	LoA by China DNA /11/
01/02/2014	First Crediting Period Start (Expected)	

## (2) Prior consideration of CDM

The EB decision of Annex 25, EB50, states that the Board agreed that the Guidelines for the demonstration and assessment of prior consideration of the CDM do not apply to PoAs. Therefore the notifications to both UNFCCC and host party DNA were not submitted for prior consideration of the project even if the starting date of project was after 2 August 2008.

## (3) Project starting date

JCI has assessed that the project starting date of the proposed PoA and the CPA-01 with the following issues.

According to the Glossary of CDM terms /61/ the starting date of a CDM programme activity is the earliest date at which either the implementation or construction or real action of a programme activity begins. The starting date of the CPA cannot be prior to the commencement of validation of the programme of activities, i.e. the date on which the CDM-PoA-DD is first published for global stakeholder consultation.

In case of the project, the starting date of the project activity was 25/06/2011 when the construction of project activity was started. It is evidenced by the approval letter of commencement by local government.

JCI has concluded that above project starting date was considered to match with the Glossary of CDM terms.

## (4) Activities/events to achieve CDM

Key activities and events regarding continuing and real actions taken by the project participants to secure CDM status are tabulated in the above Table 10.

JCI has confirmed that all milestones listed in the above Table 10 were evidenced with the documents which were provided by the project participants. Then JCI concluded that continuing and real actions were taken to secure CDM status for the project activity.

In conclusion, JCI concluded that the above timeline explained the actions/events taken by the project participants were appropriate in achieving CDM.

## 6.3 Identification of alternatives

JCI has confirmed that the baseline identification of the project was conducted in appropriate manner by confirming of following steps and sources;

Steps: Document review, Follow-up action (On-site visit, interviews), etc.  
 Document review: Findings (CARs, CLs), Plant layout, FSR, Environmental checklist, Technical specifications, Design data/drawings, Contracts, Grid baseline emission factors



Follow-up action: Observation/ inspection of the physical site and/or equipment when On-site visit and Interviews with stakeholders

Identification of baseline scenario should be comply with Baseline stipulated in the methodology AMS-I.E. (Version 05) /63/, which JCI has assessed through the finding CL-15 based on the document review and then the on-site visit, and confirmed with interview with the project participants and the stakeholders of the proposed project. CL-15 has closed.

The PoA-DD showed four alternatives as follows;

- (a) Continuation of current practice that use of biomass for cooking and heating, fossil fuel for lighting.
- (b) Get electricity from standalone off grid power plant, which uses renewable energy like solar, wind other than hydro.
- (c) Get electricity from national/regional grid.
- (d) Implementation of the project without CDM

The PoA-DD has selected the “(a) continuation of current practice that use of biomass for cooking and heating, fossil fuel for lighting” as the baseline scenario for CPAs under the PoA after discussion of four alternatives.

JCI validated that the PoA-DD defined appropriately the credible alternatives for baseline scenario of CPAs under the PoA in compliance with the applied methodology AMS-I.E /63/ and the relevant guidelines.

## 6.4 Investment analysis

The project does not apply investment analysis, since the additionality of the project is demonstrated in B.1. of PoA-DD using the positive list of the Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0) /73/.

## 6.5 Barrier analysis

The project does not apply barrier analysis, since the additionality of the project is demonstrated in B.1. of PoA-DD using the positive list of the Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0) /73/.

## 6.6 Common practice analysis

The project does not apply common practice analysis, since the additionality of the project is demonstrated in B.1. of PoA-DD using the positive list of the Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0) /73/.

## 7. Eligibility criteria for inclusion of a CPA in the PoA

The CME specified the twelve (12) distinct criteria for inclusion of CPA in the section B.2. of the PoA-DD /4a/. The twelve (12) distinct criteria are shown in the below Table 11.

JCI assessed whether the eligibility criteria of the PoA were sufficiently developed by the CME in accordance with the “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities” /68/and also whether those criteria were verifiable and also sufficiently objective and comprehensive to permit the assessment of the inclusion of CPA in the proposed PoA.

**Table 11 Eligibility criteria**

Eligibility criteria for inclusion	PoA-DD	Check result By JCI
a. The geographical boundary of the CPA including any time-induced boundary <sup>3</sup> consistent with the geographical boundary set in the PoA;	1. A CPA locates in Liangshan Prefecture in Sichuan Province on the upper reaches of the Yangtze River.	OK, conformed.

b. Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);	2. A CPA includes installation/construction of micro hydro power plants and their related equipment. And micro hydro power plants and households under the CPA should have the CPA specific identifications such as serial numbers for avoiding double counting of emission reductions.	OK, conformed.
c. The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;	3. The CME is responsible for purchasing micro hydropower plants/generators and their related equipment for each CPA through screening their specifications and checking installation of each micro hydro power plant and inspecting their operation conditions.	OK, conformed.
d. Conditions to check the start date of the CPA through documentary evidence;	4. The start date of each CPA being defined as the date of construction started and contracts of the construction will be used to documenting start dates of CPAs.	OK, conformed.
e. Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;	5. Each CPA should meet the applicability and other requirements of AMS- I.E (version 05).	OK, conformed.
f. The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified in Section A above;	6. For additionality demonstration, “GUIDELINES ON THE DEMONSTRATION OF ADDITIONALITY OF SMALL-SCALE PROJECT ACTIVITIES (version 09)” is applied.	OK, conformed.
g. The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;	7. Local stakeholder consultation is conducted at a CPA level and related environmental impacts are discussed during the consultation.	OK, conformed.
h. Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance;	8. Funding from Annex I parties will be used for the PoA does not result in a diversion of official development assistance.	OK, conformed.
i. Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation);	9. Each CPA targets off-grid households and provides energy for lighting, cooking and heating to replace woody biomass consumed at households for cooking and heating in the absence of the project activity.	OK, conformed.
j. Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys;	10. Ex-ante and ex-post statistical samplings as per “General guidelines for sampling and surveys for small-scale CDM project activities” and “Standard for sampling and surveys for CDM project activities and PoAs” are applied for parameters of CPAs.	OK, conformed.
k. Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or microscale threshold criteria <sup>6</sup> and remains within those thresholds throughout the crediting period of the CPA;	11. Any CPA under the PoA clears the criteria for small-scale CDM projects.	OK, conformed.
l. Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories.	12. A CPA is not a part of a registered CDM project or not a CPA under another PoA.	OK, conformed.

JCI has concluded that the eligibility criteria specified by the CME was concrete and quantitative. And then the criteria was applicable to check the proposed CPA by the CME and also applicable to validate the proposed CPA by the DOE at CPA inclusion.

JCI assessed the demonstration of CPA-01 inclusion by the CME in accordance with above criteria and noted DOE's justification at the foot line of each corresponding item of Table 12 below.

**Table 12 Eligibility Criteria Check**

No.	Eligibility criteria noted by CME at B.2., Part I, PoA-DD	Means of verification by CME
1	A CPA locates in Liangshan Prefecture in Sichuan Province on the upper reaches of the Yangtze River.	Junenghuili will check if any CPA is within the PoA boundary through confirming information of each power plant and household such as location, serial number, name and number households of electricity receivers.
	<b>Justification by JCI</b> The CPA-DD under section A.7. provided a map of geographical boundary which is in accordance with the geographical boundary set in the PoA. Therefore, this criteria is deemed sufficiently established, and they comply with the <i>Standard</i> Para.16 (a).	
2	A CPA includes installation/construction of micro hydro power plants and their related equipment. And micro hydro power plants and households under the CPA should have the CPA specific identifications such as serial numbers for avoiding double counting of emission reductions.	Junenghuili will keep information of each power plant such as location, serial number, name and number households of electricity receivers.
	<b>Justification by JCI</b> The measures to avoid double counting (Marking with serial number, Programme database) were demonstrated in details at Operation and Management Plan in the PoA under section C., Part I, which shall be applied to the CPA under the contractual agreements between CME and each CPA. Therefore the criteria is deemed sufficient, and they comply with the <i>Standard</i> Para.16 (b).	
3	The CME is responsible for purchasing micro hydropower plants/generators and their related equipment for each CPA through screening their specifications and checking installation of each micro hydro power plant and inspecting their operation conditions.	Junenghuili is responsible for purchasing micro hydropower plants/generators and their related equipment for each CPA through screening their specifications and checking installation of each micro hydro power plant and inspecting their operation conditions.
	<b>Justification by JCI</b> The CPA shall be conducted in accordance with the CPA-DD, the applied Methodology and the relevant guidelines, which was described under section D.1. in CPA-DD and B.2. in PoA-DD. Therefore the criteria is deemed sufficient. And the procedure complied with the <i>Standard</i> Para.16 (c).	
4	The start date of each CPA being defined as the date of construction started and contracts of the construction will be used to documenting start dates of CPAs.	Junenghuili will check the date of the construction started and the contract.
	<b>Justification by JCI</b> The criterion was defined to be checked with the date of the construction started and the contract of the CPA. JCI confirmed with the case of the CPA-001 with its CPA-DD stated under section A.8.1., where the construction start of micro hydro power plant was not prior to the commencement of the validation of the PoA (25/05/2011). Therefore the Criterion is deemed sufficient, and thus complied with the <i>Standard</i> Para.16 (d).	
5	Each CPA should meet the applicability and other requirements of AMS- I.E (version 05).	Junenghuili will check the applicability and other requirements of AMS- I.E (version 05) for each CPA.
	<b>Justification by JCI</b> The criterion defined to check with the CPA-DD. JCI verified CPA-DD-001 as an example, which demonstrated the applicability and other requirements of the approved methodology AMS-I.E under section D.2. of the CPA-DD. Therefore the Criterion is deemed sufficient, and thus complied with the <i>Standard</i> Para.16 (e).	
6	For additionality demonstration, "GUIDELINES ON THE DEMONSTRATION OF ADDITIONALITY OF SMALL-SCALE PROJECT ACTIVITIES (version 09)" is applied.	The number of micro-hydro power plants in a CPA shall be controlled to sure the total capacity of power plants not exceeding 15 MW with satisfying other requirements of the guidelines.
	<b>Justification by JCI</b>	

	The PoA-DD under section B.1., Part I. appropriately described the additionality-related guidelines, thus complying with the <i>Standard</i> Para.13. Regarding the procedures for small-scale project activities, the PoA-DD defined the criteria under section B.2. Therefore the Criterion is deemed sufficient, and thus complied with the <i>Standard</i> Para.16 (f).	
7	Local stakeholder consultation is conducted at a CPA level and related environmental impacts are discussed during the consultation.	Junenghuili will check the appropriate implementation of the local stakeholder consultation.
	<b>Justification by JCI</b> The PoA-DD defined that both “ <i>Stakeholders’ comments and Due account</i> ” and “ <i>Environmental Analysis</i> ” will be done at CPA level, under sections E and F of PoA-DD. JCI verified by document review and on-site assessment that the first CPA followed the required measures as evidenced. Therefore, the Criteria are deemed sufficient and this complied with the <i>Standard</i> Para.16 (g).	
8	Funding from Annex I parties will be used for the PoA does not result in a diversion of official development assistance.	Junenghuili will provide relevant information to prove any public fund from Annex I parties is not a diversion of official development assistance.
	<b>Justification by JCI</b> The PoA-DD under A.7., Part I stipulated that “The PoA does not depend on any public funding. In case any CPA under the PoA avails of any public funding, it will be required to provide in its CPA-DD that no official development assistance is diverted to that public funding”. And also the CPA-DD under A.11. reports that “The CPA did not utilize any public fund”. Therefore, this criterion is deemed sufficiently established, and they comply with the Procedures, and the <i>Standard</i> Para.16 (h).	
9	Ex-ante and ex-post statistical samplings as per “General guidelines for sampling and surveys for small-scale CDM project activities” and “Standard for sampling and surveys for CDM project activities and PoAs” are applied for parameters of CPAs.	Junenghuili will check the appropriate sampling of the CPA.
	<b>Justification by JCI</b> The PoA-DD under sections A.2., Part I and B.4., Part II defined the target group and their baseline information for the PoA activity. JCI verified the first CPA as an example of CPA and confirmed that CPA-DD -01 under Appendix 6 defined sampling number collected information. Therefore the Criteria for inclusion of a CPA are deemed sufficient. Thus the procedure complied with the <i>Standard</i> Para.16 (j).	
10	Generated electricity is used for lighting, cooking and heating through replacing woody biomass used at households.	Junenghuili shall conduct a survey study for toward households’ energy consumption structure; Junenghuili together with CPA implementers shall monitor households’ energy consumption structure and electric appliances after implementation of the CPA. Only the households who use electric stoves and heating devices under the CPA are considered to claim for emission reduction.
	<b>Justification by JCI</b> The CPA-DD under sections A.3. defined the target group who will use a typical micro hydro power plant with 3kW provides electricity to a household for lighting (including black and white TV), cooking and heating). The criterion is sufficiently objective as the condition for the target group confirmation. Therefore the Criteria for inclusion of a CPA are deemed sufficient. Thus the procedure complied with the <i>Standard</i> Para.16 (i)	
11	Any CPA under the PoA clears the criteria for small-scale CDM projects.	The number of micro-hydro power plants in a CPA shall be controlled to sure the total capacity of power plants not exceeding 15MW with satisfying other requirements of the guidelines.
	<b>Justification by JCI</b> The Criterion is sufficiently objective as the condition. JCI verified the CPA-DD- 01 as an example of CPA in the CPA-DD under D.2.which shows the key criteria to check the small-scale threshold (15MW throughout the crediting period).Thus the procedure complied with the <i>Standard</i> Para.16 (k) and the Methodology.	
12	A CPA is not a part of a registered CDM project or not a CPA under another PoA.	Regarding inclusion of any CPA to the PoA, Junenghuili will check the home pages of Chinese DNA and UNFCCC to identify if there is any registered CDM project which applied the same technology with the CPA and targeted the same area

	or any registered PoA which applied the same technology with the CPA and covered in Liangshan prefecture, Sichuan provinces.
<b>Justification by JCI</b>	The Criterion is sufficiently objective as the condition. Thus the procedure complied with the <i>Standard</i> Para.16 (l) and the Guidelines.

