



# **VALIDATION REPORT**

## **Programme of Activities (PoA): East Africa Renewable Energy Programme (EA-REP)**

14 December 2012

**Japan Consulting Institute**

**REPORT NO. JCI-CDM-VAL-11-124**

**REVISION NO. 0**



Validation Report No.	JCI CDM VAL-11-124
Date of revision	14 December 2012 Revision 0
Project title (PoA)	East Africa Renewable Energy Programme (EA-REP)
Project Participant(s) / Organization	Standard Bank Plc
Host Country	Kenya and Rwanda
Project site Location	All national boundaries of Kenya and Rwanda
Methodology	AMS I.D. Version 17.0
Scale	<input type="checkbox"/> Large Scale <input checked="" type="checkbox"/> Small Scale
Sectoral Scope/ Technical Area	Sectoral Scope :1 / Technical Area: 1.2
GHG reducing measure/ Technology	Power generation with hydro, wind, geothermal, solar photovoltaic) sources
Emission Reduction estimated (CPA-001)	18,442 t-CO <sub>2</sub> e / year (average)

Validation Team	Name
Team leader	Shigeo Aoki
Team member	Kenichi Suzuki

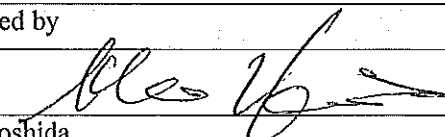
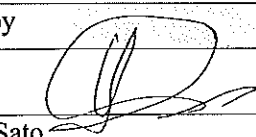
Technical Reviewer	Haruo Sawada
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<b>Conclusion of validation</b>
<input checked="" type="checkbox"/> Positive opinion: JCI's opinion is that the proposed CDM project meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria 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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Approved by	Checked by
	
Akio Yoshida Executive Director, JCI CDM Center	Hideyuki Sato Evaluation Group Manager, JCI CDM Center

## Abbreviations

Act	Environmental and Coordination Act of 1999 (the Act), Kenya
AMS-I.D.	AMS-I.D. “Grid connected renewable electricity generation” (Version 17.0)
BM	Build Margin
CAL	Carbon Africa Limited
CAR	Corrective Action Request
CDF	Gichugu Constituency Development Fund
CDM	Clean Development Mechanism
CERs	Certified Emission Reductions
CFC	CfC Stanbic Bank Limited
CL	Clarification Request
CM	Combined Margin
CME	Coordinating/Managing Entity
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
CPA	Component Project Activity
CPA-DD	Component Project Activity Design Document
CPA Guidelines	Guidelines for completing the component project activity design document form for small-scale component project activities (Version 01.0)
DNA	Designated National Authority
DOE	Designated Operation Entity
DPR	Detailed Project Report
EB	Executive Board
EIA	Environmental Impact Assessment
Emission Tool	Tool to calculate the emission factor for an electricity system (Version 02.2.1)
EPB	Environmental Protection Bureau
ERB	Electricity Regulatory Board
ERC	Electricity Regulatory Commission
EA-REP	East Africa Renewable Energy Programme
ERPA	Emission Reduction Purchase Agreement
ERs	Emissions Reductions
GDC	Geothermal Development Company
Generic CPA	Generic Component Project Activity (Part II of PoA-DD)
GHG	Greenhouse Gas
GSC	Global Stakeholder Comments
HFO	heavy fuel oil (HFO)
IMS	Inclusion Management System
IPCC	Intergovernmental Panel on Climate Change
IPO	initial public offering
IPP	Independent Power Producer
JCI	Japan Consulting Institute
KenGen	Kenya Electricity Generating Company
KETRACO	Kenya Transmission Company Limited
KP	Kenya Power (KP)

KPLC	Kenya Power and Lighting Company
LoA	Letter of Approval
Leakage tool	Tool to calculate project or leakage CO <sub>2</sub> emissions from fossil fuel combustion (Version 02)
LDCs	Least Developed Country
MoE	Ministry of Energy (MoE)
M&P	Modalities and procedures for a clean development mechanism
O&M cost	Operation and Maintenance cost
OM	Operating Margin
PDD	Project Design Document
PoA	Programme of Activities
PoA-DD	Programme of Activities Design Document (Part I of PoA-DD)
PoA Guidelines	Guidelines for completing the programme design document form for small-scale CDM programmes of activities (Version 02.0)
PPA	Power Purchase Agreement
RACI-VS	Responsible, Accountable, Consulted, Informed, Verifier, Signatory
RFR	Request for Registration
SIDs	Small Island Developing State
SB	Standard Bank Plc
Specific CPA	Specific Component Project Activity
Std PoA	Standard: demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (Version 02.1)
UNFCCC	United Nations Framework Convention on Climate Change
UPL	Uni-power Limited
VAT	Value Added Tax
VVS	CDM Validation and Verification Standards (Version 03.0)
WAT	Water Source Technologies PVT. Ltd.

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## I. EXECUTIVE SUMMARY - VALIDATION OPINION

Japan Consulting Institute (JCI) performs a validation work of the small-scale CDM Program of Activities (PoA) whose title is “East Africa Renewable Energy Programme (EA-REP) in Kenya and Rwanda This report summarizes the findings of the validation of design documents (Hereafter called “DDs”) such as:

- (a) Programme of Activities Design Documents (PoA-DD)<sup>1</sup>
- (b) Specific Component Project Activities Design Document (CPA-DD) (Hereafter called “Specific CPA-DD (CPA-001)”)

The Specific CPA-DD (CPA-001) is based on the application of the PoA to the CPA-001 as the first real case to be included in this PoA.

JCI states the validation opinion for the PoA of “EA-REP” in accordance with the Paragraph (hereafter called “Para.”) 143 through 149 of CDM Validation and Verification Standards (hereafter called “VVS”).

The requirement of the Para.143 of VVS is stated “*To be included the likelihood of the proposed project activity achieving the anticipated emission reductions stated in the CDM-PDD (DDs)*”.

JCI informed the validation outcome to the project participant. The notification to the project participants included a confirmation of validation and date of submission of the validation report to the Board (Para.144(a) of VVS). The Para.144 (b) of VVS is not applicable, because the proposed project activity has fulfilled the requirements for validation.

JCI provides a positive validation opinion that is submitted as a request for registration in its validation report (Para.145 (a) of VVS). The Para.145 (b) of VVS is not applicable.

According to the Para.146 of VVS, JCI states the validation opinion such as:

- (a) The validation methodology of “AMS-I.D. “*Grid connected renewable electricity generation*” and referenced Tools are correctly applied to the proposed PoA including CPA-001. The validation work is performed on the basis of UNFCCC criteria for PoA under the CDM and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.
- (b) The component of the proposed project activity will use renewable energy technologies to generate electricity. The PoA will target countries in East Africa, including, Kenya and Rwanda. The renewable energy technologies and measures to be employed by a small-scale CPA will include hydro, wind, solar photovoltaic (PV), and geothermal. Installed capacities of individual CPAs will be below or equal to 15 MW.
- (c) JCI concludes that the latest version of the PoA-DD (Part I of PoA-DD) is covered each Generic CPA-DDs (Part II of PoA-DDs) for each technology/measure under the methodology of “AMS-I.D.”. Thus, whole PoA-DD is met the requirement specified by the latest version of CDM project cycle procedure/7-15/.
- (d) JCI concludes that the inclusion for the Specific CPA (CPA-001) in the PoA as described in the latest version of DDs, meets all relevant UNFCCC requirements for the proposed PoA including CPA-001 (hydro energy project) and all relevant host country criteria and currently applies the baseline and monitoring methodology AMS-I.D.
- (e) JCI judges the expected emission reduction of CPA-001 will be achieved 18,442 tCO<sub>2</sub>/y.

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<sup>1</sup> The Generic CPA-DD is included in the PoA –DD part II and contains generic information relevant to all CDM programme activities (CPAs).

(f) JCI concludes the proposed project activity for the proposed PoA including CPA-001 have met the stated eligibility criteria for inclusion of a CPA in the PoA.

As a result, summary of the validation opinions is:

- The proposed project activity's conformity is applicable with CDM requirements (Para.147 (a) of VVS).
- The validation has been performed on the basis of UNFCCC criteria for PoA and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting (Para.147 (b) of VVS).
- As a dialogue among the DOE (JCI), the Coordinating/Managing Entity (CME) of PoA (Standard Bank Plc.) and the project participant of CPA-001 (Uni-Power Limited), whole Corrective Action Request (CAR) and Clarification Request (CL) are resolved and closed. These CARs, CLs and FARs are reported in the validation report as the "Appendix A: CDM Validation Protocol" (Para.147(c) of VVS).

The detail of validation opinion is reported in the following section in according to the Para.148 (a) through (g) of VVS. The assessment by JCI is complied with not only the general validation requirements of VVS, but also the requirements of "*Guidelines on the demonstration of additionality of small-scale project activities*" (Version 09.0) /7-03/<sup>2</sup> and Standards for PoA (Para.149 of VVS).

## II. INTRODUCTION OF VALIDATION

The client has commissioned JCI to perform a validation of the PoA, "EA-REP" and the Specific CPA (CPA-001) titled "EAREP - Njega 5MW Small Hydro Project".

This report summarizes the findings of the validation of the project, performed on the basis of UNFCCC criteria for the CDM, 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, (the simplified modalities and procedures for small-scale CDM project activities) and the subsequent decisions by the CDM Executive Board (EB).

### 1. Objective of CDM validation

JCI conducted a thorough and independent assessment of proposed project activities against the applicable CDM requirements in accordance with the Para.19 of VVS.

The purpose of the validation is to ensure a thorough and independent assessment of proposed CDM project activities submitted for registration as a proposed CDM project activity against the applicable CDM requirements<sup>3</sup>.

In particular, the project's baseline, monitoring plan, and the project's compliance with relevant UNFCCC and host Party criteria are validated in order to confirm that the project design, as documented, is sound and reasonable and meets the identified criteria.

Validation is a requirement for all CDM projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).

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<sup>2</sup> The title of "Guidelines on the demonstration of additionality of small-scale project activities" was changed from Attachment A of Appendix B to "Guidelines on the demonstration of additionality of small-scale project activities" by EB 68, Annex 27 on 20 July 2012.

<sup>3</sup> The applicable CDM requirements has been set out in Decision 3/CMP.1: "Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol", its annex and relevant decisions of the COP/MOP held at Montreal from 28 November to 10 December 2005 ("FCCC/KP/CMP/2005/8/Add.1" on 30 March 2006).

## 2. Validation approach

According to the Para.20 of VVS, JCI will carry out the validation work for the proposed PoA including CPA-001.

The requirement of the Para.20 of VVS is stated *"To be determined whether the proposed project activity complies with the requirements of Para. 37 of the CDM Modalities and procedures (M&Ps)<sup>4</sup> issued by the Board"* (Para.20(a)) and *"To assess the claims and assumptions made in the DDs"* (Para.20(b)).

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

## 3. Means of validation

According to the Para.21 through 23 of VVS, JCI assesses the information provided by the project participants.

The requirement of the Para.22 of VVS is stated *"To be applied the means of validation specified throughout the VVS and where appropriate standard auditing techniques, including, but not limited to following:"*

(a) *Document review, involving:*

(i) *A review of data and information;*

(ii) *Cross checks between information provided in the DDs and information from sources other than those used, if available, the DOE's sectoral or local expertise 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 checks between information provided by interviewed personnel (i.e. by checking sources or other interviews) to ensure that no relevant information has been omitted.*

(c) *Reference to available information relating to projects or technologies similar to the proposed CDM project activity registered and under validation; and*

(d) *Review, based on the approved methodology being applied, of the appropriateness of formulae and correctness of calculations.*

Where no specific means of validation is specified, JCI applies the standard auditing techniques described in accordance with the Para.23 of VVS,

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

JCI raises corrective action requests, clarification requests, and forward action requests. During the validation of a project activity, when 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 in accordance with the Para.24 through 29 of VVS.

- According to the Para.25(a) through 25(c) of VVS, 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

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<sup>4</sup> Para. 37 of the CDM Modalities and procedures (M&Ps) is Annex of FCCC/KP/CMP/2005/8/Add.1, required the applicability conditions of the selected methodology and guidance issued by the Board

- 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 (Para.26 of VVS).
- 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 (Para.27 of VVS).
- JCI resolves or “close out” CARs and CLs only if the project participants modify the project design, rectify the PDD or provide adequate additional explanations or evidence that satisfies the JCI’s concerns. If this is not done, JCI does not recommend the project activity for registration to the CDM Executive Board (Para.28 of VVS).
- 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 raises, 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 PDD or supporting annexes (Para.29 of VVS).

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

#### Validation protocol tables

**Table 1, 2: Requirements checklist**

- ✧ *Requirement (Checklist Question) :*  
The various requirements in Table 1 are checklist questions the project should meet. The checklist is organised in different sections, following the logic of the latest VVS, the Guidelines for completing the programme design document form for small-scale CDM programmes of activities version 02.0 on EB67 Annex 30 and Guidelines for completing the component project design document form for small-scale component project activities Version 01.0 on EB66 Annex17. 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: 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 Table1 :*  
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.*

## 4. General reporting requirement

JCI applies general reporting requirement in the validation report in accordance with the Para.30 through 33 of VVS.

The requirement of the Para.30 of VVS is stated "*To be reported the results of its assessment in a validation report*".

JCI ensures the followings:

- A positive validation opinion is included to the validation report only when the the proposed PoA including CPA-001 comply with the applicable CDM requirements (Para.31 of VVS).
- JCI submits the validation report, along with the supporting documents, to the Board as part of the request for registration of a project activity as a proposed PoA including CPA-001 (Para.32 of VVS).
- When the validation report includes a negative validation opinion, JCI provides the project participants with the report and inform the Board of the outcome (Para.33 of VVS).

## 5. Global Stakeholder Consultation

JCI assesses global stakeholder consultation in accordance with the Para.34 through 37 of VVS.

The requirement is stated in Para.34 of VVS is "*To acknowledge receipt of and take into account all comments on the DDs of the proposed proposed PoA and CPA-001 submitted in accordance with the Project cycle procedure*".