JCI validated above verification of the CME by desk review and by interviews with the stakeholders during on-site assessment. JCI concluded that the verification results by Junenghuili, as the CME, are correct and appropriate.

JCI concluded that the eligibility criteria of the PoA project activity was specified appropriate by the CME and also that the CPA-01 was demonstrated appropriately its eligibility for inclusion to the PoA in the D.5. of the CPA-DD.

## 8. Application of the selected baseline and monitoring methodology

### 8.1 Application of multiple methodologies

The CPA under the proposed PoA is applied the following methodology.

AMS-I.E., Switch from non-renewable biomass for thermal applications by the user, version 05.0 /63/

Sectral scope; SS 1, Energy industries (renewable - / non-renewable sources)

This methodology comprises activities to displace the use of non-renewable biomass by introducing renewable energy technologies. Examples of these technologies include, but are not limited to biogas stoves, solar cookers, passive solar homes, renewable energy based drinking water treatment technologies (e.g. sand filters followed by solar water disinfection; water boiling using renewable biomass).

The conformity of PoA in line with applicability conditions in the AMS-I.E. is described in the para 8.2.

### 8.2 Applicability of the selected baseline and monitoring methodology to the project activity

According to the PoA-DD, it is described that the CPA under the PoA will apply the small scale methodology AMS-I.E. "Switch from non-renewable biomass for thermal applications by the user", version 05.0 /63/.

JCI concluded from the following steps that the small scale methodology AMS-I.E. was appropriately applied to the PoM project activity;

Steps: Document review, Follow-up action (On-site visit, interviews), etc.  
Document review: Findings (CARs, CLs), FSR, Environment checklist, Technical specifications, Design data/drawings, relevant laws/regulations/codes, Internet websites  
Follow-up action: Observation/inspection of the physical site and/or equipment during on-site visit and Interviews with stakeholders

#### 1) Document review

JCI has reviewed the FSR /7/ and Environment checklist /8/ of the project and confirmed a part of the hydrological resources will be utilized for the power generation.

#### 2) On-site visit on 01 to 03 Aug. 2011

JCI has confirmed that it was micro hydro power type plant, and the construction and operation of plants has implemented plant by plant when the site visit has done, and the each plant capacity was 3 kW of the water turbine and generator.

#### 3) Findings of CL



JCI issued the finding of CL-11 & CL-12 to clarify the methodology applicability condition of the proposed project, and then closed as being resolved.

The PoA-DD discussed the applicability of the Methodology to the project in the Table 2 of the PoA-DD. As a consequence, JCI confirmed that the justification of application of methodology AMS-I.E. version 05.0 to the PoA was appropriate.

**Table 13 Justification of applicability of Methodologies**

Applicable conditions	Justifications in PoA DD	Justification of JCI
<b>AMS-I.E.</b>		
1. This category comprises activities to displace the use of non-renewable biomass by introducing renewable energy technologies. Examples of these technologies include but are not limited to biogas stoves, solar cookers, passive solar homes, renewable energy based drinking water treatment technologies (e.g. sand filters followed by solar water disinfection; water boiling using renewable biomass).	1. CPAs under the PoA will introduce micro hydro power plants for providing households renewable energy to replace woody biomass (most portion of the woody biomass are non-renewable biomass) used at the households for cooking and heating purposes.	OK
2. Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.	2. China is the second largest energy consumer in the world with 1.7 billion tons of oil equivalent in 2006 or 15.6 % of the World consumption. Despite the fact that 96% of the population is connected to the grid, 700 million people in rural areas are still using forest biomass and agricultural residues to meet nearly 90% of their energy needs; particularly in South western China (including the PoA boundary). The vast majority of China's bioenergy is used for cooking and heating in rural areas, where it is the dominant source of energy and is often burned in low efficiency stoves in what is commonly referred to as "traditional" biomass use.  Collection of fuel wood, which is permitted under the National Natural Forest Protection Program. But year round heating, cooking requires large volumes of fuel wood. Before logging ban (Chinese government banned logging in upper Yangtze forests including in the giant panda's habitat in 1998) a substantial percentage of fuel wood collected from logging slash on forests. Now farmers are forced to rely more heavily on their own collective forests. In most areas, these forests are not managed in sustainable ways.  The households in mountainous area of Sichuan province including Shen' guo zhuang Nature Reserve and its ambient area have traditionally frequently collected fuel wood for cooking and heating from their collective and other forests. This kind of life style is a common practice in most remote mountainous area in China from the history to present.	OK

3. The total installed electricity generation capacity of any CPA shall be smaller than 15 MW.	3. Since each micro power plant system of any CAP under the PoA is 3 kW~5kW. And the number of power plants in a CPA is controlled to be sure the total capacity of a CPA should not exceed 15MW.	OK
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### 8.3 Boundary

#### 1) Boundary for the PoA in terms of geographical area

JCI identifies the project boundary from the following steps;

Steps: Document review, Follow-up action (On-site visit, interviews), etc.  
 Document review: Findings (CARs, CLs), Plant layout, FSR, Environmental checklist, Technical specifications, Design data/drawings, Contracts, Grid baseline emission factors  
 Follow-up action: Observation/ inspection of the physical site and/or equipment when On-site visit and Interviews with stakeholders

The PoA-DD stipulated as one of the eligibility criteria that the geographical boundary is on mountainous area in Liangshan prefecture, Sichuan Province, where national/regional grid is not accessible. The geographical boundary of the first specific CPA (CPA01) is Shen' guo zhuang Giant Panda nature reserve surrounding in Yuexi County, Liangshan Yi Autonomous Prefecture, Sichuan Province where is shown clearly in the CPA-DD (CPA-01).

JCI validated that the geographical boundary in the PoA-DD was appropriate and that of the first specific CPA (CPA01) was to meet the geographical boundary in the PoA-DD as one of the eligibility criteria of the PoA.

JCI issued CAR-3 regarding change of the PoA project title which was related to change of geographical boundaries from the "Regions on the Upper Reaches of the Yangtze River, China" to "Forest Regions of Liangshan Prefecture, Sichuan Province". The reason of title change was clarified appropriately and the CAR-3 was resolved and closed.

The PoA-DD showed the emission source of the baseline and the project activity. JCI issued CL-13 and CL-14 regarding emission source identified. The PoA-DD has revised appropriately and then CL-13 and CL-14 have closed. The revised PoA-DD showed that the baseline emission source was "Emissions from combustion of fossil fuel for meeting similar thermal energy needs". It is consistent with the stipulation of the applied methodology regarding baseline scenario that was the use of fossil fuel for meeting similar thermal energy needs. The PoA-DD discussed regarding the actual emission resource (non-renewable biomass) and the baseline emission source (fossil fuel) in the applied methodology. JCI concluded that the PoA-DD explained appropriately about the emission source.

#### 2) Sources and GHGs in CPA-Generic

JCI checked that the system boundary and associated emissions for the project activity and the conclusion is summarized in the Table 14 below.



**Table 14 Check for System Boundary and Emissions**

	Source	Gas	Included?	Justification / Explanation	JCI check conclusion
Baseline	Emissions from combustion of fossil fuel for meeting similar thermal energy needs	CO <sub>2</sub>	Yes	Major emission source	OK
		CH <sub>4</sub>	No	Not significant. Excluded for simplification and conservativeness	OK
		N <sub>2</sub> O	No	Not significant. Excluded for simplification and conservativeness	OK
Project	Emissions from use of electricity generated by micro hydro power plants for cooking and heating	CO <sub>2</sub>	No	Zero emission	OK
		CH <sub>4</sub>	No	Zero emission	OK
		N <sub>2</sub> O	No	Zero emission	OK

JCI has not identified the GHG emissions occurring within the proposed project activity boundary as a result of the implementation of the proposed project activity which are expected to contribute more than 1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology.

## 8.4 Description of baseline scenario

JCI has confirmed that the baseline identification of the project was conducted in appropriate manner by confirming of following steps and sources;

- Steps: Document review, Follow-up action (On-site visit, interviews), etc.  
Document review: Findings (CARs, CLs), Plant layout, FSR, Environmental checklist, Technical specifications, Design data/drawings, Contracts, Grid baseline emission factors  
Follow-up action; Observation/ inspection of the physical site and/or equipment when On-site visit and Interviews with stakeholders

Identification of baseline scenario should be comply with Baseline stipulated in the methodology AMS-I.E. (Version 05.0) /63/, which JCI has assessed through the finding CL-15 based on the document review and then the on-site visit, and confirmed with interview with the project participants and the stakeholders of the proposed project. CL-15 has closed.

The PoA-DD selected four alternatives which were reported in 6.3. of this report and determined the baseline scenario for CPAs under the PoA from the four alternatives that “(a) continuation of current practice that use of biomass for cooking and heating, fossil fuel for lighting”.

JCI validated that the PoA-DD defined appropriately the credible alternatives for baseline scenario and also identified appropriately the baseline scenario for CPAs under the PoA. JCI concluded that the continuation of current practice was complied with the applied methodology AMS-I.E /63/ and relevant guidelines as baseline scenario.

## 8.5 Estimation of emission reductions of CPA

### 1) Project emission (PE<sub>y</sub>)

The proposed project is a micro scale hydro power plant to displace the use of non-renewable biomass in household s for cooking, heating and lighting. The project emission from micro scale hydro power is zero since it is a renewable energy.

### 2) Emission Reduction (ER<sub>y</sub>)

The applied methodology AMS-I.E version 05 /63/ stipulates calculation procedure for the emission reduction ER<sub>y</sub> in the paragraph 5 using the Leakage stipulated in the paragraph 10.

Emission reductions ER<sub>y</sub> would be calculated as follows:

$$ER_y = B_y * f_{NRB,y} * NCV_{biomass} * EF_{projected\_fossilfuel} - LE_y$$

Where:

$ER_y$  : Emission reduction during the year y in tCO<sub>2</sub>e

$B_y$  : Quantity of woody biomass that is substitute or displaced in tonnes

$f_{NRB,y}$  : Fraction of woody biomass used in the absence of the project activity in year y that can be established as non renewable biomass using survey methods. This is measured once by sampling for the municipality of each CPA once before implementing the CPA (CPA-1 is 75%).

$NCV_{biomass}$  : Net Calorific Value of the non-renewable woody biomass that is substituted. IPCC default for wood fuel is applied (0.015 TJ/tonne).

$EF_{projected\_fossilfuel}$  : Emission factor for substitution of non-renewable woody biomass by similar consumers. Default value of 81.5 t CO<sub>2</sub>/TJ is taken for CPAs under the PoA.

$LE_y$  : Leakage is calculated as below explanation in tCO<sub>2</sub>e.

The above  $B_y$  is calculated as follows during the monitoring period.

$$B_y = R_{o,y} \times \sum_i^N B_{i,y}^{BL}$$

Where:

$B_{i,y}^{BL}$  : The quantity of woody biomass that is used by a household i in baseline in year y

$R_{o,y}$  : Ratio of micro hydro power plants in normal operation in a year

$N$  : The number of target households (in principle, each household has one micro-hydro power plant)

The above equation for  $B_y$  calculation is settled in accordance with the following arguments;

- i)  $R_{o,y}$  is calculated from the survey results to ensure that micro hydro plants are still operation or are replaced by an equivalent in service appliances.  $R_{o,y}$  is the ratio of the number of operating micro hydro power plants per the number of total target households. The survey will be carried out twice a year and an averaged value of the surveys will be used for  $B_y$  calculation.
- ii) The capacity of electric goods are approximately as follows; electric cooking heater 500 – 800 W, electric stove 500 - 800 W, light (incandescent lamp) 40 – 80 W, TV 60 - 100 W (general capacity of electric goods). Therefore electricity is mainly consumed by electric cooking heater and electric stove. And the electricity consumptions of lighting and TV are small and those are the remainder of electricity.

JCI concluded that this  $B_y$  calculation method gives conservative value for the emission reductions since the micro hydro power plant reported as not operating at survey is considered as not operating for full previous half year.

### 3) Leakage

The leakage would be calculated as follows:

$$LE_y = B_y * (1 - Af) * f_{NRB,y} * NCV_{biomass} * EF_{projected\_fossilfuel}$$

Where:

$Af$ : Adjusting factor which is a net to gross adjustment of 0.95 to account for leakage, in which case surveys are not required. (stipulated in para.10 of AMS-I.E version 05.0)

### 4) Ex-ante calculations of emission reductions

For ex-ante calculation, the  $B_y$  is determined as follows based on 90 % operation of micro hydro power plants:

$$\begin{aligned} B_y &= R_{o,y} \times \sum_i^N B_{i,y}^{BL} \\ &= 0.9 \times 120 \times 9 \end{aligned}$$

$$= 972 \text{ ton/year}$$

The survey regarding consumption of woody biomass was conducted in the relevant area of CPA-01 before the project start and its results show about 9 ton/year per householder used for cooking and heating. The survey was conducted toward 46 households among the total 120 households in Shen' guo zhuang nature reserve where the first CPA will be implemented and then the result is evaluated to satisfy 90% confidence interval and 10% margin of error.

And also from the survey results the  $f_{NRB,y}$  (fraction of woody biomass stipulated in AMS-I.) was determined as 0.75 which was calculated appropriately in the CPA-DD.

As for leakage the adjusting factor 95% is applied in accordance with paragraph 10 of the Methodology AMS-I.E in case of project activity under Programme of activity.

Therefore  $B_y$  is estimated using 9 ton/year of woody biomass consumption per householder, 120 householders of CPA-01 and 95 % of adjusting factor.

$$\begin{aligned} LE_y &= B_y * (1 - Af) * f_{NRB,y} * NCV_{biomass} * EF_{projected\_fossilfuel} \\ &= 972 * (1 - 0.95) * 0.75 * 0.015 * 81.6 = 44 \text{ tonCO}_2\text{e/year} \end{aligned}$$

$$\begin{aligned} ER_y &= B_y * f_{NRB,y} * NCV_{biomass} * EF_{projected\_fossilfuel} - \text{Leakage} \\ &= 972 * 0.75 * 0.015 * 81.6 - 44 = 848 \text{ tonCO}_2\text{e/year} \end{aligned}$$

JCI concluded that the calculation of Emission reduction  $ER_y$  was in compliance with the applied Methodology AMS-I.E version 05.0.

JCI concluded that the calculation method was applicable to the project and the monitoring items required were listed up in the monitoring plan appropriately.

## 8.6 Monitoring plan

### (1) Compliance with the requirements of the methodology

JCI has confirmed that the monitoring plans in the PoA-DD /4-a/ and CPA-DD (CPA-01) /5-b/ were complied with the requirements of the applied methodology AMS-1-E version 05.0 /63/, related Tools and Guidelines for PoA.

Detailed process of validation is described in the following sections.

### (2) The steps for monitoring arrangements

The monitoring implementation plan of the project was described in the PoA-DD and CPA-DD (CPA-01), which required two monitoring items as follows;

#### 1) Monitoring items

$R_{o,y}$  : Ratio of micro hydro power plants in normal operation in a year.

The parameter is used to ensure that micro hydro power plants are still operating or are replaced by an equivalent in service appliances. The parameter is obtained through a survey in terms of sample survey or census toward target households and micro hydro power plants under each CPA. The survey is conducted twice a year and an average value of the surveys will be used.

JCI concluded that the item was enough and appropriate for calculation of the emission reduction of the project.

#### 2) Sample survey

The Appendix 6 of the PoA-DD and the Appendix 6 of the CPA-DD show the sampling method, sample size and sampling procedure to collect the monitoring data in the households participated in the CPA. The sampling method is a simple random sampling approach and the sample size is minimum 32 against 120 households which is calculated by the equation (1) of the Guideline for sampling and surveys

for CDM project activities and programmes of activities (Version 03.0) with 90% confidence interval and 10% margin of error assured. /75/.

JCI concluded that the sampling plan is made appropriately in accordance with the Guideline for sampling and surveys for CDM project activities and programmes of activities.

### 3) Monitoring manual

The project owner has already prepared the monitoring manual (CDM management manual) /37/ to implement the monitoring task. The monitoring manual stipulates the format for questionnaire to monitor the CPA operational status of each micro hydro power plant. The CPA Implementer visits owners every four month to investigate a status with the questionnaire. The questionnaire contains the following items;

- Owner of micro hydro power
- Frequency of used of micro hydro power
- Average operation hours per day
- Operation status
- Maintenance status
- Consumption of biomass, fuel oil and other fuels per day

### 4) Project organization

The PoA-DD reports the operation and management structure for the project monitoring which involves Junenghuili, the CPA implementers and households.

- Participants of the Programme Activities; China (host country); Junenghuili Carbon Capital Management (Beijing) Co., Ltd.  
And Japan (Annex 1 country); PEAR Carbon Offset Initiative, Ltd.
- The programme coordinator; Junenghuili Carbon Capital Management (Beijing) Co., Ltd.  
(Supported by PEAR Carbon Offset Initiative, Ltd.)
- CPA implementer for CPA-01; Shen' guo zhuang nature reserve management center
- Operation of Micro hydro power; 120 Householders lived in the ambient area of Shen' guo zhuang nature reserve in Yuexi county, Liangshan Yi autonomous prefecture Sichuan province

The Responsibilities and tasks of the stakeholders of the PoA and the Functions of CPA Implementers were reported in the PoA-DD /4-a/ and CPA-DD /5-b/. The responsibilities and functions of the programme coordinator and the CPA implementer were clearly distinguished and prescribed in those tables in both DDs.

JCI confirmed the organization of project and those tasks through the interview with the stakeholders and concluded that the organization was established appropriately and each entity has grasped their responsibility and function.

### 5) Training

Householders under the CPA will be trained on micro hydro power plant operation and related safety issues. Households are responsible for operation and maintenance of the power plants and provide related data and information to the CPA implementer and the CME.

JCI confirmed that one householder operated by oneself and was able to carry out a maintenance work except special technique required.

### 6) Data collection and Data management

The PoA-DD and CPA-DD reported the data collection and data management. The CPA implementer is responsible for data collection. Junenghuili, as project coordinator, supports the CPA implementer and checks the quality of the data collected by the CPA implementer.

The CPA implementer shall undertake an annual questionnaire or interview survey to collect data, including fuel consumptions in the baseline and the project.

The sample householder survey is conducted by a questionnaire or interview with households included in a CPA. The determination of sampling number is described in Annex 6 CPA-DD /5-b/.

For sampling method of the project a 90 % confidence level with error margin of +/- 10% (90/10 confidence/precision) is applied. JCI concluded that the sampling method conformed to the Methodology AMS1.E. version 05.0.

#### 7) Record keeping system

The record keeping system consists of the method of data survey, the duty and roles of each participants and the database including but not limited to schedule and serial number for each CPA, objective area, size of each CPA, all necessary information/data of every single household and power plant in each CPA including;

- name of targeted household representative, address and other household-related information
- fuel consumptions (before and after reaching electricity)
- serial number of micro hydro power plants
- operation hours of power plants
- status of operation of each power plant
- status of compliance with related standards and regulations

The database is completed by Junenghuili and CPA implementers through ex ante and ex post sample or an entire survey toward the targeted households.

JCI concluded that the record keeping system is in compliance with all relevant guidelines and regulations of the CDM and the Chinese DNA. All activities can be confirmed at any time whether its operation is in line with the project schedule and in accordance with the project objectives.

#### (3) JCI's opinion on monitoring plan

JCI has validated that the monitoring plans in the PoA-DD /4-a/ and CPA-DD /5-b/ were in compliance with methodology /63/, and that the monitoring arrangement of the project participant was feasible within the project design and also the project participant was able to implement the monitoring plan including management organization and operational ability.

## 9. Environmental impacts

The project is expected to provide the following positive environmental impacts.

#### 1) Change fuel consumption structure of households

Non-renewable biomasses used at the households will be replaced by Micro hydro power by the project. The replacement will result in the reduction of greenhouse gas and contribute to forest conservation and bio-diversity in the target area.

#### 2) Improve life condition of households

The project will provide electricity to the households in the project area where the households have not used electricity, and also provide clean energy for cooking and heating.

#### 3) Health benefits:

A major problem for rural people especially for housewives is indoor air pollution due to smoke inside the kitchen while cooking with biomass.

The micro hydro power plant promotion project seems to have no negative impacts on the environment; however, an environmental impact clearance certification should be gained from the local Environmental Protection Bureau concerned through submitting registration checklist at a CPA level.

Regarding to the project JCI has confirmed that the Environmental Checklist /8/ for CPA-01 was prepared and it was approved by the Yuexi County Environmental Protection Bureau /14/. And JCI has confirmed through the interview with Yuexi County Environmental Protection Bureau and Yuexi County Forrest Office that the project follows the national policy for industry and did not give a negative influence on the relevant area. And JCI also confirmed that the project was located in the nature reserve area which was applied with the environmental protective measures and the project ensured to take the measures reported in the Checklist.

JCI issued CL-28 regarding an environmental protection and soil/water protection. The Project Participants have clarified appropriate those matters and approvals from the local office and then CL-28 has been resolved and closed.

## 10. Local stakeholder consultation

In September 2010, the Kangmei as the former program coordinator had carried out the meetings for local stakeholder consultation in which were attended totally by about 80 people including the related local governmental offices and the residents receiving advantage of project activities. All attendants supported the project and agreed with the explanations about merit of the project. The project participants submitted the evidences to JCI such as the meeting invitations to the local stakeholder consultation /42/ and the meeting minute /43/. In the meeting there were some questions and answers between the residents/non-governmental organization and the project participants. All questions were answered and the residents / non-governmental organization understood and accepted.

JCI has carried out some interview with the three residents and the stakeholders and has confirmed the following comments and opinions of the residents who have already a micro hydro generator.

- Before the project young men go to collect firewood every day from morning to late afternoon. About 30 kg/day firewood is necessary for one house during summer season. But the firewood used in house is decreased drastically after the project start.
- The residents use, as electric equipment, lighting (incandescent), television (cathode-ray type), TV recorder, electric heater, telephone, rice cooker and so on, after the project start. They have purchased those by their own stocks.
- The construction works were done by themselves who would use electricity generated by the generator.
- The life style has been changed drastically and improved very much. Electricity is used only in night hours and main equipment is used with time sharing among houses using electricity from same generator.
- The room has become clean since the firewood burning in the room was decreased.
- They are learning Chinese standard language by watching TV since their language is local use and small racial language. Many children in neighbourhood gather in the house having Television.
- Some residents in the project area have micro hydro power generator, by own expense, that is smaller than the project, therefore electricity generated is used for lighting only. But such generator has failed often and at that time some bamboo was burned as alternative of lighting.

Based on the above information, JCI has concluded that the project activity was supported by local stakeholders, gave no significant adverse impacts on local environment, and was expected to contribute to the development of local economy and the improvement of living conditions in the relevant area.



## Appendix A Protocol for CDM (SSC-PoA) Project

### Abbreviation

<b>CAR</b>	Corrective Action Request	<b>CL</b>	Clarification Request	<b>FAR</b>	Forward Action Request
<b>VVS</b>	Validation and Verification Standard	<b>NA</b>	Not Applicable	<b>Tbv</b>	To be verified
<b>Project Std</b>	CDM Project Standard	<b>PA</b>	Project Activities	<b>PP</b>	Project Participants
<b>Std</b>	Standard	<b>GL</b>	Guideline	<b>DD</b>	Design Document
<b>PoA</b>	Programme of Activities	<b>CPA</b>	Component Project Activity	<b>SSC PoA GL</b>	SSC-PoA-DD Completion Guidelines
<b>SSC CPA GL</b>	SSC-CPA-DD Completion Guidelines				
<b>Std Add</b>	Standard for Demonstration of Additionality, Eligibility Criteria and application of Multiple methodologies for Programme of Activities.				
<b>Std Sampling</b>	Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities				

**Table for comparison between Old Protocol Ver.4 (VVM version) and New Protocol Ver.5 & after (VVS version)**

No	CAR, CL	Ver. 04 (VVM)	Ver. 05 and after (VVS)		
		Table 1 Sec. No	Table 1 Part I / II or Table 2	Sec. No	Table 3 / 4
1	CAR-1	1.1	Table 2	E.1	Table 4
2	CAR-2	6.	Table 1 Part I	B.1.3	Table 3 Part I
3	CAR-3	3.1	Table 1 Part I	A.1 (a)	Table 3 Part I
4	CAR-4	3.7 3) & 6.1	Table 2	A.8.1.1	Table 4
5	CAR-5	5.15	Table 2	A.9.1.1	Table 4
6	CAR-6	3.6 7)	Table 1 Part I	B.2.3	Table 3 Part I
8	CL-1	3.6 6)	Table 1 Part I	A.2 (b)	Table 3 Part I
9	CL-2	2.4 1)	Table 2	A.3.1	Table 4
10	CL-3	3.6 7)	Table 2	A.3.1	Table 4
11	CL-4	3.6 7)	Table 2	A.3.1	Table 4
12	CL-5	3.6 7)	Table 2	A.3.1	Table 4
13	CL-6	3.6 7)	Table 2	A.5.1	Table 4
14	CL-7	4.3	Table 1 Part I	B.1.1	Table 3 Part I
15	CL-8	4.3	Table 1 Part I	B.1.1	Table 3 Part I
16	CL-9	4.4	Table 1 Part I	C.4 (e)	Table 3 Part I
17	CL-10	4.4	Table 1 Part I	C.4 (d)	Table 3 Part I
18	CL-11	5.3	Table 1 Part II	B.2.1	Table 3 Part II
19	CL-12	5.3	Table 1 Part II	B.2.1	Table 3 Part II
20	CL-13	5.4 3)	Table 1 Part II	B.3.1	Table 3 Part II