JCI ensures the followings:

- JCI acknowledges receipt of and take into account all comments on the PoA-DD including CPA-001 of the proposed PoA project activity submitted in accordance with the CDM Project cycle procedure/7-15/.
- JCI takes into account all the comments received during the validation of the proposed project activity.
- If comments indicate that the project activity does not comply with the CDM requirements and are not substantiated, then JCI will request furthermore clarification from the entity providing the comment. However, JCI does 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.
- JCI reports the details of the actions taken to take due account of the comments received during the validation process.

JCI has provided the DDs for the proposed PoA including CPA-001 under consideration publicly available on UNFCCC website and Parties, stakeholders and NGOs were through the CDM website invited to provide comments during a 30 days period from 21 January 2012 to 19 February 2012.

As a result of consultation, no comment was received during above 30 days period.

### III. VALIDATION WORK

JCI carried out the validation work to ensure that the project activity complies with the requirements of paragraph 37 of the M&P.

#### 1. Validation Team

Details of the validation team are shown in below Table.

Role/Qualification	Name	Qualified Technical Areas related to the Project	On-site Visit
CDM auditor/ Team Leader	Shigeo AOKI	Hydropower (TA 1.2)	✓
CDM auditor/ Team Member	Kenichi SUZUKI	Hydropower (TA 1.2)	

Details of the technical reviewer are shown in below Table.

Name	Qualified Technical Areas related to the Project
Haruo SAWADA	Hydropower (TA 1.2)

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

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

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

The validation report worked out by the team underwent an internal review process for the assurance of being in 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 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 the internal audit team and 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

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 PDD and information from sources other than that used, if available, and if necessary independent background investigations

The following table outlines the documentation reviewed during the validation:

**Table 2 Documents list**

No.	Document	Issue date	Issued by
	<b>1. &lt; PDD, DPR, EIA&gt;</b>		
<b>1-01</b>	PoA-DD for Global Stakeholder Consultation (GSC) Version 01	13/01/2012	Carbon Africa Limited (CAL)
<b>1-01B</b>	PoA-DD for Request for Registration (RFR) Version 06	28/11/2012	CAL
<b>1-02</b>	CPA-DD-001 for GSC Version 01	13/01/2012	CAL
<b>1-02B</b>	CPA-DD-001 for RFR Version 06	12/12/2012	CAL
<b>1-03</b>	Detailed Project Report (DPR) of CPA-001	August 2011	Water Source Technologies PVT. Ltd. (WAT)
<b>1-04</b>	Environmental impact Assessment (EIA) Report of CPA-001	April 2012	Gibb Africa Limited.
<b>1-06C</b>	Emission Reduction calculation sheet rev. 4 of CPA- 001	10/10/2012	CAL
	<b>2. &lt; Letters of Approval &gt;</b>		
<b>2-01A</b>	Letter of Approval (LOA) of Kenya	07/11/2012	National Environment Management Authority (NEMA) of Kenya (DNA)
<b>2-01B</b>	Letter of Approval (LOA) of Rwanda	09/07/2012	Rwanda Environment Management Authority (REMA, DNA)
<b>2-04</b>	Approval Letter for EIA Report of CPA-001	02/10/2012	National Environment Management Authority (NEMA) of Kenya
<b>2-05</b>	Approval Letter for Business License for CPA implementing entity of CPA-001	16/03/2011	Ministry of Energy, Kenya
	<b>3. &lt; Contracts, Agreements for Project&gt;</b>		
<b>3-01</b>	Draft Power purchase Agreement (PPA)	21/10/2011	Kenya Power and Lighting Company (KPLC)
<b>3-02</b>	PoA Participation Agreement/ Emission Reduction Purchase Agreement (ERPA) between Coordinating/Managing Entity (CME) and CPA implementing entity of CPA-001	14/11/2011	Standard Bank Plc. (SB)/ Uni-Power Ltd (UPL)
<b>3-03</b>	Incorporation documents between Uni-Power Ltd (UPL) and Hydel (Certificate for changing the company's title)	10/02/2011	Registrar of Companies/UPL
<b>3-04</b>	Contract for CDM Consultation	04/04/2011	CAL

No.	Document	Issue date	Issued by
3-05	Contract between CME and validator	15/11/2011	SB/JCI
3-06	DDs uploaded on the website of UNFCCC for Global Stakeholder Consultation (GSC)	22/01/2012	JCI
3-07	Offer for equipment supply Njega project (CPA-001)	31/08/2011	ANDRITZ HYDRO Pvt Ltd.
3-08	Statement of CPA implementing entity of CPA-001 on non-ODA	29/03/2012	UPL
3-09	Grid connection Confirming letter with CPA implementing entity of CPA-001	21/10/2011	UPL
3-11	Mandate agreement between parent company of CPA implementing entity and financial bank	12/04/2011	CfC Stanbic Bank Limited (CFC)/Hydel
<b>4. &lt; Project related documents &gt;</b>			
4-01A	Introduction of the parent company of the CPA implementing entity of CPA-001	2011	Profile of Hydel Engineering and Construction Company Limited (Hydel)
4-01B	Introduction of the CPA implementing entity of CPA-001	2011	Profile of UPL
4-02	Standard Bank Group Annual reports and statements	2012	CFC
4-03	Invitation letter for Stakeholder meeting	26/05/2011	CAL and UPL
4-04	Questionnaire and Responses	07/12/2011	CAL
4-05A	Local Stakeholder Consultation Report	07/12/2011	CAL
4-05B	Record of Stakeholder meeting for environmental protection	26/05/2011	Gibb Africa Limited
4-07	Notification of CDM project activity for Kenyan DNA (Received as "Kipeto Wind Energy Project and East Africa Renewable Energy Programme")	11/05/2012	CAL
4-10	CPA Inclusion Management System	Feb. 2012	SB
<b>5. &lt;Engineering Drawings&gt;</b>			
5-01	Location plan of Njega project	06/06/2011	WAT
5-02A	Layout of main equipment	06/06/2011	WAT
5-02B	Hydropower station layout plan (cross section)	12/08/2011	WAT
5-03	Electric Single Line Diagram including Monitoring Meters	15/08/2011	WAT
5-04	Turbine technological specification	August 2011	WAT
5-05	Generator technological specification	August 2011	WAT
5-06	Penstock plan	12/08/2011	WAT

No.	Document	Issue date	Issued by
5-07	Switch Yard Layout	06/06/2011	WAT
<b>6. &lt; Referenced Documents, (Books, Regulation, Code)</b>			
6-01	National Development Strategy of Kenya, Summary	2007	Government of Kenya
6-02	National Energy Policy Strategy of Kenya	2004	Government of Kenya
6-03A	National Regulation for Energy Development of Kenya	2006	Government of Kenya
6-03B	Electric Power Act No. 11 of 1997	1997	Government of Kenya
6-03C	Energy Act, No. 12 of 2006	2006	Government of Kenya
6-04A	Environmental Management and Coordination Act (EMCA) 1999	1999	Government of Kenya
6-04B	The Environmental (Impact Assessment and Audit) Regulations, 2003	2003	Government of Kenya
6-06	Regulation Code for electricity monitoring meter	March 2008	Government of Kenya
6-07	National Baseline Emission Factors for Power Grids (KPLC Annual Reports 2010-2011)	2011	KPLC
6-08	Kenyan Census 1999 ( <a href="http://www.knbs.or.ke/Census%20Results/KNBS%20Brochure.pdf">http://www.knbs.or.ke/Census%20Results/KNBS%20Brochure.pdf</a> )	1999	Kenya National Bureau of Statistics
6-11	Average diesel price	2011	Energy Regulatory Commission in Kenya
6-12	Density of diesel: Tanks to wheels report, version 2c,	2007	Joint Research Centre (JRC), European Commission
6-13	Feed-in-Tariffs Policy on Wind, Biomass and Small-Hydro Resource Generated Electricity	Jan. 2010	Government of Kenya
6-14	Updated Least Cost Power Development Plan for the Study Period 2011-2031	March 2011	Government of Kenya
6-15	World Bank Enterprise Survey 2007 <a href="http://data.worldbank.org/data-catalog/enterprise-surveys">http://data.worldbank.org/data-catalog/enterprise-surveys</a>	2011	World Bank
6-16A	Research Solutions Africa, Final edition	17/01/2012	CAL
6-16B	Research Solutions Africa, Datasheet	17/01/2012	CAL
<b>&lt;Methodology, Tool of UNFCCC&gt;</b>			
7-01	AMS-I.D. “Grid Connected Renewable Electricity Generation” (Version 17.0)		
7-02	Tool to Calculate the Emission Factor for an Electricity System (Version 02.2.1)		
7-03	Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0)		

No.	Document	Issue date	Issued by
7-04	F-CDM-SSC-PoA-DD - Programme design document form for small-scale CDM programmes of activities (Version 02.0)		
7-05	F-CDM-SSC-CPA-DD - Component project activity design document form for small-scale component project activities (Version 02.0)		
7-06	Guidelines on the assessment of investment analysis (version 05.0)		
7-07	Glossary of CDM terms (Version 07.0 )		
7-08	CDM Validation and Verification Standard (Version 03.0)		
7-09	Guidelines for demonstrating additionality of microscale project activities (Version 04)		
7-10	Guidelines on Assessment of De-bundling for SSC Project Activities (Version 03.1)		
7-11	Guidelines for completing the programme design document form for small-scale CDM programmes of activities (Version 02.0)		
7-12	Guidelines for completing the component project activity design document form for small-scale component project activities (version 01.0), EB66, Annex 17		
7-13	Standard for sampling and surveys for CDM PAs and PoAs (Version 03.0)		
7-14	CDM project standard (Version 02.1)		
7-15	CDM project cycle procedure (Version 03.1)		
7-16	Tool to calculate project or leakage CO <sub>2</sub> emissions from fossil fuel combustion (Version 02)		
7-17	Guidelines for the reporting and validation of plant load factors (version 01)		
7-18	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2 Energy: p. 1.23-1.24		
7-19	Non binding best practice examples to demonstrate additionality for SSC project activities (version 01)		
7-21	Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (version 02.1)		
7-22	Guidelines for objective demonstration and assessment of barriers (version 01.0)		
7-23	Tool for the demonstration and assessment of additionality (versions 06.1.0)		
7-24	General guidelines to SSC CDM methodologies (version 19.0)		

Main changes in the PDDs between the version published for the 30 days stakeholder commenting period and the final version submitted for registration are summarized in the table below:

**Table 3 Main changes in the PDDs between GSC and RFR**

Subject and section in the DDs	Original content on GSC	Revised content on RFR	Issued CAR or CL
General	VVM form	VVS form Generic CPA-DD is combined with the PoA-DD.	-

PoA-DD (Part I of PoA-DD)			
<u>A.4</u> Host country	Kenya, Uganda and Rwanda	Uganda is deleted.	-
<u>A.6</u> Technologies/measures Type of CPA	Hydro, Wind, Solar, Solar thermal and Geothermal	Solar thermal is deleted.	-
<u>B.2</u> Additionality	The conditions were not fully covered for additionality-related eligibility criteria	The conditions for Microscale, Investment Barriers and Positive technologies were adequately listed with the Guidelines on additionality of SSC.	CL-6 CL-7 CL-8
<u>B.2</u> Eligibility criteria	Not fully reported	Revision of eligibility criteria based on Std PoA	CL-4 CL-5
<u>B.6.2</u> Parameters of for the calculation of the grid emission factor; $EF_{CO_2,grid,y}$	Specific parameters of Kenya is missed in the PoA-DD but shown in the CPA-DD	Specific parameters of Kenya included in section B.6.2 of the PoA-DD	CL-15
<u>C.</u> Management system	Not fully reported	Management plan was revised based on inputs from SB and following par 17 of EB 65 Annex 3	CL-9, CL-10
<u>D.1</u> Start date of the PoA	01/07/2012	21/01/2012 (DDs uploaded on the website of UNFCCC for Global Stakeholder Consultation (GSC))	CL-21
Generic CPA (Part II of PoA-DD)			
General	Separated document as a Generic CPA-DD	Unified with PoA-DD as a Part II of PoA-DD	
General	Blank form of [technology]	Generic CPA-DD of each technologies are reported such as Hydro, Wind, Solar PV and Geothermal respectively.	
B.1 Reference of Standards and Guidelines	VVM and its related Guidelines	<ul style="list-style-type: none"> <li>VVS and the related Standards, and Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0) are applied.</li> </ul>	-
Specific CPA (CPA-001)			
<u>A.5. Physical/ Geographical boundary</u> Figure 1. Map of project location	Detailed map of Njega site is reported	Country map of Kenya is added.	CL-20c
<u>A.5.</u> Technical description of the CPA	Major technical specifications are not reported	Major technical specifications are tabulated.	CAR-3, CL-19
<u>A.8.1</u>	01/07/2012	01/09/2013	CL-21

Start date of the CPA-001			
<u>A.9.2; D.6.4</u> Crediting period	01/07/2014 – 31/12/2014	01/09/2015 – 31/08/2022	CL-21
<u>D.4.</u> Baseline scenario	The baseline scenario is reported in Annex 3	The baseline scenario is reported in D.4 of CPA-DD.	CL-14 CL-15 CL-16
<u>A.10; D.6.4</u> ERy	18,682 tCO <sub>2</sub> e/y	18,442 tCO <sub>2</sub> e/y is re-calculated in according to Detailed Project report (DPR)	CL-27c
<u>D.7.2</u> Monitoring plan	The monitoring plan is summarized.	Details plan is reported: - Figure 8. Monitoring organization, - Figure 9. Metering system location - QA/QC procedures	CL-28 a, b ,c

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

The on-site visit and interviews with project stakeholder were held from 26 to 29 March 2012 at the project site.

The names of interviewees are listed below.