No	CAR, CL	Ver. 04 (VVM)	Ver. 05 and after (VVS)		
		Table 1 Sec. No	Table 1 Part I / II or Table 2	Sec. No	Table 3 / 4
21	CL-14	5.4 3)	Table 1 Part II	B.3.1	Table 3 Part II
22	CL-15	5.6	Table 1 Part II	B.4.1	Table 3 Part II
23	CL-16	5.10 2)	Table 1 Part I	B.1.3	Table 3 Part I
24	CL-17	5.10 2)	Table 1 Part II	B.6.1.5	Table 3 Part II
25	CL-18	5.11 1)	Table 1 Part II	B.6.1.7	Table 3 Part II
26	CL-19	5.11 2)	Table 1 Part II	AP.5.1	Table 3 Part II
27	CL-20	4.7	Table 2	A.12.1	Table 4
29	CL-21	5.15	Table 2	D.6.2.1	Table 4
30	CL-22	5.15	Table 2	D.6.3.1	Table 4
31	CL-23	7.1 7)	Table 2	D.7.2.1	Table 4
32	CL-24	9.1 1)	Table 2	C.2.1	Table 4
33	CL-25	10.1	Table 2	B.1.1	Table 4
34	CL-26	10.2	Table 2	B.1.2	Table 4
35	CL-27	10.2	Table 2	C.1.1	Table 4
36	CL-28	10.1	Table 2	B.1.1	Table 4
37	CL-29	3.1	Table 1	General 2	Table 3 Part I
38	CL-30	2.1 1)	Table 1 Part I	A.3 (a)	Table 3 Part I

Table 1 Part 1 for PoA-DD; Table 1 Part 2 for CPA-Generic in PoA-DD; Table 2 for CPA-DD; Table 3 Part 1 for PoA-DD; Table 3 Part 2 for CPD-Generic in PoA-DD; Table 4 for CPA-DD

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The validation protocol for Programme of Activities is consisted of the following four types of tables, which are effective for the purposes of validation above.

**TABLE-1** contains the checklist with questions along with the thematic chapter of VVS and other relevant guidelines issued by EB for PoA project in the PoA-DD (PART 1 for PoA, PART 2 for CPA generic).

**TABLE-2** contains the checklist with questions along with the thematic chapter of VVS and other relevant guidelines issued by EB for CPA project in the CPA-DD specific.

**TABLE-3** shows the corrective actions or clarifications which are requested to be taken in **TABLE-1 (PoA-DD)** and the response from the PP.

**TABLE-4** shows the corrective actions or clarifications which are requested to be taken in **TABLE-2 (CPA-DD)** and the response from the PP.

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**TABLE-1** Requirements Checklist for PoA-DD, PART 1 for PoA ..... Page 2

**TABLE-1** Requirements Checklist for PoA-DD, PART 2 for CPA generic ..... Page 7

**TABLE-2** Requirements Checklist for CPA-DD specific ..... Page 12

**TABLE-3** Resolution of Corrective Actions and Clarification Requests for PoA-DD, PART 1 for PoA ..... Page 17

**TABLE-3** Resolution of Corrective Actions and Clarification Requests for PoA-DD, PART 1 for CPA generic ..... Page 21

**TABLE-4** Resolution of Corrective Actions and Clarification Requests for CPA-DD Specific ..... Page 24

**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 74 Annex 8 “Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
<b>General guidelines (Small-Scale PoA)</b>				
	<b>Title of the project activity:</b>		--	--
1.	Confirm that the SSC-PoA-DD Form applies the <b>latest version of F-CDM-SSC-PoA-DD.</b>	SSC PoA GL	OK	
2.	Confirm that the PoA-DD is completed <b>in English.</b> (all attached documents must be <b>in English</b> ) (SSC PoA GL Para.12)	SSC PoA GL	<del>No</del> OK	<b>CL-29</b>
3.	Confirm that the PDD is completed using the same format <b>without modifying its font, headings or logo,</b> and without any other alteration to the form. (SSC PoA GL Para. 13)	SSC PoA GL	OK	
4.	Confirm that the tables and their columns in the PoA-DD are <b>not modified or deleted.</b> (SSC PoA GL Para. 14)	SSC PoA GL	OK	
5.	Confirm that the <b>blanks are left intentionally</b> for the “not applicable section” of the PoA-DD. (SSC PoA GL Para. 15)	SSC PoA GL	OK	
6.	Confirm that the values in the SSC-PoA-DD are presented in an internationally recognized format. {For example: digits grouping in thousands and a decimal point with a dot (.), not with a comma (,)} (e.g 1,000 representing one thousand and 1.0 representing one. Confirm that the units used for weights/currency are in S.I. units/norms (thousand/million)	SSC PoA GL	OK	
<b>Check for SSC-PoA-DD</b>				
<b>PART I.</b>	<b>Programme of activities (SSC-PoA)</b>		--	--
<b>Section A.</b>	<b>General description of PoA</b>			

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**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 74 Annex 8 “ Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
<b>A.1</b>	<b>Title of the PoA:</b>			
(a)	Confirm that the title of the PoA is accurate.	SSC PoA GL	<del>No</del> OK	<b>CAR-3</b>
(b)	Confirm that the version number of the PoA-DD is accurate.	SSC PoA GL	OK	
(c)	Confirm that the date of the PoA-DD is reported in DD/MM/YYYY.	SSC PoA GL	OK	
<b>A.2.</b>	<b>Purpose and general description of the PoA:</b>			
(a)	Confirm that the description is provided on the policy/measure or stated goal of the PoA.	SSC PoA GL	OK	
(b)	Confirm that the description is provided on the framework for the implementation of the PoA.	SSC PoA GL	<del>No</del> OK	<b>CL-1</b>
(c)	Confirm that the description is provided on the voluntary action by the CME for PoA.	SSC PoA GL	OK	
<b>A.3.</b>	<b>CMEs and participants of PoA</b>			
(a)	Confirm that the identification of the CME is provided for the PoA.	SSC PoA GL	<del>No</del> OK	<b>CL-30</b>
(b)	Confirm that the description is provided on Project participants of the PoA.	SSC PoA GL	OK	
<b>A.4.</b>	<b>Party(ies)</b>			
(a)	Confirm that the Party(ies), PPs and CMEs are listed in the table.	SSC PoA GL	OK	
(b)	Confirm that the “(host)” is indicated in the table.	SSC PoA GL	OK	
(c)	Confirm that the name of PPs are consistent with the contact information in Appendix 1	SSC PoA GL	OK	
<b>A.5.</b>	<b>Physical/geographical boundary of the PoA</b>			
(a)	Confirm that the description is provided on the defined boundary of PoA as a geographical area. (e.g. municipality, region within a country, country or several countries)	SSC PoA GL	OK	
<b>A.6.</b>	<b>Technologies/measures</b>			
A.6.1	Confirm that the description is provided on the technologies for the CPAs.	SSC PoA GL	OK	
<b>A.7.</b>	<b>Public funding of PoA</b>			
A.7.1	Confirm that the description is provided on no public funding from Parties for PoA. If public fund has received for PoA,	SSC PoA GL	OK	
(a)	(a) Provide information on Parties providing public funding;	SSC PoA GL	OK	
(b)	(b) Attach in Appendix 2: the affirmation obtained from such Parties	SSC PoA GL	OK	
<b>Section B.</b>	<b>Demonstration of additionality and development of eligibility criteria</b>			

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**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 74 Annex 8 “ Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
<b>B.1.</b>	<b>Demonstration of additionality for PoA</b>			
B.1.1	Confirm that additionality is demonstrated by establishing that in the absence of CDM, none of the implemented CPAs would occur.	Std Add Para 7	<del>No</del> OK <del>No</del> OK	CL-7 CL-8
B.1.2	If PoA consists of one or more microscale projects as CPAs, confirm that PoA includes eligibility criteria derived from all the relevant requirements of the “ <i>Guidelines for demonstrating additionality of microscale project activities</i> ”.	Std Add Para 8	OK	
B.1.3	If PoA consists of one or more small-scale projects as CPAs, confirm that PoA includes eligibility criteria derived from all the relevant requirements of “ <i>Guidelines on the demonstration of additionality of small-scale project activities</i> ”.	Std Add Para 9	<del>No</del> OK <del>No</del> OK	CAR-2 CL-16
B.1.4	If PoA consists of one or more large scale projects as CPAs, confirm that PoA includes eligibility criteria derived from all the relevant requirements contained in the additionality section of the large scale methodologies.	Std Add Para 10	OK	
B.1.5	Confirm whether the CME demonstrates that compliance with the additionality-related eligibility criteria set in the PoA-DD ensures that all the relevant additionality-related guidelines, tools or any requirements embedded in the methodologies are met.	Std Add Para 13	OK	
B.1.6	Confirm that for PoA involving combinations of technologies/measures and/or methodologies, the eligibility criteria relative to each of them are proposed to demonstrate additionality. Types of combinations as indicated in paragraph 31(a) to 31(d) of Std Add. shall be taken into account.	Std Add Para 14	OK	
<b>B.2.</b>	<b>Eligibility criteria for inclusion of a CPA in the PoA</b>			
B.2.1	Confirm that the description is provided on the eligibility criteria.	SSC PoA GL	OK	
B.2.2	Confirm that the CME developed eligibility criteria for inclusion of a CPA under the PoA and shall include these criteria in the PoA design documents (e.g. CDM-PoA-DD, CDM-SSC-PoA-DD).	Std Add Para 15	OK	
B.2.3	Confirm that the eligibility criteria shall cover as a minimum the following	Std Add Para 16	<del>No</del> OK	CAR-6
(a)	(a) The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA;		OK	
(b)	(b) Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);		OK	
(c)	(c) The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications		OK	
(d)	(d) Conditions to check the start date of the CPA through documentary evidence;		OK	
(e)	(e) Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;		OK	

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**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**
**(OK/No/NA/Tbv)**

PoA-DD Section	Check Points (according to EB 74 Annex 8 “ Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
(f)	(f) The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified in Section A above;		OK	
(g)	(g) The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;		OK	
(h)	(h) Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance		OK	
(i)	(i) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation);		OK	
(j)	(j) Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys;		OK	
(k)	(k) Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or microscale threshold criteria and remains within those thresholds throughout the crediting period of the CPA;		OK	
(l)	(l) Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories.		OK	
B.2.4	Confirm that the eligibility criteria are verifiable.	Std Add Para 17	OK	
B.2.5	Determine whether the eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA.	Std Add Para 18	OK	
B.2.6	Confirm that the CPAs shall be included in the PoA on the basis of the DOE’s confirmed eligibility of CPAs where applicable undertaking sample-based checks in accordance with the approved guidelines/standard from the Board.	Std Add Para 21	OK	
B.2.7	For PoAs that include combinations of technologies/measures and/or methodologies, confirm that distinct eligibility criteria are developed per combination as specified in paragraph 29(a) to 29(d), in Section C below.	Std Add Para 22	OK	
<b>B.3.</b>	<b>Application of methodologies</b>			
B.3.1	Confirm that the description is provided on the technology/measures and indicate the methodology chosen.	SSC PoA GL	OK	
<b>Section C.</b>	<b>Management system</b>			
C.1	Confirm that the description is provided on the management system.	SSC PoA GL	OK	
C.2	Confirm whether the management system described in the PoA design document (CDM PoA-DD) in accordance with the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities.	VVS Para 186	OK	

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**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**
**(OK/No/NA/Tbv)**

PoA-DD Section	Check Points (according to EB 74 Annex 8 “ Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
C.3	Confirm whether 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.	Std Add Para 19	OK	
C.4	Confirm that the CME develop and implement a management system that includes the following made available to the DOE at the time of validation of the PoA:	Std Add Para 19	OK	
(a)	(a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies		OK	
(b)	(b) Records of arrangements for training and capacity development for personnel		OK	
(c)	(c) Procedures for technical review of inclusion of CPAs		OK	
(d)	(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);		<del>No</del> OK	CL-10
(e)	(e) Records and documentation control process for each CPA under the PoA		<del>No</del> OK	CL-9
(f)	(f) Measures for continuous improvements of the PoA management system		OK	
(g)	(g) Any other relevant elements.		OK	
C.5	Confirm whether the elements of the management system referred to in paragraph 17 are appropriate as part of the validation of the PoA or as part of the validation of the CPA inclusion.	Std Add Para 20	OK	
<b>Section D.</b>	<b>Duration of PoA</b>			
<b>D.1.</b>	<b>Start date of PoA</b>			
D.1.1	Confirm the start date is described.	SSC PoA GL	OK	
<b>D.2.</b>	<b>Length of the PoA</b>			
D.2.1	Confirm that the length of the PoA is described in years.	SSC PoA GL	OK	
<b>Section E.</b>	<b>Environmental impacts</b>			
<b>E.1.</b>	<b>Level at which environmental analysis is undertaken</b>			
E.1.1	Confirm whether an analysis of the environmental impacts of the PoA was undertaken as per the requirements of the CDM modalities and procedures.	VVS Para 199	OK	
	If the analysis was not undertaken for the PoA but conducted at the CPA level, confirm whether the analysis of the environmental impacts was conducted as described in the CDM-PoA-DD and the CDM-CPA-DD.	VVS Para 200	OK	
<b>E.2.</b>	<b>Analysis of the environmental impacts</b>			
E.2.1	Confirm that the summary of analysis is provided on the environmental impacts and reference to related documentation in accordance with applicable provisions related to environmental impacts for PoAs in the Project standard.	SSC PoA GL	OK	

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**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 74 Annex 8 “ Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
<b>Section F.</b>	<b>Local stakeholder comments</b>			
<b>F.1.</b>	<b>Solicitation of comments from local stakeholders</b>			
F.1.1	Confirm whether the local stakeholder consultation process is performed at the PoA and/or the CPA level. Justify the choice of level at which the local stakeholder consultation is undertaken.	SSC PoA GL VVS Para 201	OK	
	If at PoA level, confirm those below in PoA-DD.	VVS Para 201	OK	
F.1.2	Conform how these comments were invited.	VVS Para 201	OK	
<b>F.2.</b>	<b>Summary of comments received</b>			
F.2.1	Confirm whether the summary of the comments received is complete.	VVS Para 201	OK	
<b>F.3.</b>	<b>Report on consideration of comments received</b>			
F.3.1	Confirm how due account was taken of all comments received.	VVS Para 201	OK	
<b>Section G.</b>	<b>Approval and authorization</b>			
G.1	Confirm whether the LoA is available at the time of submitting the PoA-DD to the DOE.	SSC PoA GL	OK	
G.2	If yes, Confirm that the following letters of approval are provided with PoA-DD. (a) LoA of the Party(ies) involved in the PoA (b) CME letters of authorization of its coordination of the PoA from each Party	SSC PoA GL	OK	
<b>Check for CPA-DD-Generic</b>				
<b>PART II.</b>	<b>Generic component project activity (CPA)</b>			
1	Confirm that this section is used to demonstrate the application of the PoA framework to implement generic CPAs and to demonstrate that each type of CPA meets the requirements. Where multiple technologies/measures and/or multiple methodologies are being applied, confirm that the demonstration of the application of the PoA framework to implement generic CPAs must be done for each of the combinations of technologies/measures and/or methodologies. Therefore, repeat all of Part II of these guidelines for each of the combination of technologies/measures and/or methodologies.	SSC PoA GL	OK	
<b>Section A.</b>	<b>General description of a generic CPA</b>			
<b>A.1.</b>	<b>Purpose and general description of generic CPAs</b>			
A.1.1	Confirm that the description of each generic CPA within the PoA is provided.	SSC PoA GL	OK	
<b>Section B.</b>	<b>Application of a baseline and monitoring methodology</b>			
<b>B.1.</b>	<b>Reference of the approved baseline and monitoring methodology(ies) selected</b>			
B.1.1	Confirm that the following reference of the <u>methodology</u> is exact.	SSC PoA GL	OK	

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**NA:** Not Applicable, **Tbv:**To be verified, **PDD GL:** PDD Guidelines, **PA:** Project Activities, **PP:** Project Participants

**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**
**(OK/No/NA/Tbv)**

PoA-DD Section	Check Points (according to EB 74 Annex 8 “ Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
(i)	(i) reference number of the methodology.	SSC PoA GL	OK	
(ii)	(ii) title of the methodology.	SSC PoA GL	OK	
(iii)	(iii) version number of the methodology	SSC PoA GL	OK	
B.1.2	Confirm that the following reference of the <b>Tool</b> is exact.	SSC PoA GL	OK	
(i)	(i) title of the Tool	SSC PoA GL	OK	
(ii)	(ii) version number of the Tool	SSC PoA GL	OK	
<b>B.2.</b>	<b>Application of methodology(ies)</b>		OK	
B.2.1	Confirm that the description is provided on application of methodology(ies) for generic CPA.	SSC PoA GL	<del>No</del> OK <del>No</del> OK	CL-11 CL-12
B.2.2	If the multiple small scale methodologies are applied, confirm that the combinations of technologies/measures and/or methodologies for a PoA are eligible with demonstration on that there are no cross effects between the technologies/measures applied. <sup>1</sup> ( <sup>1</sup> Combinations of approved methodologies contained in the “General guidelines to SSC CDM methodologies” may be applied without further assessment of cross effects, while other combinations can be applied with the analysis of cross effects. )	Std Add Para 30	OK	
	Where such cross effects do exist, confirm that the CME proposes the methods to account for such cross effects using the “Procedures for requests to the executive board for deviation from an approved methodology” so as to ensure that the calculation of emission reductions is accurate.	Std Add Para 30	OK	
<b>B.3.</b>	<b>Sources and GHGs</b>			
B.3.1	Confirm that the description is provided in the table on the sources and GHGs in generic CPA boundary.	SSC PoA GL	<del>No</del> OK <del>No</del> OK	CL-13 CL-14
<b>B.4.</b>	<b>Description of baseline scenario</b>			
B.4.1	Confirm that the description is provided on the baseline scenario for generic CPA.	SSC PoA GL	<del>No</del> OK	CL-15
<b>B.5.</b>	<b>Demonstration of eligibility for a generic CPA</b>			
B.5.1	Confirm that the description is provided for the demonstration on how generic CPA meets the eligibility criteria of the PoA.	SSC PoA GL	OK	
B.5.2	Confirm that the demonstration of the usability to assess the inclusion of CPAs in the generic CDM-CPA-DD.		OK	
<b>B.6.</b>	<b>Estimation of emission reductions of a generic CPA</b>			
<b>B.6.1.</b>	<b>Explanation of methodological choices</b>			
B.6.1.1	Confirm that the description is provided for the explanation on how the methodological steps, in the selected methodology, are applied to generic CPA.	SSC PoA GL	OK	

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**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**
**(OK/No/NA/Tbv)**

PoA-DD Section	Check Points (according to EB 74 Annex 8 “ Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
B.6.1.2	Confirm that the explanation was indicated on how the methods or methodological steps in the selected methodology are applied for calculating baseline emissions, project emissions, leakage and emission reductions.	PDD GL	OK	
B.6.1.3	Confirm that the steps taken and the equations and parameters applied in the PDD to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected methodology including applicable tool.	VVS Para 96	OK	
B.6.1.4	Confirm that it is clearly stated in the PDD that the proper equations are used in calculating emission reductions.	PDD GL	OK	
B.6.1.5	Confirm that the methodology allows for selection between options for equations or parameters. If yes, confirm that adequate justification has been provided for selection. (based on the choice of the baseline scenario, context of the PA and other evidence provided) .	VVS Para 97	<del>No</del> OK	CL-17
B.6.1.6	Confirm that the correct equations and parameters have been used, in accordance with the methodology selected including applicable tool.	VVS Para 97	OK	
B.6.1.7	Confirm that the justification given in the PDD for the choice of data and parameters used in the equations is appropriate.	VVS Para 98	<del>No</del> OK	CL-18
B.6.1.8	Confirm that data and parameters will not be monitored and will remain fixed throughout the crediting period.	VVS Para 98	OK	
B.6.1.9	If yes, confirm that;			
	♦ all data sources and assumptions are appropriate.		OK	
	♦ calculations are correct as applicable to the PA.		OK	
B.6.1.10	♦ will result in an accurate or otherwise conservative estimate of the emission reductions.		OK	
	Confirm that data and parameters will be monitored or estimated on implementation and hence become available only after validation of the PA.	VVS Para 98	OK	
	If yes, confirm that the estimates provided in the PDD for these data and parameters are reasonable.	VVS Para 98	OK	
<b>B.6.2.</b>	<b>Data and parameters that are to be reported ex-ante</b>			
B.6.2.1	Confirm that the tables are provided with the parameters for not monitoring.	SSC PoA GL	OK	
<b>B.6.3.</b>	<b>Ex-ante calculations of emission reductions</b>			
B.6.3.1	Confirm that the blank tables are provided.	SSC PoA GL	OK	
B.6.3.2	Confirm that the transparent ex ante calculation of baseline emissions, project emissions (or, where applicable, direct calculation of emission reductions) and leakage expected during the crediting period is provided.	PDD GL	OK	
B.6.3.3	Confirm that the sample calculation for each equation used, substituting the values used in the	PDD GL	OK	

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**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**
**(OK/No/NA/Tbv)**

PoA-DD Section	Check Points (according to EB 74 Annex 8 “ Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
	equations is provided.			
B.6.3.4	Confirm that the relevant electronic spreadsheets for ex ante calculation are provided.	PDD GL	OK	
B.6.3.5	Confirm that the additional background information and/or data are described in Appendix 4 adequately.	PDD GL	OK	
<b>B.7.</b>	<b>Application of the monitoring methodology and description of the monitoring plan</b>			
<b>B.7.1.</b>	<b>Data and parameters to be monitored by each generic CPA</b>			
B.7.1.1	Confirm that the tables are provided with the parameters for monitoring.	SSC PoA GL	OK	
B.7.1.2	Confirm that the specific information on how the data and parameters that need to be monitored would actually be collected during monitoring is indicated in the tables in Section B.7.1. of PDD adequately.	PDD GL	OK	
B.7.1.3	Confirm that any relevant further background documentation is provided in Appendix 5.	PDD GL	OK	
<b>B.7.2.</b>	<b>Description of the monitoring plan for a generic CPA</b>			
B.7.2.1	Confirm that the description is provided on the monitoring plan for a generic CPA.	SSC PoA GL	OK	
B.7.2.2	Confirm that the detailed description of the monitoring plan of the PA is developed in accordance with the monitoring requirements of the selected methodology is provided in sections B.7.1, B.7.2 and B.7.3.	PDD GL VVS Para 131	OK	
B.7.2.3	Confirm that the following two-step process is applied to assess compliance with the requirement of methodology.	VVS Para 132	OK	
(a)	(a) Confirm the compliance of the monitoring plan with the approved methodology and the applicable tool,		OK	
	(i) Confirm that the list of parameters required by the selected approved methodology including applicable tool by means of document review are Identified.		OK	
	(ii) Confirm that the description of the monitoring plan contains all necessary parameters.		OK	
	(iii) Confirm that the means of monitoring described in the plan complies with the requirements of the methodology including applicable tool.		OK	
(b)	(b) Assess the implementation of the plan by means of review of the documented procedures, interviews with relevant personnel, project plans and any physical inspection of the project activity site.		OK	
	(i) Confirm that the monitoring arrangements described in the monitoring plan are feasible within the project design.		OK	
	(ii) Confirm that the means of implementation of the monitoring plan, including the data management and quality assurance and quality control procedures, are sufficient to ensure that the emission		OK	

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**TABLE-1 REQUIREMENTS CHECKLIST (POA-DD)**
**(OK/No/NA/Tbv)**

PoA-DD Section	Check Points (according to EB 74 Annex 8 “ Guidelines for Completing The Programme Design Document Form For Small-Scale CDM Programs of Activities”(Ver.03.0)	Reference GL,DD	Check Comment	CAR, CL, No.
	reductions achieved by/resulting from the PA can be reported ex post and verified.			
<b>Appendix 1</b>	<b>Contact information on entity/individual responsible for the PoA</b>			
AP.1.1	Confirm that the following mandatory fields are filled in the table.	SSC PoA GL	OK	
	♦ Organization	SSC PoA GL	OK	
	♦ Street/P.O. Box	SSC PoA GL	OK	
	♦ City, Postcode	SSC PoA GL	OK	
	♦ Country, Telephone	SSC PoA GL	OK	
	♦ Fax,	SSC PoA GL	OK	
	♦ e-mail	SSC PoA GL	OK	
	♦ Name of contact person	SSC PoA GL	OK	
	Confirm the consistency between the organization listed in above table and that in section A.4.	SSC PoA GL	OK	
<b>Appendix 2</b>	<b>Affirmation regarding public funding</b>			
AP.2.1	Confirm the description on no public funding from Parties for PoA.	SSC PoA GL	OK	
(a)	If public fund has received for PoA, (a)Provide information on Parties providing public funding;	SSC PoA GL	OK	
(b)	(b)Attach in Appendix 2: the affirmation obtained from such Parties		OK	
<b>Appendix 3</b>	<b>Application of methodology(ies)</b>			
AP.3.1	Confirm that further background information on the applicability of the selected methodology(ies) is provided.	SSC PoA GL	OK	
<b>Appendix 4</b>	<b>Further background information on ex ante calculation of emission reductions</b>			
AP.4.1	Confirm that further background information on the ex-ante calculation of emission reductions is provided, and that this may include data, measurement results, data sources, etc.	SSC PoA GL	OK	
<b>Appendix 5</b>	<b>Further background information on the monitoring plan</b>			
AP.5.1	Confirm that further background information used in the development of the monitoring plan is provided, and that this may include tables with time series data, additional documentation of measurement equipment, procedures etc.	SSC PoA GL	<del>No</del> OK	<b>CL-19</b>
	♦ revision of existing methodologies to the Board	SSC PoA GL	OK	
	♦ publication in a newspaper		OK	
	♦ interviews with the DNA	SSC PoA GL	OK	
	♦ earlier correspondence on the project with the DNA or the secretariat.		OK	