**Tale 4 List of interviewees**

Ref. No.	Date	Organization/ Attendance	Topics
/101/	26/03/2012	<u><b>Uni-Power Limited (UPL)</b></u> - Mr. Hon. Norman MGK Nyagah - Mr. Nand Gopal <u><b>Strategic Consulting Group (SCG)</b></u> - Mr. Nikhil Jaipurkar	➤ Meeting with UPL and SCG in UPL's office ➤ Introduction of JCI ➤ Introduction of UPL and the Project ➤ Discussion with UPL and SCG on the project timeline and documents to be assessed based on the Documents List prepared by JCI
/102/	27/03/2012	<u><b>Local government</b></u> - Muchiri Mbicho <u><b>Local Residents (Farmers)</b></u> - Gabriel (Mr), - Mbogo(Mr), - Samuel Mbogo(Mr), - Karani(Mr)	➤ Interview with Local government official and Local residents (Farmers)
/103/	28/03/2011	<u><b>Kenya Power and Lighting Company (KPLC)</b></u> - Dennis Koimett	➤ Interview with KPLC
/104/	28/03/2011	<u><b>GIBB International (GIBB)</b></u> - Mr. Alex M Mutiso - Mr. Caleb Ouma	➤ Interview with EIA Author

		- Ms. Eunice	
/105/	28/03/2011	<b><u>Carbon Africa Limited (CAL)</u></b> - Mr. Adriaan Tas - Mr. Carlos Guerrero - Ms. Faith Nangabo	➤ Interview with CA <ul style="list-style-type: none"> <li>• Initial findings</li> <li>• Timeline/Milestones</li> <li>• New Findings during On-site Assessment</li> </ul>

## IV. VALIDATION FINDINGS

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

The final validation findings relate to the project design as documented and described in the revised and resubmitted project design documentation.

### Findings issued through the validation

JCI issues four (4) CARs, twenty eight (28) CLs and one (1) FAR as shown in the Validation Protocol, Appendix A of this report. All the CARs and CLs are resolved and then closed as shown in the Table 2 of the Appendix A. One (1) FAR is remained as not closed and will be cleared until the starting operation of the project.

Major issues and its resolution process through the CARs and CLs are described in following items according to VVS.

## 1. Approval and authorization

### 1.1 Approval

JCI assesses applicability on approvals of the project activity in accordance with the Para.38 through 44 of VVS.

The requirement of the Para.38 of VVS is stated "*To be determined whether the designated national authority (DNA) of each Party indicated as being involved in the proposed CDM project activity in the PDD has provided a written letter of approval*".

JCI ensures the letter of approval (LoA) of host countries such as Kenya/2-01A/ and Rwanda/2-01B/ which are provided from the CME of PoA to JCI on 12/11/2011.

#### 1) Approval of Kenya (Sec. G of PoA)

- The LoA/2-01A/ is clearly reported in accordance with the Para.39 (a) through (d) of the VVS.
  - (a) Government of Kenya is the party to the Kyoto Protocol.
  - (b) The participation is voluntary.
  - (c) The proposed PoA contributes to the sustainable development of Kenya.
  - (d) The LoA/2-01A/ refers to the precise proposed PoA title in the DDs being submitted for registration.
- The LoA is unconditional with respect to the Para.39 (a) through (d) of VVS (Para.40 of VVS).
- The LoA has been issued by the respective Kenyan DNA, National Environment Management Authority (NEMA) of Kenya, on 07/11/2012 and is valid for the proposed project activity under validation (Para.41 of VVS).

#### 2) Approval of Rwanda (Sec. G of PoA)

- The LoA/2-01B/ is clearly reported in accordance with the Para.39 (a) through (d) of VVS.
  - (a) Rwanda has ratified the Kyoto Protocol on 22 July 2004.
  - (b) The participation is voluntary basis.
  - (c) The proposed PoA contributes to the sustainable development of Rwanda as Host country.
  - (d) The LoA/2-01B/ refers to the precise proposed PoA title in the DDs being submitted for registration.
- The LoA is unconditional with respect to the Para.39 (a) through (d) of VVS (Para.40 of VVS).
- The LoA has been issued by the respective Rwandan DNA, Rwanda Environment Management Authority (REMA), on 09 July 2012 and is valid for the proposed project activity under validation (Para.41 of VVS).

As a result, the Table 5 is shown the summary of the above assessment on the LoAs.

**Table 5 Summary of the assessment result on LoAs**

Para. No. VVS	Requirement of VVS	Kenya /2-01A/	Rwanda /2-01B/	JCI's determination
39(a)	Kyoto Protocol	OK	OK	OK
39(a)	Voluntary participation	OK	OK	OK
39(a)	Sustainable development	OK	OK	OK
39(a)	PoA title	OK	OK	OK
40	Unconditional	OK	OK	OK
41	Issued date	OK	OK	OK

JCI judges the results are reported appropriately and complied with the Para.39 (a) through 42 of the VVS.

JCI also judges for the Party involved in accordance with the Para.43 of VVS:

- (a) The LoAs of host countries/2-01A, 2-01B/ have been provided to JCI.
- (b) The LoAs/2-01A, 2-01B/ have been transferred to JCI from the project participants (CME of PoA) on 12/11/2012.
- (c) The means of validation employed to assess the authenticity is applied with the Para.42 of VVS.
- (d) The LoAs/2-01A, 2-01B/ have complied with the Para.39 (a) through (d) of VVS.

By the way, the Para.44 of VVS is not applicable, because the LoAs do not refer to a specific version of the validation report (Para.44 of VVS).

Therefore, JCI determines the approvals of the proposed PoA are appropriate and complied with the Para.38 through 44 of VVS. Although CAR-1 is raised for justification of LoAs, it is resolved and closed.

## 1.2 Authorization

JCI assesses authorization of the CME and the project participant of CPA-001 (implementing entity) in accordance with the Para.45 through 49 of VVS.

The requirement of the Para.45 of VVS is stated "*To be determined whether each project participant has been authorized by at least one Party involved in a letter of approval*".

JCI judges the followings:

### 1) Authorization of Kenya (Sec. G of PoA)

- The CME of PoA is Standard Bank Plc (SB) of United Kingdom of Great Britain and Northern Ireland (UK). SB has been authorized by Kenyan DNA involved in the LoA/2-01A/ (Para. 45 of VVS).
- JCI judges that SB is listed in tabular form in Section A.4 of the PoA-DD and that the information is consistent with the information provided in the section that contains the contact information on CME (Para. 46 of VVS).
- No entities other than those authorized as CME is included in these sections of the DDs (Para. 47 of VVS).

## 2) Authorization of Rwanda (Sec. G of PoA)

- The CME of PoA is SB of UK. SB has been authorized by Rwanda DNA involved in the LoA/2-01B/ (Para. 45 of VVS).
- JCI judges that SB is listed in tabular form in Section A.4 of the PoA-DD and that the information is consistent with the information provided in the section that contains the contact information on CME (Para. 46 of VVS).
- No entities other than those authorized as SB is included in these sections of the DDs (Para. 47 of VVS).

By the way, JCI identifies the proposed PoA is a unilateral project. The CME does not have an Annex I Party LoA at the time of registration. JCI raises FAR-4 for providing a written LoA of Annex I Party to the EB before to be received CERs.

As a result, JCI determines the authorization of the proposed PoA including CPA-001 is reported appropriately and compiled with the Para.45 through 49 of VVS.

## 1.3 Contribution to sustainable development

JCI assesses the contribution to sustainable development of the proposed PoA including CPA-001 in accordance with the Para.50 through 52 of VVS.

The requirement of the Para.50 of VVS is stated "*To be confirmed that the DNA has considered whether the proposed CDM project activity assists the host Party in achieving sustainable development*".

JCI checks the proposed PoA-DD and specific CPA-DD (CPA-001). Sustainable development is demonstrated in these DDs as follows:

### 1) PoA-DD (Sec. A.2.)

- *The project will provide clean and reliable electricity to the national grid systems incorporated in the program.*
- *The project will be expected to provide local employment opportunities during the construction and operation phase of the projects.*
- *The project will be expected to contribute to the fiscal revenues through payment of taxes.*
- *The project will improve the hydrocarbon trade balance through reduction of oil imports used for electricity generation.*
- *The project will reduce the consumer price of electricity.*

JCI refers the "Kenya Vision 2030"/6-01/ which is national development strategy plan of Kenya issued by Government of the Republic of Kenya and confirms the contribution to sustainable development of the proposed PoA is reported appropriately.

As the above assessment, JCI judges the national development strategy and the appropriateness on the contribution to sustainable development of the proposed PoA in Rwanda have conformity with Kenya.

## 2) CPA-DD (Sec. A.3. of specific CPA)

- *The project is expected to provide clean and reliable electricity to the national grid system in Kenya<sup>5</sup>.*
- *The project will be expected to provide local employment opportunities during the construction and operation phase.*
- *The project will be expected to contribute to Kenya's fiscal revenues through payment of taxes.*
- *The project will improve the hydrocarbon trade balance through reduction of oil imports used for electricity generation.*
- *The project will reduce the consumer price of electricity<sup>6</sup>. All electricity tariffs in Kenya are liable to a fuel cost charge, which is calculated monthly and published in the "Kenya Gazette"<sup>7</sup>.*

As a result, JCI refers the evidences and determines that the Kenyan LoA confirms the contribution of the proposed PoA and CPA-001 activity to the sustainable development of Kenya (Para.51 and 52 of VVS).

## 2. Modalities of Communication

JCI assesses modalities of communications of the proposed PoA and CPA-001 in accordance with the Para.53 through 61 of VVS.

### 2.1 General

The requirement of the Para.53 of VVS is stated *"To be validated the corporate identity of all project participants and focal points included in the Modalities of Communication (MoC) statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories"*.

JCI checks the consistency between the requirement and the description of MoC (Para.54 (a) through (c) of VVS):

- (a) Evidence for corporate, personal identity and other relevant documentation;*
- (b) Confirming notarized documentation; or*
- (c) Written confirmation from the CME that submits to it the MoC statement that all corporate and personal details, including specimen signatures, are valid and accurate.*

JCI ensures that the MoC statement is received from the CME in accordance with the Para.54(c) (Para.55 of VVS).

JCI ensures that the CME official of PoA who submitted the MoC statement to JCI and the CME official of PoA who signed the written confirmation are duly authorized to do so on behalf of the respective CME of PoA (Para.56 of VVS).

JCI judges the diligence on the MoC statement in accordance with the requirements of VVS (Para.58 of VVS).

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<sup>5</sup> This is in line with "Kenya Vision 2030"/6-01A, 6-01B/, which recognizes reliable and cheap energy as one of the foundations for economic growth and essential for making Kenya a middle-income country by 2030.

<sup>6</sup> This is in line with the "2008 Schedule of Tariffs for Supply of Electricity"/3-01B/ by the Kenya Power and Lighting Company Limited, all electricity tariffs in Kenya are liable to a fuel cost charge, which is calculated monthly and published in the "Kenya Gazette"

<sup>7</sup> "Kenya Gazette" is an official publication of the government of the Republic of Kenya. It contains notices of new legislation, notices required to be published by law or policy as well as other announcements.  
<http://www.kenyalaw.org/klr/index.php?id=32>

## 2.2 Modalities of communication statement Validation requirement

The requirement of the Para.59 of VVS is stated "*To be validated that the MoC statement is correctly completed and duly authorized*".

JCI judges the following (Para.60 (a) through (c) of VVS):

- (a) The latest version of the form "*Modalities of Communication statement (F-CDM-MOC)*" is used;
- (b) The information required as per the F-CDM-MOC, including its Annex 1, is correctly completed;
- (c) The project participant's authorized signatories signing the *F-CDM-MOC* correspond to the project participant's authorized signatories included in *F-CDM-MOC, Annex 1*.

Therefore, JCI determines that the MoC statement has complied with all relevant forms and complied with the Para.59 through 61 of VVS.

## 3. Management System

The requirement of the Para.186 of VVS is stated "*To be reported the management system in accordance with the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities*" (hereafter called Std PoA) /7-21/.

On the other hand, the requirement of the Para.20 of the Std PoA is stated "*To be assessed the elements of the management system referred to in the Para.19 as part of the validation of the PoA or as part of the validation of the CPA inclusion*".

JCI assesses the management system of the proposed PoA including CPA-001 on the following view points:

- 3.1 Management system of CME
- 3.2 CME responsibilities for PoA
- 3.3 Entity/individual responsibilities for each CPA
- 3.4 CPA implementer responsibilities for CPA-001

### 3.1 Management system of CME (Sec. C of PoA-DD: Part I)

The requirement of the Para.19 of Std PoA is stated "*To be assessed whether the proposed CME has developed and will implement a management system that includes the following made available to the DOE at the time of validation of the PoA*".

The Table 6 is shown the management system in the PoA, descriptions of PoA-DD and summary of JCI's determination in accordance with the Para.19 (a) through (g) of Std PoA/7-21/.

**Table 6 Assessment on the management system in PoA-DD**

Requirement of Para.19 of Std PoA	PoA-DD (Sec. C of PoA: Part I)	JCI's Determination
(a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their <b>competencies</b> ;	<p>The CME inclusion will involve the following people:</p> <ol style="list-style-type: none"> <li>1. Standard Bank Plc (SB) Lead who will represent Standard Bank in managing the CME responsibilities and is specifically responsible for the IMS operator</li> <li>2. SB Staff who will be a Standard Bank employee involved in related projects</li> <li>3. SB Client who is Standard Bank's client with an</li> </ol>	OK. The roles and responsibilities of personnel involved in the process is complied with the CPA

	<p>involvement or interest in the CPA</p> <p>4. Inclusion Management System (IMS) Lead and IMS Staff, i.e. who constitute the IMS operator. He/she has the accountability for executing the CPA Inclusion Management System. The IMS Staff will work under the IMS Lead. Standard Bank will ensure that these resources i.e. the CPA Operator are suitably qualified and experienced to ensure the efficient and effective operation of the CPA-IMS.</p> <p>A RACI-VS (Responsible, Accountable, Consulted, Informed, Verifier, Signatory) responsibility assignment matrix as a framework for specifying key roles in discharging sub-processes will be employed. The addition of the Verifier, Signatory roles to the traditional RACI matrix recognises that while the ‘CPA-IMS Operator’ (in-house or outsourced resources that are operating the system) is engaged to implement the CPA-IMS, ultimate responsibility lies with the Standard Bank Plc as the CME.</p> <p>Specific roles of the CPA-IMS operator and the Standard Bank staff are described in section C of the PoA-DD.</p> <p>Individual CPAs will be developed and implemented by CPA entities. The CPA entities will be responsible for the operation and maintenance of the renewable energy power plant and will enter into a power purchase agreement, wheeling agreement or similar contractual arrangement with the electricity off-taker, and where relevant the end user, for the supply of electricity.</p> <p>A CPA entity will also enter into a PoA Participation Agreement with the CME for participation in the proposed Programme of Activities.</p>	<p>Inclusion Management System/4-10/ and it is applicable.</p>
<p><i>(b) Records of arrangements for <b>training and capacity development</b> for personnel;</i></p>	<p>The CME shall conduct training and capacity building exercises for any entity involved in the IMS (Inclusion Management System) based on any identified needs collected in a personnel training and development register in order to ensure that continuous improvements of the PoA management system is taking place. The training would include information on the latest EB guidelines on PoA development, CPA inclusion, monitoring, verification and issuance. An annual review of the CPA IMS staff will be undertaken and appropriate measures undertaken to ensure continuous development of their skills.</p>	<p>OK. The records for training system is complied with the CPA Inclusion Management System/4-10/ and it is applicable.</p>
<p><i>(c) Procedures for <b>technical review</b> of inclusion of CPAs;</i></p>	<p>As part of the responsibilities of the CPA-IMS operator, a technical review of a proposed CPA will be carried out prior to the petition of inclusion to the DOE. The CPA-IMS operator will first collect and compile all the supporting evidences stated in the eligibility criteria, and make sure it does comply accordingly with all the eligibility requirements as per the PoA-DD. The CPA-IMS operator will also verify the authenticity of those documents by consulting with national or local authorities when necessary. Finally, the CPA-IMS operator will verify that the CPA has not yet been developed as a single CDM project or been included in another PoA by means of checking the CDM website</p>	<p>OK. The procedures for technical review is complied with the CPA Inclusion Management System/4-10/ and it is applicable.</p>

	<p>database, and any other documentation that may lead to such an event. An additional quality check will be done whereby another staff member from the IMS operator, not directly involved in the development of the CPA-DD will review the CPA-DD.in line with CPA-DD Internal Review Checklist. The check list is shown in section C of the PoA-DD.</p>	
<p><i>(d) A procedure to <b>avoid double counting</b> (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);</i></p>	<p>The following procedure will be established to avoid double accounting and avoid the case of including a new CPA or as a CPA of another PoA:</p> <ol style="list-style-type: none"> <li>1. Entities implementing a CPA will sign a confirmation, confirming that the project has not yet been included in another Programme of Activities or has not yet been registered as a single CDM project activity</li> <li>2. Before inclusion of a CPA, the CME will check the UNFCCC CDM project database for registered projects applying the same technology and methodology, and implemented in the same location. In case similar projects are found in the same location, the available project documentation will be further scrutinized to confirm that the registered project is different from the proposed CPA.</li> </ol>	<p>OK. The procedure to avoid double counting is complied with the CPA Inclusion Management System/4-10/ and it is applicable.</p>
<p><i>(e) Records and <b>documentation control process</b> for each CPA under the PoA;</i></p>	<p>The CME will develop and maintain an electronic database, which will contain essential data and information about each CPA, including:</p> <ol style="list-style-type: none"> <li>1. General information about CPA:</li> <li>2. Supporting evidence for each eligibility criterion to demonstrate that the CPA meets all the eligibility criteria for inclusion into the PoA.</li> <li>3. Data and information regarding the monitoring of emission reductions achieved by the CPA in line with the monitoring plan as formulated in the PoA-DD.</li> </ol> <p>General information regarding the CPA will be entered once into the database. Data and information regarding monitoring of greenhouse gas emissions will be entered on a regular basis as per the requirements of the monitoring plan. All data collected as part of monitoring will be archived electronically and be kept at least for 2 years after the end of the last crediting period.</p> <p>The CPA-IMS Lead operator appointed by the CME will be responsible for entering, updating and maintaining data and information regarding CPAs into the electronic database and will have read and write access. Other CPA-IMS Lead staff will only have read access to the data and records. Standard Bank (and the ‘SB Lead’ as its representative), as the ultimate ‘owner’ of the system, has full ownership and access to all data and systems.</p> <p>The CPA-IMS record keeping and document processes are based on standards for quality management systems (e.g. ISO 9001) documentation requirements, which consist of:</p> <ol style="list-style-type: none"> <li>1. Establishing and maintaining a ‘Quality Manual’;</li> <li>2. Procedures for control of documents; and</li> <li>3. Procedures for control of records.</li> </ol> <p>This database and other records applicable will be stored in a market leading cloud based management system that will provide the necessary infrastructure for managing document</p>	<p>OK. The documentation control process is complied with the CPA Inclusion Management System/4-10/ and it is applicable.</p>

	security, access and version control.	
<i>(f) Measures for continuous improvements of the PoA management system;</i>	<p>As per standards for quality management systems (e.g. ISO 9001) the ‘CPA-IMS operator’ will plan and implement monitoring and improvement processes needed to achieve the following</p> <ul style="list-style-type: none"> <li>– Demonstrate conformity and quality to the agreed specification</li> <li>– Ensure conformity to the management system and</li> <li>– Continually improve the management system</li> </ul> <p>In order to achieve continual improvement data will be collected in areas of customer satisfaction (where the customer is the CPA implementing entity), process performance, and product quality (where the product is the CPA-DD development process and management of the inclusion of the CPA) and the implementation of the overall management system.</p> <p>The results from this collection will be analysed and action taken to improve the effectiveness and efficiency of the system. A Management System Improvement Plan will be developed every 6 months which will detail the actions to improve the management system based on analysis of the measurement and monitoring activities.</p> <p>Additionally, training and capacity building for personnel involved in the inclusion of the CPAs will be carried out as outlined as above.</p>	OK. The measures of the PoA management system is complied with the CPA Inclusion Management System/4-10/ and it is applicable.
<i>(g) PoA subscription (Any other relevant elements).</i>	Each CPA will enter into a PoA Participation Agreement with the CME. The PoA Participation Agreement will include a confirmation that the entity implementing the CPA is aware and agrees that the CPA is being subscribed to the PoA.	OK. The PoA subscription is applicable.

As a result of above assessment, JCI judges the elements of the management system for inclusion of a CPA in the PoA is complied with the Para.19 and 18 of Std PoA/7-21/.

### 3.2 CME responsibilities for PoA-DD (Sec. A.2. of PoA-DD: Part I)

The CME responsible for the proposed PoA is stated in the PoA-DD such as:

- *Development of the PoA-DD and CPA-DD for CPAs that are developed under the PoA;*
- *Obtaining a LoA for the implementation of the PoA from the host country;*
- *Obtaining letter of authorization of the coordination of the PoA from the host country;*
- *Liaise with the DNA on matters related to the implementation of the PoA and inclusion of CPAs*
- *Carry out a quality check on CPAs to be included in the PoA;*
- *Collect and compile monitoring records from all the CPA entities;*
- *Coordinate monitoring activities and data management during the lifetime of the PoA;*
- *Prepare and submit monitoring reports and facilitate the verification of the same;*
- *Act as the focal point with the CDM EB for matters related to the PoA;*
- *During the lifetime of the PoA, maintenance of all monitoring reports of all CPAs in accordance with record keeping systems outlined in the PoA-DD;*

JCI judges the appropriateness on CME responsible for the proposed PoA described in the A.2. of PoA-DD (Part 1) that:

- 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.
- CME develops and implements the elements of management system that includes the following made available to JCI at the time of validation of the PoA.
  - (a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies;
  - (b) Records of arrangements for training and capacity development for personnel;
  - (c) Procedures for technical review of inclusion of CPAs;
  - (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);
  - (e) Records and documentation control process for each CPA under the PoA;
  - (f) Measures for continuous improvements of the PoA management system;
  - (g) Any other relevant elements.

Therefore, JCI determines the CME responsibilities for the proposed PoA stated in the PoA-DD is reported appropriately and complied with the Para.19 through 22 of the Std PoA/7-21/ and Para.186 of the VVS.

### **3.3 Entity/individual responsibilities for each CPA (Sec. A.2. of PoA-DD: Part I)**

The responsibilities of Entity/individual responsible for each CPA for the proposed PoA are stated in the PoA-DD as follows:

- *Operating the CPA for the duration of the project;*
- *Keeping records of parameters as per the monitoring plan and provide hard and electronic records to the CME on a regular basis;*
- *Making available staff for validation and verification where applicable;*

JCI judges that the CPAs will be included in the PoA on the basis that the JCI has confirmed the eligibility of CPAs where applicable undertaking sample-based checks in accordance with the approved guidelines/standard from the Board.

Therefore, JCI determines the entity/individual responsible for each CPA for the proposed PoA is reported appropriately and complied with the Para.19 of the Std PoA/7-21/.

### **3.4 Responsibilities of CPA implementing entities for CPA-001(Sec. A.3. and D.7.2. of CPA-DD)**

The CPA responsible for CPA-001 implementing entity is stated in the specific CPA-DD (CPA-001) such as:

- *The entity responsible for the implementation of the CPA-001 will be Uni-Power Limited (UPL).*
- *Contributing sustainable development such as to provide clean and reliable electricity to the national grid system in Kenya.*
- *Having responsible for the technical aspects related to on-site monitoring such as a) employment and training of personnel responsible for gathering and recording monitoring data and b) calibration and maintenance of metering equipment*

JCI checks the appropriateness of CPA responsible for CPA-001 implementing entity by following evidences.

- The company profile of UPL/4-01B/
- The company profile of Hydel Engineering and Construction Company Limited./4-01A/ (hereafter called "Hydel")

JCI judges that:

- UPL is the CPA-001 implementing entity of the proposed PoA and subsidiary of Hydel according to the company profile/4-0A, 4-04B/.
- PoA participation agreement /3-02/ between CME (SB) and CPA-001 implementing entity (UPL) has been concluded on 14/11/2011.
- Quadco One Hundred and Fifty Seven Limited has changed the company's title to UPL on 10/02/2011/ in accordance with the Certification issued by the Registrar of Companies.

Therefore, JCI determines the responsibilities for the proposed CPA-001 implementing entity stated in the CPA-DD is appropriate and complied with the description above "3.2 Entity/individual responsible for each CPA".

## 4. CPA design document

According to the Para.187 and 188 of VVS, JCI assesses the project design document of the proposed CPA.

The requirement of the Para.187 of VVS is stated "*To be assessed any proposed CPA that a CME wishes to include in the PoA, to determine whether it complies with the eligibility criteria specified in the PoA-DD. The means of validation to determine compliance with this requirement will be specific to the PoA*". Also the Para.187 of VVS is "*To consider a desk review of the documentation sufficient to determine compliance in certain instances and also consider follow-up interviews and/or site visits necessary for other types of PoA*".

Through desk reviews, follow-up actions (On-site visit, interviews) with the CME, JCI judges that:

- The proposed CPA-001 is complied with the eligibility criteria specified in the PoA-DD. The assessment of the eligibility criteria which requested based on the Para.16 (a) through (l) of Std PoA is demonstrated in the "*Section 7 Eligibility criteria for inclusion of a CPA in the PoA*" in this report.
- The proposed CPA-001 is complied with the requirements of specific to the PoA such as;  
Para.16(j): Sampling requirements is not applicable because no sampling will be used in the verification of the CPAs.
- The CPA-DD is reported based on and referring to the following relevant tools, guidance, guidelines, and manual:
  - (a) AMS-I.D. "Grid Connected Renewable Electricity Generation" (Version 17.0)/7-01/
  - (b) Tool to Calculate the Emission Factor for an Electricity System (Version 02.2.1)/7-02/
  - (c) Tool to calculate project or leakage CO<sub>2</sub> emissions from fossil fuel combustion (version 02)/7-16/
  - (d) -Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0)/7-03/
  - (e) Guidelines for demonstrating additionality of micro-scale project activities (version 04.0)/7-09/
  - (f) Guidance for determining the occurrence of de bundling under a Programme of Activities (version 03.1)/7-10/
  - (g) Tool for the demonstration and assessment of additionality (versions 06.1.0)/7-23/
  - (h) F-CDM-SSC-PoA-DD: Programme design document form for small-scale CDM programmes of activities (Version 02.0)/7-04/
  - (i) F-CDM-SSC-CPA-DD: Component project activity design document form for small-scale component project activities (Version 02.0)/7-05/
  - (j) Glossary of CDM terms (Version 07.0) /7-07/

(k) *CDM Validation and Verification Standards (Version 03.0)7-08/*

(l) *2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2 Energy: p. 1.23-1.24/7-18/*

Therefore, JCI concludes the project design document of the proposed CPA is reported appropriately and complied with the requirement of Para.187 and 188 of VVS.

## 5. Description of a PoA/CPAs

According to the Para.189 of VVS, JCI assesses the appropriateness of description of a proposed PoA and CPA-001.

The requirement of the Para.189 of VVS is stated "*To be confirmed the framework developed for the implementation of the PoA, and defining a CPA under the PoA*".

JCI assesses the description of the proposed PoA including CPA-001 on the following view points:

- 5.1 *Description of a PoA*
- 5.2 *Description of a CPA-001*

### 5.1 Description of a PoA

JCI judges the following frameworks developed for the implementation of the PoA.

- (a) Policy/measure or stated goal of the PoA is to support the development and implementation of small-scale renewable energy projects in East Africa. The programme will target countries in East Africa, including, Kenya and Rwanda.
- (b) The stated goal of the PoA is to displace grid-connected, fossil fuel based electricity generation through the promotion of renewable energy based electricity generation in East Africa, thereby reducing greenhouse gas (GHG) emissions.
- (c) The program is expected to contribute to sustainable development.
- (d) SB will act as the CME and they will be responsible for PoA such as:
  - Developing of the PoA-DD and CPA-DD for CPAs that are developed under the PoA;
  - Obtaining a LoA for the implementation of the PoA from the host country;
  - Obtaining letter of authorization of the coordination of the PoA from the host country;
  - Liaising with the DNA on matters related to the implementation of the PoA and inclusion of CPAs;
  - Carrying out a quality check on CPAs to be included in the PoA;
  - To collect and compile monitoring records from all the CPA entities;
  - To coordinate monitoring activities and data management during the lifetime of the PoA;
  - To prepare and submit monitoring reports and facilitate the verification of the same;
  - Acting as the focal point with the CDM EB for matters related to the PoA;
  - During the lifetime of the PoA, maintenance of all monitoring reports (MR) of all CPAs in accordance with record keeping systems outlined in the PoA-DD;
- (e) Each CPA entities will be responsible for the implementation of individual CPAs under the PoA such as:
  - Operating the CPA for the duration of the project;

- Keeping records of parameters as per the monitoring plan and provide hard and electronic records to the CME on a regular basis;
- Making available staff for validation and verification where applicable;

(f) Confirmation that the proposed PoA is a voluntary action by the coordinating/managing entity.

Therefore, JCI determines the accuracy and completeness of the project description of PoA is complete, and well outlined the nature and technical aspects of the project activity.