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**TABLE-2 REQUIREMENTS CHECKLIST (PoA) FOR CPA-DD-SPECIFIC**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 16 “ Guidelines for Completing The Component project Activity Design Document Form”(Ver.01.0)	Reference GL, DD	Check Comment	CAR, CL, No.
<b>General guidelines</b>				
1.	Confirm that the CPA-DD Form applies <b>version 02.0 of F-CDM-CPA-DD.</b> (Guideline Para.8)	SSC CPA GL	OK	
2.	Confirm that the CPA-DD is completed <b>in English.</b> (all attached documents must be <b>in English</b> ) (Guideline Para.13)	SSC CPA GL	OK	
3.	Confirm that the CPA-DD is completed using the same format <b>without modifying its font, headings or logo,</b> and without any other alteration to the form. (Guideline Para. 14)	SSC CPA GL	OK	
4.	Confirm that the tables and their columns in the CPA-DD are <b>not modified or deleted.</b> (Guideline Para. 15)	SSC CPA GL	OK	
5.	Confirm that the <b>blanks are left intentionally</b> for the “not applicable section” of the CPA-DD (Guideline Para. 16)	SSC CPA GL	OK	
<b>Check for SSC-CPA-DD</b>				
<b>Specific guidelines</b>				
<b>Section A.</b>	<b>General description of CPA</b>			
<b>A.1.</b>	<b>Title of the proposed or registered PoA</b>			
A.1.1	Confirm that the reference and title of the PoA to which this CPA is included.	SSC CPA GL	OK	
<b>A.2.</b>	<b>Title of the CPA</b>			
A.2.1	Confirm the followings related to the title of the PoA.	SSC CPA GL	OK	
(a)	(a) the title of the CPA and the unique identification of the CPA.	SSC CPA GL	OK	
(b)	(b) the current version number of the CPA-DD.	SSC CPA GL	OK	
©	© the date the CPA-DD in DD/MM/YYYY.	SSC CPA GL	OK	
<b>A.3.</b>	<b>Description of the CPA</b>			
A.3.1	Confirm that the description is provided on the technology and/or measures for the CPA.	SSC CPA GL	<del>No</del> OK <del>No</del> OK <del>No</del> OK <del>No</del> OK	<b>CL-2</b> <b>CL-3</b> <b>CL-4</b> <b>CL-5</b>
<b>A.4.</b>	<b>Entity/individual responsible for CPA</b>			
A.4.1	Confirm that the description is provided on the CPA implementers. (Name of PPs of PoA)	SSC CPA GL	OK	
<b>A.5.</b>	<b>Technical description of the CPA</b>			
A.5.1	Confirm that the description is provided on the technologies for the CPA.	SSC CPA GL	<del>No</del> OK	<b>CL-6</b>
<b>A.6.</b>	<b>Party(ies)</b>			
A.6.1	Confirm that the Party(ies) CPA implementers (PPs) and involvement are listed in the table.	SSC CPA GL	OK	

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**TABLE-2 REQUIREMENTS CHECKLIST (PoA) FOR CPA-DD-SPECIFIC**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 16 “ Guidelines for Completing The Component project Activity Design Document Form”(Ver.01.0)	Reference GL, DD	Check Comment	CAR, CL, No.
A.6.2	Confirm that the “(host)” is indicated in the table.	SSC CPA GL	OK	
A.6.3	Confirm that the name of PPs are consistent with the contact information in Appendix 1	SSC CPA GL	OK	
<b>A.7.</b>	<b>Geographic reference or other means of identification</b>			
A.7.1	Confirm that the geographic reference is indicated for the CPA ( <u>within one page</u> ). (e.g. map, registration number of GPS devices)	SSC CPA GL	OK	
<b>A.8.</b>	<b>Duration of the CPA</b>			
<b>A.8.1.</b>	<b>Start date of the CPA</b>			
A.8.1.1	Confirm the start date is described in DD/MM/YYYY how the start date was determined..	SSC CPA GL	<del>No</del> OK	<b>CAR-4</b>
<b>A.8.2.</b>	<b>Expected operational lifetime of the CPA</b>			
A.8.2.1	Confirm that the expected operational lifetime of the CPA is described in years and months.	SSC CPA GL	OK	
<b>A.9.</b>	<b>Choice of the crediting period and related information</b>			
A.9.1	Confirm that the type of crediting period is chosen in fixed or renewable.	SSC CPA GL	OK	
<b>A.9.1.</b>	<b>Start date of the crediting period</b>			
A.9.1.1	Confirm that the expected start date of the crediting period of the CPA is described in DD/MM/YYYY.	SSC CPA GL	<del>No</del> OK	<b>CAR-5</b>
<b>A.9.2.</b>	<b>Length of the crediting period</b>			
A.9.2.1	Confirm that the length of the crediting period is described.	SSC CPA GL	OK	
A.9.2.2	Confirm that the CPA is limited to the end date of the CPA.	SSC CPA GL	OK	
<b>A.10.</b>	<b>Estimated amount of GHG emission reductions</b>			
A.10.1	Confirm that the table is completed by ; <ul style="list-style-type: none"> <li>the annual GHG emission reductions for each year of the crediting period</li> <li>the annual average and the total GHG emission reductions over the chosen crediting period.</li> </ul>	SSC CPA GL	OK	
A.10.2	Confirm that the start date and end date of crediting period are consistent with those dates in Section A.8.1.	SSC CPA GL	OK	
A.10.3	Confirm that the start date and end date of crediting period are consistent with those dates in table of Section D.6.4.	SSC CPA GL	OK	
<b>A.11.</b>	<b>Public funding of the CPA</b>			
A.11.1	Confirm the description on no public funding from Parties for CPA.	SSC CPA GL	OK	
A.11.2	If public fund has received for CPA, (a)Provide information on Parties providing public funding; (b)Attach in Appendix 2: the affirmation obtained from such Parties	SSC CPA GL	OK	
<b>A.12.</b>	<b>Debundling of small-small component project activities</b>			

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**TABLE-2 REQUIREMENTS CHECKLIST (PoA) FOR CPA-DD-SPECIFIC**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 16 “ Guidelines for Completing The Component project Activity Design Document Form”(Ver.01.0)	Reference GL, DD	Check Comment	CAR, CL, No.
A.12.1	Confirm that CPA is demonstrated not to be a debundled component of a large-scale activities, in accordance with the applicable provision of the «Guidelines on assessment of debundling for SSC project activities».	SSC CPA GL	<del>No</del> OK	CL-20
<b>A.13.</b>	<b>Confirmation for CPA</b>			
A.13.1	Confirm the confirmation on that the CPA is not an individual registered CDM project nor a part of another registered CPA.	SSC CPA GL	OK	
<b>Section B.</b>	<b>Environmental analysis</b>			
<b>B.1.</b>	<b>Analysis of the environmental impacts</b>			
B.1.1	Confirm whether the analysis of the environmental impacts is undertaken or not.	SSC CPA GL	<del>No</del> OK <del>No</del> OK	CL-25 CL-28
B.1.2	If yes, confirm that the summary of analysis of the environmental impacts and reference to all related documentation, in accordance with the PoA.	SSC CPA GL	<del>No</del> OK	CL-26
<b>Section C.</b>	<b>Local stakeholder comments</b>			
<b>C.1.</b>	<b>Solicitation of comments from local stakeholders</b>			
C.1.1	Confirm that the invitation process is provided on local stakeholders comments for the CPA.	SSC CPA GL	<del>No</del> OK	CL-27
C.1.2	Confirm that the PP has completed a local stakeholder consultation process.	VVS Para 138	OK	
C.1.3	Confirm that the due steps were taken to engage stakeholders and solicit comments for the PA.	VVS Para 138	OK	
C.1.4	Confirm, by means of document review and interviews with local stakeholders as appropriate, that : (a) comments have been invited from local stakeholders that are relevant for the PA.	VVS Para 139	OK	
<b>C.2.</b>	<b>Summary of comments received</b>			
C.2.1	Confirm that the summary is provided on stakeholders comments.	SSC CPA GL	<del>No</del> OK	CL-24
<b>C.3.</b>	<b>Report on consideration of comments received</b>			
C.3.1	Confirm that the consideration is provided for all comments received.	SSC CPA GL	OK	
C.3.2	Confirm that the PPs have taken due account of all comments received and have described this process in the PDD.	VVS Para 139	OK	
<b>Section D.</b>	<b>Eligibility of CPA and estimation of emissions reductions</b>			
<b>D.1.</b>	<b>Title and reference of the approved baseline and monitoring methodology(ies) selected</b>			
D.1.1	Confirm that the following reference of the <u>methodology</u> is exact.	SSC CPA GL	OK	
	(i) reference number of the methodology.	SSC CPA GL	OK	
	(ii) title of the methodology.	SSC CPA GL	OK	
	(iii) version number of the methodology	SSC CPA GL	OK	
D.1.2	Confirm that the following reference of the <u>Tool</u> is exact.	SSC CPA GL	OK	

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**TABLE-2 REQUIREMENTS CHECKLIST (PoA) FOR CPA-DD-SPECIFIC**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 16 “ Guidelines for Completing The Component project Activity Design Document Form”(Ver.01.0)	Reference GL, DD	Check Comment	CAR, CL, No.
	(i) title of the Tool	SSC CPA GL	OK	
	(ii) version number of the Tool	SSC CPA GL	OK	
<b>D.2.</b>	<b>Application of methodology(ies)</b>			
D.2.1	Confirm that the applicability conditions are demonstrated to be met in accordance with the approved methodology(ies) and the PoA.	SSC CPA GL	OK	
D.2.2	Confirm that the CPA is demonstrated to be qualified as Type I, II and/or III during every year of the crediting period in accordance with applicable provisions for project activity eligibility in the Project standard.	SSC CPA GL	OK	
D.2.3	Confirm that the used documentation is explained and that the reference is provided or included in Appendix 3.	SSC CPA GL	OK	
<b>D.3.</b>	<b>Sources and GHGs</b>			
D.3.1	Confirm that the description is provided in the table on the sources and GHGs in generic CPA boundary.	SSC CPA GL	OK	
<b>D.4.</b>	<b>Description of the baseline scenario</b>			
D.4.1	Confirm that the description is provided on how the baseline scenario is identified for the CPA.	SSC CPA GL	OK	
<b>D.5.</b>	<b>Demonstration of eligibility for a CPA</b>			
D.5.1	Confirm that the description is provided on how specific CPA meets the eligibility criteria of the CPA.	SSC CPA GL	OK	
<b>D.6.</b>	<b>Estimation of emission reductions</b>			
<b>D.6.1.</b>	<b>Explanation of methodological choices</b>			
D.6.1.1	Confirm that the description is provided on how the methodological steps, in the selected methodology, are applied to specific CPA.	SSC CPA GL	OK	
<b>D.6.2.</b>	<b>Data and parameters that are to be reported ex-ante</b>			
D.6.2.1	Confirm that the description is provided on the data and parameters not for monitoring in the Tables.	SSC CPA GL	<del>No</del> OK	CL-21
<b>D.6.3.</b>	<b>Ex-ante calculation of emission reductions</b>			
D.6.3.1	Confirm that the ex-ante calculation is provided on emission reductions.	SSC CPA GL	<del>No</del> OK	CL-22
<b>D.6.4.</b>	<b>Summary of the ex-ante estimates of emission reductions</b>			
<b>D.7.</b>	<b>Application of the monitoring methodology and description of the monitoring plan</b>			
<b>D.7.1.</b>	<b>Data and parameters to be monitored</b>			
D.7.1.1	Confirm that the description is provided on the data and parameters for monitoring in the Tables.	SSC CPA GL	OK	
<b>D.7.2.</b>	<b>Description of the monitoring plan</b>			
D.7.2.1	Confirm that the description is provided on the monitoring plan for a specific CPA.	SSC CPA GL	<del>No</del> OK	CL-23

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**TABLE-2 REQUIREMENTS CHECKLIST (PoA) FOR CPA-DD-SPECIFIC**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 16 “ Guidelines for Completing The Component project Activity Design Document Form”(Ver.01.0)	Reference GL, DD	Check Comment	CAR, CL, No.
<b>Section E.</b>	<b>Approval and authorization</b>			
E.1	Confirm whether the LoA is available at the time of submitting the CPA-DD to the DOE.	SSC CPA GL	<del>No</del> OK	<b>CAR-1</b>
	If yes, Confirm that the LOA is provided with following information. (a) approval of the: Party(ies) (b) authorization for CME from each Party.	SSC CPA GL	OK	
<b>Appendix 1</b>	<b>Contact information on entity/individual responsible for the CPA</b>			
AP.1.1	Confirm that the following mandatory fields are filled in the table.	SSC CPA GL	OK	
	Organization		OK	
	♦ Street/P.O. Box		OK	
	♦ City, Postcode		OK	
	♦ Country, Telephone		OK	
	♦ Fax,		OK	
	♦ e-mail		OK	
	♦ Name of contact person		OK	
	♦ Confirm the consistency between the organization listed in above table and that in section A.4.	SSC CPA GL	OK	
<b>Appendix 2</b>	<b>Affirmation regarding public funding</b>			
AP.2.1	Confirm the description on no public funding from Parties for CPA.	SSC CPA GL	OK	
	If public fund has received for CPA, (a) provide information on Parties providing public funding; (b) attach in Appendix 2: the affirmation obtained from such Parties	SSC CPA GL	OK	
<b>Appendix 3</b>	<b>Applicability of the selected methodology(ies)</b>			
AP.3.1	Confirm that further background information on the applicability of the selected methodology(ies) is provided.	SSC CPA GL	OK	
<b>Appendix 4</b>	<b>Further background information on ex ante calculation of emission reduction</b>			
AP.4.1	Confirm that further background information on the ex ante calculation of emission reduction.	SSC CPA GL	OK	
<b>Appendix 5</b>	<b>Further background information on monitoring plan</b>			
AP.5.1	Confirm that further background information on the monitoring plan.	SSC CPA GL	OK	