## 5.2 Description of a CPA-001

JCI assesses accuracy and completeness of the project description of CPA-001.

- The Njega 5 MW Small Hydro project activity forms part of the EA-REP that seeks to promote grid-connected small-scale renewable energy projects in East Africa.
- The entity responsible for the CPA-001 is UPL.
- The proposed project activity will install a greenfield plant.
- The project will be located in Kirinyaga County in the Central Province in the Republic of Kenya.
- The project will install 5 MW of hydropower generation capacity and is expected to have a gross annual electricity generation of 32,530 MWh/y.
- The applied methodology is AMS-I.D (version 17) and the expected annual net electricity generated by the project 32,205 MWh. Electricity will be supplied to the Kenyan national grid system.
- Annual emission reduction of 18,442 tCO<sub>2</sub>/y will be achieved through the replacement of electricity generated by fossil fuel fired power plants connected to the grid system.
- CPA contributes to sustainable development.

JCI raises the following CLs:

- CL-19: To be clarified the definition of "run-of river".- CL-20b: To be clarified the location of Detailed Project Report (DPR)/1-03/ (Fig 1.1, page 5), because it is not inconsistent with specific CPA-DD. According to the Google map, 00°32'51"S, 37°20'11"E is just Kirinyaga County, not the location of DPR is pointed Eldoret County (00°32'N, 35°20'E). The CME of PoA demonstrated that the location in DPR is an error by the DPR authors and the geo-coordinate is correct. The correct project area is however clearly described in the page 7 of DPR (table 1.5) in which the report mentions that the project is in Kirinyaga. JCI judges the map is appropriate and CL-20b is closed.
- CL-20c: To be clarified make more clear Figure 1 of CPA-DD-001. The CME of PoA demonstrated that the figure has been modified. The maps presented together with their coordinates give clear indication of the project location. The third map was deleted as its information is already reflected in the other two remaining maps. JCI judges the deviation is appropriate and CL-20c is closed.- CL-21: To be clarified the expectation of the start date of the project. The CME of PoA updates the start date from 01/07/2012 to 01/09/2013, because the date is expected signing date of the equipment supplier of CPA-001. JCI judges the start date is appropriate and CL-21 is closed.

Therefore, JCI judges the accuracy and completeness of the project description of CPA-001 is complete, and well outlined the nature and technical aspects of the project activity.

As a result, JCI determines the framework developed for the implementation of the PoA, and defining a CPA under the PoA are reported appropriately and complied with the Para.189 of VVS.

## 6. Additionality of a project activity

According to the Para.193 and 195 of VVS, JCI assesses the additionality of a project activity as follows:-

- 6.1 *Demonstration of additionality of the PoA as a whole*

- 6.2 *Start date of a PoA/CPA*

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

JCI assesses that the demonstration of additionality of a PoA as a whole according to the requirement of the Para.195 of VVS. The Para.195 is stated the requirement such as, "*To be demonstrated the additionality in accordance with Std PoA/7-21/* (Para.7 through 14). Table 7 is shown assessment result on the demonstration of additionality of a PoA as a whole.

**Table 7 Assessment result on demonstration of additionality of a PoA as a whole**

Requirement of Std PoA	Description of PoA-DD	JCI Determination
<b><u>Para. 7 of Std PoA:</u></b> <b>Additionality</b> shall be demonstrated by establishing the in the absence of CDM, none of the implemented CPAs would occur.	As each SSC-CPA will comply with the eligibility criteria on additionality, it can also be concluded that in the absence of CDM and this PoA, none of the proposed SSC-CPAs would occur.	OK. The the demonstration of additionality in the Section B.1 of the PoA-DD is met with the requirement of Para.7 of Std PoA.
<b><u>Para. 8 of Std PoA:</u></b> PoAs that consist of one or more <b>microscale projects</b> as CPAs shall include eligibility criteria delivered from all the relevant requirements of the " <i>Guidelines for demonstration additionality of microscale project activities</i> ".	Each SSC-CPA is additional through the eligibility criteria on section B.2 (of PoA-DD) using the <i>Guidelines for demonstrating additionality of microscale project activities</i> (version 04.0, EB 68, Annex 26).	OK. The proposed PoA meets the additional requirements stated in the <i>Guidelines for demonstrating additionality of micro-scale project activities</i> " /7-09/.
<b><u>Para. 9 of Std PoA:</u></b> PoAs that consist of one or more <b>small-scale projects</b> as CPAs shall include eligibility criteria derived from all the relevant requirements of attachment A of Appendix B of the "Simplified modalities and procedures for small-scale CDM project activities".	Each SSC-CPA is additional through the eligibility criteria on section B.2 (of PoA-DD) using the <i>Guidelines on the demonstration of additionality of small-scale project activities</i> (version 09.0, EB 68, Annex 27).	OK. The proposed PoA meets eligibility criteria derived from all the relevant requirements of "Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0))" /7-03/.
<b><u>Para. 10 of Std PoA:</u></b> PoAs that consist of one or more <b>large scale projects</b> as CPAs shall include eligibility criteria derived from all the relevant requirements contained in the additionality section of the large scale methodologies.	All CPAs under this PoA will apply the small-scale baseline and monitoring methodology AMS-I.D. " <i>Grid connected renewable electricity generation</i> (version 17)" as the installed capacity will be equal or below than 15 MW.	OK. Para.10 of Std PoA is not applicable, because Para.10 is a requirement for large scale projects.
<b><u>Para. 11 of Std PoA:</u></b>	-	OK. Para.11 of Std PoA is not applicable, because the proposed

Large-scale CPAs, small-scale CPAs and microscale CPAs may be included in the same PoA. The “Guidelines for demonstrating additionality of microscale project activities” may be applied to a large-scale or small-scale CPA if all of the units in the CPA are below the microscale thresholds. The “Guidelines on the demonstration of additionality of small-scale project activities” may be used for small-scale CPAs only.		PoA is not applied with large scale CPAs.
<b><u>Para. 12 of Std PoA:</u></b> The large-scale PoA design document (PoA-DD) form and the large-scale CPA design document (CPA-DD) form shall be used for PoAs applying both large-scale and small-scale methodologies.	-	Para.12 of Std PoA is not applicable, because the proposed PoA is not applied with large scale CPAs.
<b><u>Para. 13 of Std PoA:</u></b> The CME shall demonstrate that compliance with the additionality-related eligibility criteria set in the PoA design document will ensure that all the relevant additionality-related guidelines, tools or any requirements embedded in the methodologies are met.	Each SSC-CPA will comply with the eligibility criteria on additionality.	OK. The eligibility criteria on additionality is reported in B.2. of PoA-DD (Part I of PoA-DD) appropriately.
<b><u>Para.14 of Std PoA:</u></b> For PoAs involving combinations of technologies/measures and/or methodologies, the eligibility criteria relative to each of them shall be proposed to demonstrate additionality. Types of combination as indicated in paragraph 31(a) to 31(d) shall be taken account.	All CPAs under this PoA will apply the small-scale baseline and monitoring methodology AMS-I.D. " <i>Grid connected renewable electricity generation (version 17)</i> " as the installed capacity will be equal or below than 15 MW.  Renewable energy technologies implemented under the programme will include small hydro, wind, solar photovoltaic and geothermal. Biomass projects are excluded from the programme.	OK. Para.31(b) of Std PoA is applicable for the all CPAs under the proposed PoA, because the proposed PoA will be applied AMS-I.D. and involved combinations of technologies/measures of All CPA's under this PoA i.e. small hydro, wind, solar photovoltaic and geothermal.

Therefore, JCI judges the demonstration of additionality of a PoA is well reported in the PoA-DD (Part I of PoA-DD). On the other hand, CME has demonstrated the additionality of PoA in the PoA-DD such as:

- *Although progress has been made in East Africa, there are many barriers hampering the development and implementation, especially lack of access to capital.*
- *The energy sector faces serious challenges with respect to mobilizing financing and relatively higher upfront investment costs as compared to fossil fuel based projects.*
- *CDM has been identified as one of the ways in which some of the barriers to the development and implementation of renewable energy projects in Africa can be overcome.*
- *The proposed PoA will use CDM revenues to overcome the financing barriers and, therefore, it can be concluded that this PoA would not be implemented in the absence of the CDM.*

JCI cross-checks the following documents on the trend of energy development in East Africa for the assessment of additionality:

- *"Kenya Vision 2030"/6-01/*: It is reported on long-term national development strategy plan of Kenya issued by the Government of the Republic of Kenya, especially economic vision and strategy adding value to Kenya's products and services, the social strategy investing in the people of Kenya, the vision to the future and implementing vision to 2030.
- *"2004 National Energy Policy, Sessional Paper on Energy"/6-02/*: It is reported on the overview of the energy sector in Kenya, energy demand and supply, energy policies and strategies and implementation plan.
- *"Feed-in-Tariffs Policy on Wind, Biomass and Small-Hydro Resource Generated Electricity"/6-13/*: It is reported on the promotion action for the development of renewable energy and fostering Independent Power Producer.
- *"Updated Least Cost Power Development Plan for the Study Period 2011-2031"/6-14/*: It is reported on the study for the existing situation of the Kenyan power sector, Kenyan natural resources, energy forecasting and load mapping, energy efficiency procedure and optimization.
- *"Research Solutions Africa"/6-16A, 6-16B/<sup>11</sup>*: It is reported on statistical data for the back-up generators and estimation of the total generation capacity in Kenya.

JCI undertakes the status of energy balance of demand/ supply in Kenya is slightly tight and judges the additionality would be established that in the absence of CDM, none of the implemented CPAs would occur (Para.7 of Std PoA/7-21/).

As a result of above assessment for the section 6.1 *"Demonstration on additionality of the PoA as a whole"*, JCI determines the additionality argument is demonstrated on "Additionality-related eligibility criteria" in the Section B.1 of the PoA-DD and the demonstration is complied with the requirement of Std PoA (Para.7 through 14)/7-21/ and the Para.195 of VVS.

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<sup>8</sup> "2004 National Energy Policy, Sessional Paper on Energy"/6-02/ is a comprehensive policy framework issued by the Government of the Republic of Kenya on 2004

<sup>9</sup> "Feed-in-Tariffs Policy on Wind, Biomass and Small-Hydro Resource Generated Electricity"/6-13/ issued by the Ministry of Energy, Kenya on January 2010.

<sup>10</sup> "Updated Least Cost Power Development Plan for the Study Period 2011-2031"/6-14/ issued by the Ministry of Energy, Kenya on March 2011

<sup>11</sup> "Research Solutions Africa" /6-16A, 6-16B/ is issued by Carbon Africa Limited on November 2011. /6-16A/ is final edition and /6-16B/ is a statistical data sheet.

## 6.2 Start date of a PoA/CPA

The Table 8 is shown the timeline on major key activity of the proposed PoA including CPA-001.

**Table 8 Timeline on major key activity**

Date	Key Activity	Evidence	JCI's Determination
12/04/2011	Mandate agreement between CFC and Hydel <b>(Decision of investment and CDM application)</b>	/3-11/	OK
26/05/2011	Stakeholder meeting (First meeting)	/4-03/	OK
August 2011	Detailed Project Report (DPR)	/1-03/	OK
21/10/ 2011	Draft PPA	/3-01/	OK
14/11/2011	PoA Participation Agreement (ERPA) with SB/Uni-Power	/3-02/	OK
07/12/2011	Stakeholder meeting (Second meeting)	/4-04, 4-05/	OK
21/01/2012	DDs uploaded on the website of UNFCCC for <b>Global Stakeholder Consultation (GSC)</b>	—	OK
21/01/2012	<b>The start date of the PoA</b>		OK
07/11/2012	LOA (Letter of Approval) of Kenya	/2-01A/	OK
09/07/2012	LOA (Letter of Approval) of Rwanda	/2-01B/	OK
01/09/2013	Signing date of the equipment supplier of CPA-001 (Expected) <b>(The start date of the CPA-001)</b>	—	OK
01/09/2015	First Crediting Period Start (Expected)	—	OK

The start date of the PoA has been decided on 21/01/2013. It is the uploaded date of the PoA-DD and Specific CPA-DD (CPA-001).

JCI judges the dates are in line with the CDM glossary (Version 07.0) that defines the start date as “the earliest date at which either the implementation or construction or real action of a CDM project activity or PoA begins”.

The Global Stakeholder Consultation (GSC) has been taken on 21/01/2012. It is the uploaded date of DDs on the website of UNFCCC. On the other hand, the signing date of the equipment supplier of CPA-001 will be expected on 01/09/2013. It is the date after start date of the PoA and complied with Para. 193 of VVS.

JCI raises CL-21 to clarify the expected start date and The CME of PoA demonstrated that the date is the expected date to sign with the equipment supplier after the finalization of the PPA and financial agreements. CL-21 is resolved and closed.

Therefore, JCI determines the timeline of the proposed PoA and CPA-001 is reported appropriately and the start date of the proposed PoA including CPA-001 is complied with the Para.193 of VVS.

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

According to the Para.196 of VVS, JCI assesses Eligibility criteria for inclusion of a CPA in the proposed PoA. The requirement of the Para.196 is stated to be assessed the criteria in accordance with the Para.15 through 22 of Std PoA/7-21/. The assessment is included as follows:

- 7.1 Eligibility criteria
- 7.2 Additionality-related eligibility criteria
- 7.3 Findings of CARs, CLs and FARs

### 7.1 Eligibility criteria

The requirement of the Para.15 of Std PoA is stated "To be developed eligibility criteria for inclusion of a CPA under the PoA and to include these criteria in the PoA-DD and demonstrate their usability to assess the inclusion of CPAs in the generic CPA-DD. Also the requirement of the Para.16 of Std PoA is stated "To be covered the eligibility criteria as a minimum".

Table 9(a) through 9(l) are shown the details of assessment result on each Eligibility criteria required in the Para. 16(a) through 16(l) of Std PoA/7-21/. The results are tabulated such as the CME's demonstration on PoA-DD (Section B.2, Part I), Generic CPA-DD (Sec. B.5, Part II), Specific CPA-DD (CPA-001) and JCI's determination.

**Table 9(a) Assessment result on the Eligibility criteria  
(Requirement of Para.16(a) of Std PoA; Geographical boundary)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
The <b>geographical boundary</b> of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA;	<b>PoA-DD (Sec. B.2, Part I):</b> CPA will provide detailed documentation regarding the exact geographical location of the project activity such as EIA report or feasibility study.	OK. JCI judges the demonstration of PoA-DD on the geographical boundary is applicable.
	<b>Generic CPA-DD (Sec. B.5, Part II):</b> The SSC-CPA's exact geographical location as shown in the detailed project documentation is within the geographical boundary set in section A.5 of the PoA-DD and more specifically within the Kenyan boundaries.	OK. JCI judges the demonstration of each Generic CPA-DDs on the geographical boundary are applicable.
	<b>Specific CPA-DD (CPA-001):</b> Ditto (See the Detailed Project Report page 7 table 1.5.)	OK. The geographical boundary is consistent with Project Design Report (PDR). JCI judges the demonstration of Specific CPA-DD on the geographical boundary is applicable.

**Table 9(b) Assessment result on the Eligibility criteria  
(Requirement of Para.16(b) of Std PoA; Avoid double counting)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
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<p>The CPA has not yet been included in another Programme of Activities or has not yet been registered as a single CDM Project Activity. <b>(Avoid double counting)</b></p>	<p><b>PoA-DD (Sec. B.2, Part I):</b> Signed confirmation from the entity implementing the CPA, confirming that the project has not yet been included in another PoA or has not yet been registered as a single CDM project activity. Each CPA will have a unique name, which will at least refer to the location, the technology and the installed capacity of the CPA.</p>	<p>OK. JCI judges the demonstration of PoA-DD on conditions that avoid double counting is applicable.</p>
	<p><b>Generic CPA-DD (Sec. B.5, Part II):</b> Ditto</p>	<p>OK. JCI judges the demonstration of each Generic CPA-DDs on conditions that avoid double counting are applicable.</p>
	<p><b>Specific CPA-DD (CPA-001):</b> Ditto (See the PoA Participation Agreement page 14.) This CPA has the title “<i>EAREP - Njega 5MW Small Hydro Project</i>” where the location is Njega, the technology is hydro and the installed capacity is 5 MW.</p>	<p>OK. CPA-001 has a unique name; “Njega 5MW Small Hydro Project”. JCI judges the demonstration of CPA-DD on conditions that avoid double counting is applicable.</p>

**Table 9(c) Assessment result on the Eligibility criteria  
(Requirement of Para.16(c) of Std PoA; Technology/measure)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
<p>The CPA involves the implementation of a renewable energy technology, including solar PV, wind, geothermal and hydro. CPAs involving the use of biomass for generating electricity are excluded from this Programme of Activities. <b>(Technology/measure)</b></p>	<p><b>PoA-DD (Sec. B.2, Part I):</b> Feasibility study or other project documentation proving that the CPA involves the implementation of a technology eligible for inclusion in the PoA.</p>	<p>OK. JCI judges the demonstration of PoA-DD on the specifications of technology/measure is applicable.</p>
	<p><b>Generic CPA-DD (Sec. B.5, Part II):</b> Feasibility study or other project documentation proving that the CPA involves the implementation of a wind, solar PV, hydro and geothermal energy project, a technology eligible for inclusion in the PoA.</p>	<p>OK. JCI judges the demonstration of each Generic CPA-DDs on the specifications of technology/measure are applicable.</p>
	<p><b>Specific CPA-DD (CPA-001):</b> The feasibility study or other project documentation proves that the SSC-CPA involves the implementation of a hydro energy project, a technology eligible for inclusion in the PoA. (See the Detailed Project Report page 7 table 1.5.)</p>	<p>OK. The description of the using technologies are consistent with PDR. JCI judges the demonstration of Specific CPA-DD on the specifications of technology/measure is applicable.</p>

**Table 9(d) Assessment result on the Eligibility criteria  
(Requirement of Para.16(d) of Std PoA; start date of the CPA)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
The <b>start of the CPA</b> occurs after the start of the validation of the programme of activities, 21/01/2012. The start date will be defined as the date on which a contract has been signed for equipment, construction or operation services required for the CPA.	<b>PoA-DD (Sec. B.2, Part I):</b> Date of signing the contract with party providing equipment/ construction/ operation services. If this is not available, the expected date of signing the contract will be provided.	OK. JCI judges the demonstration of PoA-DD on the conditions of the start date is applicable.
	<b>Generic CPA-DD (Sec. B.5, Part II):</b> The contract with the party providing equipment/construction/operation services [is expected to be signed or has been signed] on the [insert date]. The start of validation the PoA was 21/01/2012. Thus the project meets the start date requirements.	OK. JCI judges the demonstration of each Generic CPA-DDs on the conditions start date are applicable.
	<b>Specific CPA-DD (CPA-001):</b> The contract with the party providing equipment/construction/operation services is expected to be signed on the 1st of September 2013. The start of validation of the PoA was 21/01/2011. Thus the project meets the start date requirements.	OK. The start date of CPA 001 is met with the requirement of Para.193 of VVS. JCI judges the demonstration of Specific CPA-DD on the conditions of the start date is applicable.

**Table 9(e) Assessment result on the Eligibility criteria  
(Requirement of Para.16(e) of Std PoA; Applicability of methodologies)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
<p>1. The CPA supplies electricity to a national or regional grid; or supplies electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling. (<b>Applicability of methodologies</b>)</p> <p>2. The CPA meets all the applicability criteria of version 17 of AMS I.D Grid connected renewable electricity generation. (<b>Applicability of methodologies</b>)</p> <p>3. The CPA does not use generating equipment</p>	<p><b>PoA-DD (Sec. B.2, Part I):</b></p> <p>1. Power Purchase Agreement, wheeling contract or any other project documentation e.g. records of discussions with the Utility company or draft PPA proving that the CPA supplies electricity to a national or regional grid; or supplies electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p> <p>2. Detailed assessment that the project meets all the applicability criteria of version 17 of AMS- I.D. Grid connected renewable electricity generation.</p> <p>3. Feasibility study report or other relevant project documentation proving that the CPA does not use generating equipment which is transferred from another activity</p>	OK. JCI judges the demonstration of PoA-DD on the conditions and requirements of single or multiple methodologies are applicable.

<p>which is transferred from another activity. (<b>Applicability of methodologies</b>)</p>	<p><b>Generic CPA-DD (Sec. B.5, Part II):</b></p> <ol style="list-style-type: none"> <li>1. Power Purchase Agreement, wheeling contract or any other project documentation e.g. records of discussions with the Utility company or draft PPA proving that the CPA supplies electricity to the Kenyan/Rwandan national grid; or supplies electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</li> <li>2. Detailed assessment that the project meets all the applicability criteria of version 17 of AMS- I.D. Grid connected renewable electricity generation.</li> <li>3. Feasibility study report or other relevant project documentation proving that the CPA does not use generating equipment which is transferred from another activity.</li> </ol>	<p>OK. JCI judges the demonstration of each Generic CPA-DDs on the conditions and requirements of single or multiple methodologies are applicable.</p>
	<p><b>Specific CPA-DD (CPA-001):</b></p> <ol style="list-style-type: none"> <li>1. Power Purchase Agreement, wheeling contract or any other project documentation e.g. records of discussions with the Utility company or draft PPA proving that the CPA supplies electricity to the Kenyan national grid; or supplies electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling (See the Draft Power purchase Agreement (PPA) and records of discussions with the Utility Company)</li> <li>2. Detailed assessment that the project meets all the applicability criteria of version 17 of AMS I.D Grid connected renewable electricity generation (See section D.2 above).</li> <li>3. Feasibility study report or other relevant documentation will show this. (See the Offer for equipment supply).</li> </ol>	<p>OK. The description of draft PPA/3-02/ Grid connection Confirming letter/3-09/, applicability criteria of AMS I.D and Offer letter on equipment supply Njega project/3-07/ are appropriate. JCI judges the demonstration of Specific CPA-DD on the conditions and requirements of single or multiple methodologies is applicable.</p>

**Table 9(f) Assessment result on the Eligibility criteria  
(Requirement of Para.16(f) of Std PoA; demonstration of additionality)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
The CPA meets the eligibility criteria pertaining to the	<p><b>PoA-DD (Sec. B.2, Part I):</b></p> <p>Additionality check in each CPA-DD carried out in line with additionality</p>	<p>OK. he demonstration of PoA-DD on the conditions pertaining to the</p>

<b>demonstration of additionality</b> as shown in "Table 10(a) through (d): <i>Additionality-related eligibility criteria</i> ".	related eligibility criteria.	demonstration of additionality is applicable.
	<b><u>Generic CPA-DD (Sec. B.5, Part II):</u></b> Additionality check carried out in section D.5 of the SSC-CPA-DD and in line with the additionality related eligibility criteria shown below demonstrates that the project is additional.	OK. JCI judges the demonstration of each Generic CPA-DDs on the conditions pertaining to the demonstration of additionality are applicable.
	<b><u>Specific CPA-DD (CPA-001):</u></b> See the Mandate Agreement between CfC Stanbic Limited (CFC) and Hydel Engineering and Construction Company Limited (Hydel), Incorporation documents of Uni-Power Ltd (UPL), and company profiles of Hydel and UPL.	OK. The description of construct on Mandate Agreement/3-11/, the Incorporation document/3-03/ and company profiles/4-01A,4-01B/ are appropriate for demonstrating access- to capital barrier of CPA implementing entity. JCI judges the demonstration at Sec. D.5 of Specific CPA-DD on the conditions pertaining to the demonstration of additionality is applicable.

**Table 9(g) Assessment result on the Eligibility criteria  
(Requirement of Para.16(g) of Std PoA;**

**Local stakeholder consultations and environmental impact analysis)**

<b>Eligibility criteria defined by CME</b>	<b>CME's Demonstration</b>	<b>JCI's Determination</b>
1. The CPA has carried out an <b>Environmental Impact Assessment</b> in line with host country laws and regulations. 2. The CPA has carried out a local <b>stakeholder consultation</b> .	<b><u>PoA-DD (Sec. B.2, Part I):</u></b> 1. Environmental Impact Assessment report. 2. Local stakeholder consultation report.	OK. JCI judges the demonstration of DD on the PoA-specific requirements for local stakeholder consultations and environmental impact analysis is applicable.
	<b><u>Generic CPA-DD (Sec. B.5, Part II):</u></b> 1. An Environmental Impact Assessment has been conducted in line with the relevant environmental laws as detailed in the Environmental Impact Assessment Report as well as section B of the CPA-DD. 2. A local stakeholder consultation was carried out as indicated in the local stakeholder consultation report as well as section C of the CPA-DD.	OK. JCI judges the demonstration of each Generic CPA-DDs on the PoA-specific requirements for local stakeholder consultations and environmental impact analysis are applicable.
	<b><u>Specific CPA-DD (CPA-001):</u></b> 1. See the EIA Report. 2. See the Local Stakeholder Report.	OK. The description of EIA report/2-04/, Local Stakeholder Consultation Report/4-05A/ and Record of Stakeholder meeting for environmental protection/4-05B/ are appropriate. JCI

		judges the demonstration of Specific CPA-DD on the PoA-specific requirements for local stakeholder consultations and environmental impact analysis is applicable.
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**Table 9(h) Assessment result on the Eligibility criteria  
(Requirement of Para.16(h) of Std PoA; Funding from Annex I)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
The CPA has not received <b>funding from Annex I</b> parties that results in a diversion of official development assistance. <b>(ODA)</b>	<b>PoA-DD (Sec. B.2, Part I):</b> Confirmation letter from CPA entity that the CPA has not received funding from Annex I parties or confirmation letter from Annex I party that funding to the CPA does not result in a diversion of official development assistance.	OK. JCI judges the demonstration of PoA-DD on the conditions for funding from Annex I parties is applicable.
	<b>Generic CPA-DD (Sec. B.5, Part II):</b> Confirmation letter from CPA entity that the CPA has not received funding from Annex I parties or confirmation letter from Annex I party that funding to the CPA does not result in a diversion of official development assistance.	OK. JCI judges the demonstration of each Generic CPA-DDs on the conditions for funding from Annex I parties are applicable.
	<b>Specific CPA-DD (CPA-001):</b> See the Unipower Statement on ODA that confirms that the CPA entity has not received public funding from Annex I parties.	OK. The description of Statement of CPA implementing entity PO on non-ODA/3-08/ is appropriate. JCI judges the demonstration of Specific CPA-DD on the conditions for funding from Annex I parties is applicable.

**Table 9(i) Assessment result on the Eligibility criteria  
(Requirement of Para.16(i) of Std PoA; Target group)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
The CPA supplies electricity to a national or regional grid; or supplies electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling. <b>(Target group)</b>	<b>PoA-DD (Sec. B.2, Part I):</b> Power Purchase Agreement (PPA), wheeling contract or any other project documentation e.g. records of discussions with the Utility company or draft PPA proving that the CPA supplies electricity to a national or regional grid; or supplies electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.	OK. JCI judges the demonstration of PoA-DD on the target group is applicable.
	<b>Generic CPA-DD (Sec. B.5, Part II):</b> Power Purchase Agreement, wheeling contract or any other project	OK. JCI judges the demonstration of each Generic CPA-DDs on the target group

	documentation e.g. records of discussions with the Utility company or draft PPA proving that the CPA supplies electricity to the Kenyan/ Rwandan national grid; or supplies electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.	are applicable.
	<b>Specific CPA-DD (CPA-001):</b> See the Draft PPA and records of discussions with the Utility Company.	OK. The description of draft PPA/3-02/ Grid connection Confirming letter/3-09/, applicability criteria of AMS I.D and Offer letter on equipment supply Njega project/3-07/ are appropriate. JCI judges the demonstration of Specific CPA-DD on the target group is applicable.

**Table 9(j) Assessment result on the Eligibility criteria  
(Requirement of Para.16(j) of Std PoA; Sampling requirements for a PoA)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
Sampling will be carried in line with paragraph 3 of the standard for <b>sampling and surveys</b> for CDM project activities and programme of activities (version 03.0, EB 69, Annex 4) whereby the requirements from the applicable methodology will have precedence. [Applicable for geothermal project types]	<b>PoA-DD (Sec. B.2, Part I):</b> Monitoring section B.7 of the PoA-DD and D.7 of the specific CPA-DD (Applicable for geothermal project types.)	OK. The sampling plan will be used for geothermal projects types. JCI judges the demonstration of Specific CPA-DD on the conditions of sampling requirements for a PoA is applicable.
	<b>Generic CPA-DD (Sec. B.5, Part II):</b> The sampling procedure per required by the standard is carried out only for geothermal project types.	OK. The sampling plan will be used for geothermal projects types. JCI judges the demonstration of each Generic CPA-DDs on the conditions of sampling requirements for a PoA are applicable.
	<b>Specific CPA-DD (CPA-001):</b> Not applicable (N/A). No sampling will be used in the verification of the CPAs.	OK. The CPA-001 is not geothermal project. JCI judges the demonstration of "Not applicable " is appropriate.