**CAR:** Corrective Action Request, **CL:** Clarification Request, **FAR:** Forward Action Request,

NA: Not Applicable, Tbv:To be verified, PDD GL: PDD Guidelines, PA: Project Activities, PP: Project Participants

**TABLE-3 RESOLUTION OF CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS (PoA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 1	Summary of project owner response	Validation team Conclusion
<b>PART I</b>				
<b>CAR</b>	<b>Corrective Action Requests</b>			
<b>CAR-2</b>	<p>Additionality of the project in the GSC PoA DD is demonstrated by “Guidelines for demonstrating additionality of micro scale project activities” which stipulates project below 5 MW as applicable condition.</p> <p>During validation stage the “Guidelines on the Demonstration of Additionality of Small-Scale Project Activities” has issued. The new Guidelines shall be applied to demonstrate additionality of the project.</p>	B.1.3 of Part I In Table 1	Please refer to page 17 of the PoA-DD. Revisions are given as per the new guidelines.	<p>The PoA-DD has been revised appropriately in accordance with the new Guidelines.</p> <p>The finding of CAR-2 was resolved and closed.</p>
<b>CAR-3</b>	The revised PoA-DD version 3.0 dated 06/12/2012 changes the title of the PoA to “Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China (Micro Hydro Power Plant Promotion Programme in Forest Regions of Liangshan Prefecture, Sichuan Province)”. The reason of title change should be clarified.	A.1 (a) of Part I In Table 1	The boundary of the PoA is shrunk significantly; thus in order to avoid misconceptions and a big change in the original title, the DNA required an explanatory title for the original one.	<p>It has been clarified appropriately.</p> <p>The finding of CAR-3 was resolved and closed.</p>
<b>CAR-6</b>	The PoA-DD stipulates the four eligibility criteria for inclusion of a SSC-CPA in A.4.2.2. And CPA-DD explains the justifications to the eligibility criteria in B.2. But the latest Standard for Development of Eligibility Criteria (Annex 3, EB65) requires developing minimum twelve (12) eligibility criteria in the paragraph 14. Therefore the PoA-DD is not in accordance with the Standard. And also the CPA-DD shall be re-justified.	B.2.3 of Part I In Table 1	Please refer to A.4.2.2 of the PoA-DD and B.2. of the CPA-DD. Corresponding revisions are made.	<p>The DDs have been revised appropriately.</p> <p>The finding of CAR-6 was resolved and closed.</p>

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**TABLE-3 RESOLUTION OF CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS (PoA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 1	Summary of project owner response	Validation team Conclusion
<b>CL Clarification Requests</b>				
CL-1	The first CPA is described In the PoA-DD page 1. It is requested to clarify how many CPAs are expected in this PoA.	A.2 (b) of Part I In Table 1	<p>The number of CPAs under the PoA is not clear at moment. However, at least 6 CPAs (one for per province in the PoA boundary) are expected in the PoA.</p> <p>The number of CPAs under the PoA will probably decrease due to shrinking of the boundary. However, the exact number of CPAs under the PoA is not clear at the moment and any project activity in the boundary that satisfies eligibility criteria of the PoA can be a CPA of the PoA. As there is still a potentiality of 10,000 households in the Liang Shan prefecture, the number of CPAs under the PoA at least, can be 6.</p>	<p>It has been clarified appropriately.</p> <p>Is the number altered due to change of geographical boundary of the PoA?</p> <p>The additional request has been clarified appropriately.</p> <p>The finding of CL-7 was resolved and closed.</p>



**TABLE-3 RESOLUTION OF CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS (PoA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 1	Summary of project owner response	Validation team Conclusion
CL-7	The PoA-DD shows that there has been no any rule or mandatory requirements for private entities to conduct such kind of activities. It is requested to clarify whether there are also no rule or mandatory requirements for Grid company.	B.1.1 of Part I In Table 1	In China nationwide electrification has nearly completed (99%) by grid companies. The off-grid areas are remote mountainous areas where households reside so scattered throughout the mountains that extension of national or regional grid to them is practically difficult and uneconomical. Unquestionably nationwide electrification is mandatory for grid companies; however, in reality, farmer households in vast remote mountainous area still have not accessed electricity. That is also the reason why WWF Chengdu office together with Mitsui Bussan wants to go to these areas to solve the real problems existing.	It has been clarified appropriately.  The finding of CL-7 was resolved and closed.
CL-8	It is requested to clarify further why the giant panda reserves in Sichuan Province are commented in the PoA-DD. And it is also requested to clarify whether all of CPA will be located in the giant panda reserves.	B.1.1 of Part I In Table 1	The target area of the first CPA is located in the giant panda reserves. However, not all of CPAs must be located in the giant panda reserves. The boundary of the PoA is delineated as provinces and regions on the upper reaches of the Yangtze River where included giant panda reserves.  Not all CPAs will be located in the giant panda reserves. Corresponding revision is done in the PoA-DD as per the request.	The PoA-DD has been revised appropriately. But it is requested to change clarification in the left column due to change of geographical boundary of the PoA.  The PoA-DD has been revised further appropriately. The finding of CL-8 was resolved and closed.
CL-9	The PoA-DD reports about the database completed by the programme coordinator. The sample of survey data and collected data shall be provided to JCI.	C.4 (e) of Part I In Table 1	The relevant data will be provided during the site visit.	The data have been provided. The finding of CL-9 was resolved and closed.

**TABLE-3 RESOLUTION OF CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS (PoA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 1	Summary of project owner response	Validation team Conclusion
CL-10	The PoA-DD shows that Project participant does not opt for the sampling of CPAs necessary for verification. If so, it should, in accordance with requirement (ii) of A.4.4.2 of CDM SSC-PoA-DD Form, define and describe the transparent system by which no double accounting occurs and by which the status of verification can be determined anytime for each CPA.	C.4 (d) of Part I In Table 1	The transparent record keeping system is defined in the A.4.4.1 (monitoring and management plan) to ensure that no double counting occurs.	It has been clarified appropriately.  The finding of CL-10 was resolved and closed.
CL-16	The E.5.2 of PoA-DD shows that the Key criteria of “the value of installed capacity” are less than 1,500kW. It is requested to clarify.	B.1.3 of Part I In Table 1	Please refer to the Table 5 in E.5.2 of the PoA-DD. It is revised as per the clarification request.	The Key criteria have been revised appropriately. It is validated as reasonable criteria. The finding of CL-16 was resolved and closed.

**TABLE-3 RESOLUTION OF CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS (PoA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 1	Summary of project owner response	Validation team Conclusion
CL-29	<p>Editorial matter</p> <ol style="list-style-type: none"> <li>1. In A.3 in the revised PoA-DD there is no name reported for PP in China.</li> <li>2. In A.4.2.1 the explanation in the Figure 2 &amp; 3 is not consistent with the description of the main text (itemized part) such as flow rate. The flow rate in the version 2.2 is 0.2m<sup>3</sup>/sec but 1 m<sup>3</sup>/sec in the version 2.0. Which is correct as flow rate?</li> <li>3. Footnote 1 in A.4.4.1 “in Bangladesh” shall be clarified.</li> <li>4. In Page 12. CME should be clarified. (it is first word in the PoA DD so clarification is necessary)</li> <li>5. In E.6.1 the description NCV<sub>biomass</sub> cannot be read.</li> <li>6. There is blank page in page 20. It should be deleted.</li> <li>7. In A.4.7 of the revised CPA-DD the CAP should “CPA”.</li> <li>8. In B.1 of the revised CPA-DD the title of PoA is not revised.</li> <li>9. In B.6.1 the title number should be ordered 1 to 6 not 5.</li> <li>10. Before Annex 1 of the revised CPA-DD the page change should be inserted.</li> </ol>	General 2 In Table 1	<p>Please refer to corresponding parts of the PoA-DD and CPA-PDD revised.</p> <ol style="list-style-type: none"> <li>1. The Table in A.3 of the PoA-DD is revised</li> <li>2. The 0.2 m<sup>3</sup>/sec is correct</li> <li>3. The footnote 2 in A.4.4.1 is revised</li> <li>4. It is revised in the PoA-DD</li> <li>5. It is revised to be readable</li> <li>6. It is revised</li> <li>7. It is revised</li> <li>8. It is revised</li> <li>9. It is revised</li> <li>10. It is revised</li> </ol>	<p>All request items have been clarified and the DDs have been revised appropriately.</p> <p>The finding of CL-29 was resolved and closed.</p>
CL-30	<p>The PoA DD version 3.0 shows Junenghuili Carbon Capital Management (Beijing) Co., Ltd., as the CME and the project participants for the PoA, which has changed from Sichuan Kangmei Community Development and Market Company Ltd. (SKCDMC). The reason of change shall be clarified.</p>	A.3 (a) of Part I In Table 1	<p>The capital amount of the project participant (CME) does not meet the requirement of DNA on the capital size of a project participant for being a CME.</p>	<p>It has been clarified and the DDs have been revised appropriately.</p> <p>The finding of CL-30 was resolved and closed.</p>

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**TABLE-3 RESOLUTION OF CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS (PoA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 1	Summary of project owner response	Validation team Conclusion
<b>PART II</b>				
<b>CAR Corrective Action Requests</b>				
<b>CL Clarification Requests</b>				
<b>CL-11</b>	AMS-I.E. stipulates as one of applicable condition that this category comprises activities to displace the use of non-renewable biomass by introducing renewable energy technologies. But Table 3 of the PoA-DD does not justify on this matter.	B.2.1 of Part II In Table 1	<p>Please refer to E-2 (table 3) of the PoA-DD revised. Clarification is given in the section.</p> <p>The table 3 in E.2 of the PoA-DD is further revised.</p>	<p>The PoA-DD has not been revised. CL requests to justify on the first applicable condition.</p> <p>The PoA-DD has been revised and its justification is appropriate. The finding of CL-11 was resolved and closed.</p>
<b>CL-12</b>	The second applicable condition in the Table 3 requests to show that non-renewable biomass has been used since 31 December 1989. But the Justification does not clarify about the condition; specially use of non-renewable biomass and having been used since 31 Dec. 1989. The document shown in the footnote shall be provided to JCI.	B.2.1 of Part II In Table 1	<p>Please refer to the Table 3 of the PoA-DD revised. Relevant documents will be provided during the on-site assessment.</p> <p>Please refer to the Table 3 of PoA-DD. Collection of fuel wood, which is permitted under the National Natural Forest Protection Program. But year round heating, cooking requires large volumes of fuel wood. Before logging band (Chinese government banned logging in upper Yangtze forests including in the giant panda's habitat in 1998) a substantial percentage of fuel wood collected from logging slash on forests. Now farmers are forced to rely more heavily on their own collective forests. In most areas, these forests are not managed in sustainable ways.</p>	<p>The Table 3 of PoA-DD has been revised appropriately. The evidences shown in the revised PoA-DD has been provided to JCI.</p> <p>The finding of CL-12 was resolved and closed.</p>

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**TABLE-3 RESOLUTION OF CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS (PoA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 1	Summary of project owner response	Validation team Conclusion
CL-13	AMS-I.E. stipulates that “it is assumed that in the absence of the project activity, the baseline scenario would be the use of fossil fuels for meeting similar thermal energy needs”. But Table 4 shows that the baseline emissions are emissions from combustion of non-renewable biomasses for cooking and heating. It should be revised.	B.3.1 of Part II In Table 1	Please refer to the Table 4 of the PoA-DD revised.	The Table 4 of PoA-DD has been revised appropriately.  The finding of CL-13 was resolved and closed.
CL-14	In the Table 4 there are two emissions from non-renewable biomasses and electricity as project emissions. But there is no emission from non-renewable biomasses since it is displaced by electricity when the project implemented. And the electricity is generated by hydro power and then there is no CO <sub>2</sub> emission. So it should be No for CO <sub>2</sub> in Table 4.	B.3.1 of Part II In Table 1	Please refer to page the Table 4 of the PoA-DD revised.	The Table 4 PoA-DD has been revised appropriately.  The finding of CL-14 was resolved and closed.
CL-15	The PoA-DD shows that one of alternatives to the project is “continuation of current practice that use of biomass for cooking and heating, fossil fuel or hydro power for lighting”. Does hydro power (electricity) supply for lighting in the relevant area?	B.4.1 of Part II In Table 1	Please refer to E-4 of the PoA-DD revised. The alternative pointed out is revised as “continuation of current practice that use of biomass for cooking and heating, fossil fuel for lighting”. In the relevant area, there are few households installed micro hydro power plants by themselves. However, CPAs under the PoA target households who have not economic capacity to install micro hydro power plants by themselves.	The PoA-DD has been revised appropriately.  The finding of CL-15 was resolved and closed.
CL-17	Regarding the calculation of NRB, DRB and $f_{NRB,y}$ , it is requested to clarify the data base and to submit the evidence to JCI.	B.6.1.5 of Part II In Table 1	The database will be provided during the site visit.	The sample of database has been provided. The finding of CL-17 was resolved and closed.