**Table 9(k) Assessment result on the Eligibility criteria  
(Requirement of Para.16(k) of Std PoA; Small-scale or microscale threshold criteria)**

Eligibility criteria defined by CME	CME's Demonstration	JCI's Determination
The installed capacity of the CPA is smaller than or equal to 15 MW. However, if a project activity is applying the additionality Option A for	<b>PoA-DD (Sec. B.2, Part I):</b> Feasibility, engineering design or other relevant study reports.	OK. JCI judges the demonstration of PoA-DD is applicable.
	<b>Generic CPA-DD (Sec. B.5, Part II):</b> The feasibility, engineering design or other relevant study reports show that the	OK. JCI judges the demonstration of each Generic CPA-DDs are applicable.

microscale project activities, the installed capacity of the CPA will be smaller than or equal to 5 MW. (Small-scale or microscale)	project meets the small scale or the microscale project threshold.	
	<b>Specific CPA-DD (CPA-001)</b> See the DPR page 8 table 1.5 that shows that the project meets the small scale project threshold.	OK. The description of installed capacity is consistent with PDR/1-03/. JCI judges the demonstration of Specific CPA-DD is applicable.

**Table 9(l) Assessment result on the Eligibility criteria  
(Requirement of Para.16(l) of Std PoA; Debundling check)**

Eligibility criteria defined by PoA	CME's Demonstration	JCI's Determination
The CPA is not a debundled component of a large-scale project activity in accordance with the latest approved version of the <i>Guidelines on assessment of debundling for SSC project activities</i> . (Debundling check))	<b>PoA-DD (Sec. B.2, Part I):</b> Debundling check carried out in line with the latest approved version of the Guidelines on assessment of de-bundling for SSC project activities version 03.	OK. JCI judges the demonstration of PoA-DD is applicable.
	<b>Generic CPA-DD (Sec. B.5, Part II):</b> Debundling check carried out in line with the latest approved version of the Guidelines on assessment of debundling for SSC project activities shows that the project is not a debundled component of a large-scale project activity.	OK. JCI judges the demonstration of each Generic CPA-DDs are applicable.
	<b>Specific CPA-DD (CPA-001):</b> See section A.12 Debundling of small-scale component project activities (Specific CPA-DD).	OK. The demonstration of section A.12 of Specific CPA-DD is appropriate. JCI judges the demonstration of Specific CPA-DD is applicable.

Note: OK is applicable

As a result of above assessment, JCI judges the Eligibility criteria (a) through (l) are verifiable (Para.17 of Std PoA) and sufficiently objective and comprehensive to permit the assessments of the inclusion of CPAs in the PoA (Para.18 of Std PoA). Therefore, JCI determines the Eligibility criteria are well reported in the PoA-DD (Sec. B.2, Part I), each Generic CPA-DDs (Sec. B.5, Part II) and Specific CPA-DD (CPA-001) and fully complied with the Para.15 through 18 of Std PoA/7-21/ and Para.196 of VVS.

## 7.2 Additionality-related eligibility criteria

According to the Footnote 2 of Std PoA, JCI assesses demonstration on "Additionality-related eligibility criteria". The Footnote 2 is referred the requirement on Para.16 of Std PoA, and it is stated "*May be specified additional criteria depending on the specific characteristics of a PoA*".

Table 10(a) through 10(d) are shown the details of above assessment result on each Additionality-related eligibility criteria. The results are tabulated such as the CME's demonstration on PoA-DD (Section B.2, Part I), each Generic CPA-DDs (Sec. B.5, Part II), Specific CPA-DD (CPA-001) and JCI's determination.

**Table 10(a) Assessment result on the Additionality-related eligibility criteria  
Option A: Microscale additionality**

Criteria of Option A: Microscale additionality	CME's Demonstration	JCI's Determination
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<p><i>Installed capacity of the SSC-CPA is smaller than or equal to 5MW and, The geographic location of the project activity is in one of the LDCs/SIDS or in a special underdeveloped zone (SUZ) of the host country, or the project activity employs specific renewable energy technologies/measures recommended by the host country designated national authority (DNA) and approved by the Board to be additional in the host country.</i></p>	<p><b><u>PoA-DD (Sec. B.2, Part I):</u></b> (Means of verification):</p> <ul style="list-style-type: none"> <li>- Feasibility study or other relevant project documentation.</li> <li>- Geographical coordinates of the project activity by public documentation from the host country.</li> <li>- Documentation from the CDM Executive Board recognizing the specific renewable energy technology used by the CPA.</li> </ul> <p>(Rationale): In case the SSC-CPA is a microscale project activity, i.e. project activities up to five megawatts that employ renewable energy technology, additionality will be demonstrated using the <i>Guidelines for demonstrating additionality of microscale project activities</i> (version 04). SSC-CPAs under the PoA follow the methodology AMS-I.D, therefore eligible SSC-CPAs will have to Para.2(a) or Para.2(d) of the guideline as they are grid-connected renewable energy technologies, in order to demonstrate microscale additionality.</p>	<p>OK. The means of verification and the Rationale are complied with the Criteria of Option A: Microscale additionality. JCI judges the demonstration of PoA-DD is applicable.</p>
	<p><b><u>Generic CPA-DD (Sec. B.5, Part II):</u></b> <b><u>Wind, Geothermal, Hydro</u></b></p> <ul style="list-style-type: none"> <li>- The installed capacity is [insert] MW as evidenced in the feasibility study report/environmental impact assessment.</li> <li>- The CPA is located in [district] that is a special underdeveloped zone in Kenya/ Rwanda.</li> <li>- The CPA employs [technology] which is a recommended technology by the Kenyan/ /Rwandan DNA.</li> </ul> <p><b><u>Solar PV</u></b> Option A is not necessary for solar PV CPAs as those are automatically additional through Option C.</p>	<p>OK. JCI judges the demonstration of each Generic CPA-DDs are applicable.</p>
	<p><b><u>Specific CPA-DD (CPA-001):</u></b> No reported.</p>	<p>OK. The CPA-001 is not applied the Criteria of Option A: Microscale additionality.</p>

**Table 10(b) Assessment result on the Additionality-related eligibility criteria:  
Option B.1: Investment Barrier**

Criteria of Option B.1 Investment Barrier	CME's Demonstration	JCI's Determination
<p><i>Without the CDM revenue, the SSC-CPA has a less favourable Project or Equity IRR than the benchmark</i></p>	<p><b><u>PoA-DD (Sec. B.2, Part I):</u></b> (Means of verification): Investment analys spreadsheet. (Rationale): Investment barrier: a financially more viable</p>	<p>OK. The means of verification and the Rationale are complied with the Criteria of B.1</p>

<i>and, Sensitivity analysis shows whether the conclusion regarding the financial/economic attractiveness is robust to reasonable variations in the critical assumptions.</i>	alternative to the project activity would have led to higher emissions. The investment barrier shall be demonstrated using benchmark analysis in accordance with the provisions of the Tool for the demonstration and assessment of additionality (versions 06.1.0, EB 69, Annex 20) and Guidelines on the assessment of investment analysis (version 05, EB 62, Annex 5).	Investment Barrier. JCI judges the demonstration of PoA-DD is applicable.
	<p><b><u>Generic CPA-DD (Sec. B.5, Part II):</u></b></p> <p><b><u>Wind, Geothermal, Hydro</u></b></p> <ul style="list-style-type: none"> <li>- The CPA is not financially viable without the revenues from the CERs as demonstrated by the benchmark analysis carried out following the guidelines in the <i>Tool for the demonstration and assessment of additionality</i> (version 06.1.0).</li> <li>- The CPA is not financially viable after applying the sensitivity analysis.</li> </ul> <p><b><u>Solar PV</u></b></p> <p>Option B.1 is not necessary for solar PV CPAs as those are automatically additional through Option C.</p>	OK. JCI judges the demonstration of each Generic CPA-DDs are applicable.
	<p><b><u>Specific CPA-DD (CPA-001):</u></b></p> <p>No reported.</p>	OK. The CPA-001 is not applied the Criteria of Option B.1 Investment Barrier.

**Table 10(c) Assessment result on the Additionality-related eligibility criteria**  
**Option B.2: Access-to-capital Barrier**

Criteria of Option B.2 Access-to-capital Barrier	CME's Demonstration	JCI's Determination
<i>The SSC-CPA is not implemented by a subsidiary of a multinational group and, Investment is done by a company that also purchases the CERs.</i> <i>In case the company that provides financing described above is different from the one that purchases the CERs a clear relationship between the two should exist e.g. subsidiaries under the same holding/parent company may be considered eligible.</i>	<p><b><u>PoA-DD (Sec. B.2, Part I):</u></b></p> <p>(Means of verification):</p> <ul style="list-style-type: none"> <li>- Incorporation documents of the entity implementing the SSC-CPA.</li> <li>- Loan or equity investment agreement or any other relevant documentation in which it is shown that CDM was considered as requirement in order to finance the project.</li> <li>- Annual financial reports or any published documents showing the structure of the company and any subsidiaries.</li> </ul> <p>(Rationale):</p> <p>Access-to-capital barrier: the project activity could not access appropriate capital without consideration of the CDM revenues. The access-to-capital shall be demonstrated by referring to guidelines 1 and 6 of the Guidelines for objective demonstration and assessment of barriers (version 01.0), as follows:</p> <p>1. While demonstrating barriers related to the lack of access to capital, information should include nature of company, organization and its ownership and,</p>	OK. The means of verification and the Rationale are complied with the Criteria of B.2 Access-to-capital Barrier. JCI judges the demonstration of PoA-DD is applicable.

	<p>financial information. A company that is a subsidiary of a multinational group may have different access to capital, technologies or skilled labour than a local SME company.</p> <p>2. In case the project proponents make the claim for investment barriers, they should demonstrate in the PDD that the financing of the project was assured only due to the benefit of the CDM. Therefore, it should be demonstrated that the loan approval (or other significant financing decision(s)) by the lender takes explicitly the CDM registration into account. For the cases where the investment is done by a company which also purchases the CERs and the loan agreement mentions that, there is an objective demonstration that the CDM facilitated the lending.</p>	
	<p><b><u>Generic CPA-DD (Sec. B.5, Part II):</u></b>  <b><u>Wind, Geothermal, Hydro</u></b>  - The CPA is not a subsidiary of a multinational group.  - Loan or Equity investment in the project activity is done by a company that purchases the CERs.  - Annual financial reports or published documents shows that the company that provides the investment and the one that buys the credits are related.  <b><u>Solar PV</u></b>  Option B.2 is not necessary for solar PV CPAs as those are automatically additional through Option C</p>	<p>OK. JCI judges the demonstration of each Generic CPA-DDs are applicable.</p>
	<p><b><u>Specific CPA-DD (CPA-001):</u></b>  - The CPA implementing entity (UPL) is not a subsidiary of a multinational group (See Incorporation documents for UPL, Hydel Profile and UPL profile).  - Loan investment in the project activity is done by CfC Stanbic bank and purchases of the CERs are done by Standard Bank Plc. CfC Stanbic bank and Standard Bank Plc are both subsidiaries of Standard Bank Group. (The Mandate Agreement between CfC Stanbic Limited and Hydel is the evidence of the loan investment and Annexure B of the 2011 annual financial statements of the Standard Bank Group is evidence of Standard Bank Group.).</p>	<p>OK. The Incorporation document for UPL/3-03/, the Company profiles of Hydel/4-01A/ and UPL/4-01B/ are evidence of not a subsidiary of a multinational group. The contract on Mandate Agreement/3-11/ and evidence of Loan investment and the purchasing the CERs are indicated CFC and SB are complied with the Criteria of Option B.2 Access-to-capital Barrier. JCI judges the demonstration of Specific CPA-DD is applicable.</p>

**Table 10(d) Assessment result on the Additionality-related eligibility criteria**  
**Option C: Automatic additionality**

Criteria of Option C: Automatic additionality	CME's Demonstration	JCI's Determination
<i>The project activity uses a technology which is on the positive list of grid-connected renewable electricity generation technologies as specified in the latest version of Guidelines on the demonstration of additionality of small-scale project activities</i>	<b><u>PoA-DD (Sec. B.2, Part I):</u></b> (Means of verification): Project feasibility study or other relevant project documentation. (Rationale): In case the project activity involves a technology, which is on the positive list of grid-connected renewable electricity generation technologies defined in the <i>Guidelines on the demonstration of additionality of small-scale project activities</i> (version 09.0) the project will be automatically additional.	OK. The means of verification and the Rationale are complied with the Criteria of Option C: Automatic additionality. JCI judges the demonstration of PoA-DD is applicable.
	<b><u>Generic CPA-DD (Sec. B.5, Part II):</u></b> <b><u>Wind, Geothermal, Hydro</u></b> Option C on automatic additionality is not applicable for the energy projects. <b><u>Solar PV</u></b>	OK. JCI judges the demonstration of each Generic CPA-DDs are applicable.
	<b><u>Specific CPA-DD (CPA-001):</u></b> No reported.	OK. The CPA-001 is not applied the Criteria of Option C: Automatic additionality.

As a result of above assessment, JCI judges the Additionality-related eligibility criteria are verifiable and sufficiently objective and comprehensive to permit the assessments of the inclusion of CPAs in the PoA. Furthermore, the Criteria of Option B.2 "Access-to-capital Barrier" is applicable to the proposed PoA including CPA-001.

Therefore, JCI determines the Additionality-related eligibility criteria are well reported in the PoA-DD (Sec. B.2, Part I), each Generic CPA-DDs (Sec. B.5, Part II) and Specific CPA-DD (CPA-001) and fully complied with the Para.15 through 18 of Std PoA/7-21/ and Para.196 of VVS.

### 7.3 Findings of CARs, CLs and FARs

JCI raises some CLs for the assessment of the Eligibility criteria for inclusion of a CPA in the PoA.