**TABLE-3 RESOLUTION OF CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS (PoA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 1	Summary of project owner response	Validation team Conclusion
CL-18	In the footnote 11 of the PoD-DD revision 2.0 it is explained that the definition of DRB is apparently wrong for the calculation of non-renewable portion of "total" biomass. It is requested to explain further detail.	B.6.1.7 of Part II In Table 1	<p>Usually renewable energy generated will be used to replace biomass that includes woody and non-woody biomass. Therefore, in the case of option (b) of the paragraph 6 of the AMS-I.E for calculation of <math>B_y</math> (quantity of woody biomass that is substituted or displaced in tonnes), it is difficult to identify woody biomass portion of the whole biomass replaced by the renewable energy. In the project, we applied the option (a) for grasping of <math>B_y</math>, so the issue will not affect the process. The footnote is given here as it is seen to be necessary to argue the issue.</p> <p>Please refer to the PoA-DD revised. The indicated footnote is eliminated, as it seems to be superfluous.</p>	<p>It is requested further to revise the description of the PoD-DD.</p> <p>The PoA-DD has been revised appropriately.</p> <p>The finding of CL-18 was resolved and closed.</p>
CL-19	The PoA-DD refers the Gold Standard requirement as one of rules for the sample size calculation. It is requested to clarify reason of description in the PoA-DD for CDM.	AP.5.1 of Part II In Table 1	<p>Please refer to page 18 of the PoA-DD revised. Revision is done in the section E.6.1.</p> <p>For the sample survey a 90/10 precision (90% confidence and 10% precision level) is applied that is required in the methodology for sampling. Even use of 95/5 precision (gold standard requirement for sampling) for the project is believed to not lead to any material change in methodology application.</p>	<p>The PoA-DD has been revised appropriately.</p> <p>The finding of CL-19 was resolved and closed.</p>
<b>FAR Forward Action Requests</b>				



**TABLE-4 Resolution of Corrective Action Requests, Clarification Requests and Forward Action Requests (CPA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 2	Summary of project owner response	Validation team Conclusion
<b>CAR Corrective Action Requests</b>				
<b>CAR-1</b>	LoA of China (host country) and Japan (annex 1 country) shall be provided to JCI if those are issued.	E.1 In Table 2	The LoAs from China DNA and Japan DNA will be provided to JCI as soon as they are acquired. Both LoAs have been obtained from Chinese Government and Japanese Government. Those have been submitted to JCI.	The LoA of China has issued on Nov. 2012 and the LoA of Japan has issued on 05 Jun 2012.  The finding of CAR-1 was resolved and closed.
<b>CAR-4</b>	The A.2.1 of CPA-DD version 2.0 dated 21/05/2011 stated is that the starting date of the CPA is 20/04/2011 (the construction start date of micro hydro power plants). But the starting date of the CPA should be not prior to the commencement of validation. It is required to clarify the suitability of starting date of the CPA.	A.8.1.1 In Table 2	The starting date of the PoA is 26/05/2011. The 20/04/2011 is the date of starting installation of 3 micro power plants in the project area for demonstrating operation of the micro power plants during an event of WWF for celebrating the "Earth day". (The 3 micro-hydro power plants that were installed on 20/04/2011 for demonstration is not included in among the 120 micro-hydro power plants under the CPA.) Regarding 21/05/2011, it is just a mistake.	The CPA-DD has been revised appropriately.  The finding of CAR-4 was resolved and closed.
<b>CAR-5</b>	CPA-DD shows the starting date of the crediting is 01/05/2012 or the day of registration of the PoA. The date is not appropriate at the registration request. And the starting date of crediting period and Tables in A.4.4 & B.5.3 shall be in consistent each other.	A.9.1.1 In Table 2	Please refer to A.4.4 and B.5.3 of the CPA-DD. The related parts are revised as per the request. Revisions are done in the corresponding section.	The starting date of the crediting has been revised to 01/02/2013 appropriately. The finding of CAR-5 was resolved and closed.

**CAR:** Corrective Action Request, **CL:** Clarification Request, **FAR:** Forward Action Request,

NA: Not Applicable, Tbv: To be verified, PDD GL: PDD Guidelines, PA: Project Activities, PP: Project Participants

**TABLE-4 Resolution of Corrective Action Requests, Clarification Requests and Forward Action Requests (CPA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 2	Summary of project owner response	Validation team Conclusion
<b>CL Clarification Requests</b>				
<b>CL-2</b>	The PoA-DD shows that the ambient area of CPA target is not accessible with national and regional grid. It is requested to clarify how many areas exist in the relevant zone. And it is requested to clarify whether there is any plan to dissolve non-electrified area.	A.3.1 In Table 2	The CPAs under the PoA target off-grid areas in the PoA boundary. China achieved an electrification rate of 99.4% in 2009, with rural areas reaching 99% and urban areas 100% (IEA, 2009b). Over the last ten years, rural electrification has slowed down because of nearly complete nationwide electrification. The emphasis has been put on modernisation, service and quality improvements, poverty alleviation and introduction of innovative technology solutions for the remaining non-electrified remote areas in the vast remote areas/regions of the country.	It has been clarified appropriately.  The finding of CL-2 was resolved and closed.
<b>CL-3</b>	The PoA-DD shows that one generator supplies plural households. Typically how many households is averagely received electricity from one generator? It is requested to clarify a possibility of micro grid system supplied electricity by plural generators.	A.3.1 In Table 2	Typically one generator with 3kW provides electricity for a household to ensure enough energy for cooking and lighting. Surplus electricity will be provided to neighbor household.  As the PoA will install micro (pico hydro power may be more appropriate) hydro power plants with capacity from 3kW to 5kW, at most three households will be received electricity from a generator. However, emission reduction is claimed only the main household.	It has been clarified appropriately.  The finding of CL-3 was resolved and closed.
<b>CL-4</b>	The PoA-DD shows that the fuel currently used in households for cooking are both non-renewable and renewable biomass. It is requested the share of non-renewable and renewable biomass.	A.3.1 In Table 2	It is noted that the non-renewable fraction is CPA specific and is calculated CPA based on survey and related official data. The 75% is the number for the first CPA.  Please refer to E-6.1 of the PoA-DD revised.	Where is it referred?  It has been clarified appropriately. The finding of CL-4 was resolved and closed.

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**TABLE-4 Resolution of Corrective Action Requests, Clarification Requests and Forward Action Requests (CPA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 2	Summary of project owner response	Validation team Conclusion
CL-5	The PoA-DD shows that kerosene is used as small portion of the fuel currently used. Its percentage shall be clarified.	A.3.1 In Table 2	Related information will be provided during the on site assessment.  The survey conducted by Kang Mei, as the former CME, showed that average kerosene and edible oil consumption of a household in the project area is 2kg/month.	Further clarification shall be provided in left column.  It has been clarified appropriately. The finding of CL-5 was resolved and closed.
CL-6	It is requested how micro hydro power plant is controlled to match with power consumption.	A.5.1 In Table 2	Please refer to A.4.2.1 of the PoA-DD revised.	The PoA-DD has been revised appropriately. The finding of CL-6 was resolved and closed.
CL-20	A.4.6 of the CPA-DD refers the paragraph 9 of the "Guidelines on assessment of de-bundling for SSC project activities, version 02". But it should be the paragraph 10 of the latest version 03.	A.12.1 In Table 2	Corresponding revision is done in the section of A.4.6 of the CPA-DD.	The CPA-DD has been revised appropriately.  The finding of CL-20 was resolved and closed.
CL-21	The CPA-DD reports 80.6 as $EF_{\text{projected\_fossilfuel}}$ but it is different from the value in the AMS-I.E. It is requested to revise the value.	D.6.2.1 In Table 2	Please refer to page 10 of the CPA-DD revised.	The CPA-DD has been revised appropriately. The finding of CL-21 was resolved and closed.
CL-22	The CPA-DD calculates the baseline emissions $ER_{FS,y}$ x number of micro hydro power generators (924=7.7*120). Unit of $ER_{FS,y}$ is ton/household/year. It is requested to confirm that one generator supply electricity only one household.	D.6.3.1 In Table 2	One micro hydro power plant with 3kW provides energy for one household. There is possibility of providing surplus energy to a neighbour household; however, the emission reduction will be claimed only for the main one household.	It has been clarified appropriately and it is conservative calculation for emission reduction.  The finding of CL-22 was resolved and closed.
CL-23	The Monitoring Manual and/or CDM management Manual shall be provided to JCI during the on-site assessment if it is available.	D.7.2.1 In Table 2	We will provide the document after the on-site assessment.	The Monitoring Manual has been provided to JCI. The finding of CL-23 was resolved and closed.

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**TABLE-4 Resolution of Corrective Action Requests, Clarification Requests and Forward Action Requests (CPA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 2	Summary of project owner response	Validation team Conclusion
CL-24	The local stakeholder consultation report shall be provided to JCI during on-site assessment including the notification procedure of consultation and Stakeholders comments on the project.	C.2.1 In Table 2	The LSC report and related documents will be provided during the on-site assessment.	The evidences have been provided to JCI. The finding of CL-24 was resolved and closed.
CL-25	The CPA-DD shows that the registration checklist is required for the CPA implementation instead of EIA report. The checklist shall be provided to JCI during on-site assessment.	B.1.1 In Table 2	<p>The document will be provided during the on-site assessment.</p> <p>The registration checklist here means an application/registration form with some relevant checklists. Through submitting the kind of document to Environmental Protection Bureau of Yuexi County, the environmental impact clearance certification that was submitted during on-site validation was acquired.</p>	<p>The registration checklist has been included in the documents submitted during on-site.</p> <p>The finding of CL-25 was resolved and closed.</p>
CL-26	If some FSR is prepared it shall be provided to JCI during on-site assessment.	B.1.2 In Table 2	<p>The FSR will be provided during the on-site assessment.</p> <p>The FSR provided during the on-site validation is the full and only document.</p>	<p>The FSR has included in the documents submitted during on-site. But it is very small document and is seemed to be a summary of the FSR. Please submit all of the FSR.</p> <p>It has been clarified appropriately.</p> <p>The finding of CL-26 was resolved and closed.</p>

**TABLE-4 Resolution of Corrective Action Requests, Clarification Requests and Forward Action Requests (CPA-DD)**

No. CAR, CL	Clarifications and corrective action requests by validation team	Sec. No. in Table 2	Summary of project owner response	Validation team Conclusion
CL-27	It is requested to clarify the procedure to get approval of the local government for the project implementation.	C.1.1 In Table 2	Project implementation approvals are issued by Development and Reform Commission (DRC) of corresponding government authorities respecting to the size and type of the projects.  In the case of the project, the approval letter was obtained from DRC of Yuexi county where the project is going to be implemented.  Detailed information on the procedure will be given during the on-site assessment.  In the local level, it should DRC rather than NDRC.	It has been clarified appropriately.          The finding of CL-27 was resolved and closed.
CL-28	It is requested to clarify the procedure to get approval of the local Environmental Protection Bureau and the local Soil and Water Protection Bureau for the project implementation.	B.1.1 In Table 2	Project implementation approvals are issued by Environmental Protection Bureau (that includes functions of supervising environmental issues on water, soil, air and so on) of corresponding government authorities respecting to the size and type of the projects.  Detailed information on the procedure will be given during the on-site assessment.	It has been clarified appropriately.          The finding of CL-28 was resolved and closed.
<b>FAR</b>	<b>Forward Action Requests</b>			

**APPENDIX B****Certificate of Appointment of Validation Team**

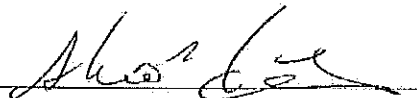
Project Title	Micro Hydro Power Plant Promotion Programme in Regions on the Upper Reaches of the Yangtze River, China
Applied Methodology	AMS-IE. Sectoral Scope 1

Date: 31 May 2011

**Designated Operational Entity: Japan Consulting Institute (JCI)**

Reflecting the competence criteria of JCI in accordance with the latest "CDM Accreditation Standard for Operational Entities", this is to certify the appointment of validation team of JCI specified below for the CDM project activity above, as per CDM Project Activity Registration Form, and Validation Procedure established by JCI CDM Center.

Signature



Akio Yoshida,

Executive Director, JCI CDM Center

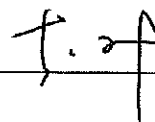
Date:

**Client: World Wide Fund for Nature (WWF)**

Reflecting the curricula vitae provided, this is to agree the validation team of JCI specified below for the CDM project activity above, as per Validation Procedure established by JCI CDM Center.

It is also agreed that Mr. Mutsuo KATO of JCI participates in the validation activities of the said project for the quality issues under its quality management scheme.

Signature



(Name)

(Title)

Head of WWF Chengdu office.

**Validation Team**

Validation Team	Name	Qualified Technical Areas related to the Project
Leader	Takayuki ABE	Hydropower (TA 1.2)
Member	Toshiaki TAKEDA	Hydropower (TA 1.2)
Member	Shigeo AOKI	Hydropower (TA 1.2)
Technical Reviewer	Hideyuki SATO	Hydropower (TA 1.2)