#### 1) Part I of PoA-DD

- CL-4: To be clarified whether the Eligibility criteria in PoA-DD and CPA-DD are complied with the requirements of Std PoA/7-21/. The CME clearly reported the criteria in PoA-DD and CPA-DD. JCI judges the revision is appropriate and closed CL-4.
- CL-6: To be clarified key criteria for additionality. The CME added furthermore description of the selection of option one (1), and logical connectors between rows in the tables. JCI judges the revision is appropriate and closed CL-6.
- CL-8: To be clarified Criteria, means of verification and Rationale of the Option B.2 "Access to capital Barrier". The CME added the description of "Annual financial reports or any published documents showing the structure of the company and any subsidiaries" in the PoA-DD (Part I). JCI judges the description is well demonstrated and applicable. The CL-8 is closed.

#### 2) Part II of PoA-DD (Generic CPA-DD)

- CL-12: To be requested to refer to the relevant UNFCCC guidelines for "First-of-its-kind" for the Criteria of Option C. The CME revised the Option C from the "First-of-its-kind" to "Automatic additionality" in Part II of PoA-DD (Generic CPA-DD) JCI judges the deviation is well reported and appropriately. CL-12 is closed.

### 3) Specific CPA-DD (CPA-001)

- CL-23d: To be provide introduction of the PO's company/4-01/ for the demonstration of Eligibility Criterion. The CME provided company's profiles of Hydel/4-01A/, UPL/4-01B/ and mandate agreement letter (page 20 and 23)/3-11/ between CFC and Hydel. JCI assesses the applicability of provided documents and judges provided document is shown the additionality. CL-23d is closed.
- CL-23e: To be provided some evidences on applicability of Environmental impact assessment and the regulation. The CME provided EIA/1-04/, its approval/2-04/, "Environmental Management and Co-ordination Act 1999 (EMCA)"/6-04A/ and "Environmental (Impact Assessment and Audit) Regulations 2003"/6-04B/ for the evidences of applicability. JCI judges the evidences are applicable because the EMCA 1999/6/04A/ is a basic law and the Regulations 2003/6-04B/ is the supplementary legislation to the EMCA. CL-28e is closed.
- CL-23f: To be provided some evidences of local stakeholder consultation. The CME provided Local stakeholder consultation report/4-05A/, Invitation letter for stakeholder meeting/4-03/ and Questionnaire and responses/4-04/. JCI assesses the documents and judges the information is applicable for the Criterion (g). CL-28f is closed.
- CL-23h: To be clarified the project has not received funding from Annex I parties. The CME provided a confirmation letter/3-08/ from the CPA entity (CPA-001) and JCI judges the letter is stated the CPA entity has no funding. CL-28h is closed.
- CL-23j: To be clarified whether the CPA-001 is de-bundled or not de-bundled project. The CME demonstrated the result of de-bundling check and added more detailed explanation in Specific CPD-DD of CPA-001. JCI judges the demonstration and deviation are applicable and CL-28j is closed.
- CL-25: To be provided some evidences for the investment decision of the CPA. The CME provided "CFC Mandate Letter between Hydel Engineering/3-11/" for the evidence of investment decision of investor (CFC). JCI judges the description is well demonstrated and the evidences are applicable.

Therefore, the eligibility criteria are verifiable (Para.17 of Std PoA) and JCI determines the Eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA (Para.16 of Std PoA).

JCI also judges the CPAs are included in the PoA on the basis that JCI has confirmed the eligibility of CPA-001 where applicable undertaking prior checks in accordance with the approved guidelines/standard from the EB (Para. 21 of Std PoA).

As a result of the assessment, JCI concludes the Section 7 "Eligibility criteria for inclusion of a CPA in the PoA" is well reported in the PoA-DD (Sec. B.2, Part I), each Generic CPA-DDs (Sec. B.5, Part II) and Specific CPA-DD (CPA-001) and fully complied with the Para.15 through 18 of Std PoA and Para.196 of VVS.

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

JCI assesses the applicability of the selected baseline and monitoring methodology as follows:

- 8.1 Application of multiple methodologies
- 8.2 Applicability of the selected baseline and monitoring methodology to the project activity (General requirements)

- 8.3 Boundary
- 8.4 Description of baseline scenario
- 8.5 Estimation of emission reductions of a generic CPA

## 8.1 Application of multiple methodologies

According to the Para. 28 through 33 of Std PoA, JCI assesses application of multiple methodologies of the proposed PoA including CPA-001.

The requirements on Para. 28 and 29 of Std PoA are:

- *To list in the PoA-DD and the generic CPA-DD various combinations of technologies/measures and/or approved methodologies that will be implemented in the PoA"(Para. 28).*
- *To define the eligibility criteria for CPA inclusion and, where applicable, sampling plans for each of the combinations separately in accordance with the guidelines in section B above as well as any approved guidelines/standard from the Board pertaining to sampling and survey"( Para.29*

However, the assessment of the application of multiple methodologies is skipped, because the proposed PoA and CPAs are small scale renewable power generation projects which will use different technology/measure of renewable power generation under a single approved methodology of AMS-I.D. "Grid Connected Renewable Electricity Generation" (Version 17.0) /7-01/. The PoA-DD is defined no combinations of technology/measure of renewable power generation under a single methodology (AMS-I.D.), which is further demonstrated at Generic CPA-DD (Part II of PoA-DD). Therefore, the Para. 28 through 35 of Std PoA are not applicable.

## 8.2 Applicability of the selected baseline and monitoring methodology to the project activity (General requirements)

According to the Para.70 through 81 of VVS, JCI assesses applicability of the selected baseline and monitoring methodology to the project activity of the proposed PoA including CPA-001 by the following steps of Document review, Follow-up action and Findings of CARs, CLs.

- (a) Document review, involving:
  - (i) A review of data and information;
  - (ii) Cross checks between information provided in the DDs and information from sources other than those used, if available, the DOE's sectoral or local expertise 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 checks between information provided by interviewed personnel (i.e. by checking sources or other interviews) to ensure that no relevant information has been omitted.
- (c) Reference to available information relating to projects or technologies similar to the proposed CDM project activity registered and under validation; and
- (d) Review, based on the approved methodology being applied, of the appropriateness of formulae and correctness of calculations.

The general requirements of VVS are:

- *To determine whether the baseline and monitoring methodologies selected by the project participants are the valid versions of those approved by the Board (Para.70 of VVS).*

- To apply specific guidance and/or clarifications provided by the Board with respect to the approved methodology and any applicable tools (Para.71 of VVS).
- To determine whether the selected methodology applies to the project activity and was correctly applied with respect to the following (Para.72 of VVS):
  - (a) Project boundary;
  - (b) Baseline identification;
  - (c) Algorithms and/or formulae used to determine emission reductions;
  - (d) Additionality;
  - (e) Monitoring methodology;

JCI checks the applicability of the "(e) Monitoring methodology" through the document reviews/follow-up actions (on-site visit, interviews). The result of the above (a) through (d) are demonstrated in the Section 8.3 through 8.6 of this report respectively.

### 1) Generic CPA-DDs

Table 11A through 11K are shown the result of the assessment on applicability criteria of AMS-I.D., Tool to calculate the emission factor for an electricity system (Emission tool)/7-02/ and Tool to calculate project or leakage CO<sub>2</sub> emissions from fossil fuel combustion (Leakage tool)/7-16/.

- Table 11A: Wind energy project in Kenya
- Table 11B: Solar photovoltaic (PV) energy project in Kenya
- Table 11C: Geothermal (with fossil fuel combustion) energy project in Kenya
- Table 11D: Geothermal (without fossil fuel combustion) energy project in Kenya
- Table 11E: Hydro (run-of-river) project in Kenya
- Table 11F: Hydro (with accumulation reservoir) project in Kenya
- Table 11G: Wind energy project in Rwanda
- Table 11H: Solar photovoltaic (PV) energy project in Rwanda
- Table 11I: Geothermal (with fossil fuel combustion) energy project in Rwanda
- Table 11J: Geothermal (without fossil fuel combustion) energy project in Rwanda
- Table 11K: Hydro (run-of-river) project in Rwanda
- Table 11L: Hydro (with accumulation reservoir) project in Rwanda

**Table 11A Assessment on the applicability for the technology/measure;  
Wind energy project in Kenya**

Applicability criteria of AMS-I.D.	Description of Generic CPA (Wind)	JCI's Determination
<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via</i></p>	<p>The generic SSC-CPAs under the PoA will use wind energy that will supply electricity to the Kenyan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>

national/regional grid through a contractual arrangement such as wheeling.		
<i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i>	The generic SSC-CPAs under the PoA will include activities that: (a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);	OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.
<i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i> <ul style="list-style-type: none"> <li>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</li> <li>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</li> <li>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</li> </ul>	N/A. These types of projects are not included in this CPA. In case of SSC-CPAs with power projects that are not hydro powered, or involve the implementation of hydro power plants without reservoirs, this condition is not applicable.	OK. The description is applicable.
<i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i>	N/A. These types of projects are not included in the PoA.	The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.
<b>Combined heat and power</b> (co-generation) systems are not eligible under this category.	The PoA does not include combined heat and power (co-generation) systems.	The PoA is not applicable, since the PoA will not include projects that involve a combined heat and power system.

<i>In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</i>	The PoA does not include capacity additions.	The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
<i>In the case of <b>retrofit or replacement</b>, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</i>	The PoA does not include retrofits and replacements.	The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Wind)</b>	<b>JCI's Determination</b>
<i>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).</i>	This tool is applicable since the generic project activity involves the generation of electricity from wind energy and its supply to the Kenyan grid system.	The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
<i>The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.</i>	The project electricity system is located in Kenya. This country is not an annex I country.	The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Wind)</b>	<b>JCI's Determination</b>
<i>The tool can be used in cases where CO<sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.</i>	The project does not need to meet the applicability criteria of the Tool to calculate project or leakage CO <sub>2</sub> emissions from fossil fuel combustion (version 02), as it is a wind energy project.	The PoA is no need to apply the Leakage tool.

**Table 11B Assessment on the applicability for the technology/measure;  
Solar photovoltaic (PV) energy project**

<b>Applicability for technology/measure</b>	<b>Description of Generic CPA</b>	<b>JCI's Determination</b>
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<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use solar PV that will supply electricity to the Kenyan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>N/A. These types of projects are not included in the CPA.</p>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>
<p><b>Combined heat and power</b> (co-generation) systems are not eligible under this category.</p>	<p>The PoA does not include combined heat and power (co-generation) systems.</p>	<p>OK. The PoA is not applicable, since the PoA will not include projects</p>

		that involve a combined heat and power system.
<i>In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</i>	The PoA does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
<i>In the case of <b>retrofit or replacement</b>, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</i>	The PoA will not include retrofits and replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Solar photovoltaic)</b>	<b>JCI's Determination</b>
<i>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).</i>	This tool is applicable since the generic project activity involves the generation of electricity from solar energy and its supply to the Kenyan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
<i>The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.</i>	The project electricity system is located in Kenya. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Solar photovoltaic)</b>	<b>JCI's Determination</b>
<i>This tool provides procedures to calculate project and/or leakage CO<sub>2</sub> emissions from the combustion of fossil fuels. It can be used in cases where CO<sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties. Methodologies using this tool should specify to which combustion process this tool is being applied.</i>	The project does not need to meet the applicability criteria of the Tool to calculate project or leakage CO <sub>2</sub> emissions from fossil fuel combustion (version 02), as it is a solar energy project.	OK. The PoA is no need to apply the Leakage tool.

**Table 11C Assessment on the applicability for the technology/measure;  
Geothermal (with fossil fuel combustion) energy project in Kenya**

Applicability for technology/measure	Description of Generic CPA (Geothermal with fossil fuel combustion)	JCI's Determination
<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use geothermal energy that will supply electricity to the Kenyan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>N/A. These types of projects are not included in the CPA.</p>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>

<b>Combined heat and power</b> (co-generation) systems are not eligible under this category.	The PoA does not include combined heat and power (co-generation) systems.	OK. The PoA is not applicable, since the PoA will not include projects that involve a combined heat and power system.
In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.	The PoA does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
In the case of <b>retrofit or replacement</b> , to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.	The PoA will not include retrofits and replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Geothermal with fossil fuel combustion)</b>	<b>JCI's Determination</b>
This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	This tool is applicable since the generic project activity involves the generation of electricity from geothermal energy and its supply to the Kenyan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.	The project electricity system is located in Kenya. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Geothermal with fossil fuel combustion)</b>	<b>JCI's Determination</b>
The tool can be used in cases where CO <sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.	Project emissions from fossil fuel combustion from geothermal CPAs will be calculated based on the fuel combusted and its properties.	OK. The description is applicable.

**Table 11D Assessment on the applicability for the technology/measure;  
Geothermal (without fossil fuel combustion) energy project in Kenya**

<b>Applicability for technology/measure</b>	<b>Description of Generic CPA (Geothermal with fossil fuel combustion)</b>	<b>JCI's Determination</b>
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<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use geothermal energy that will supply electricity to the Kenyan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>N/A. These types of projects are not included in the CPA.</p>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>
<p><b>Combined heat and power</b> (co-generation) systems are not eligible under this category.</p>	<p>The programme of activities does not include combined heat and power (co-generation) systems.</p>	<p>OK. The PoA is not applicable, since the PoA will not include projects</p>

		that involve a combined heat and power system.
<i>In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</i>	The programme of activities does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
<i>In the case of <b>retrofit or replacement</b>, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</i>	The programme of activities does not include retrofits or replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Geothermal without fossil fuel combustion)</b>	<b>JCI's Determination</b>
<i>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).</i>	This tool is applicable since the generic project activity involves the generation of electricity from geothermal energy and its supply to the Kenyan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
<i>The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.</i>	The project electricity system is located in Kenya. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Geothermal without fossil fuel combustion)</b>	<b>JCI's Determination</b>
<i>The tool can be used in cases where CO<sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.</i>	The project does not need to meet the applicability criteria of the Leakage tool as it is a geothermal energy project without fossil fuel combustion.	OK. The description is applicable.

**Table 11E Assessment on the applicability for the technology/measure;  
Hydro (run-of-river) project in Kenya**

<b>Applicability for technology/measure</b>	<b>Description of Generic CPA (Hydro; run-of-river)</b>	<b>JCI's Determination</b>
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<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use hydro (run-of-river) energy that will supply electricity to the Kenyan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>N/A. These types of projects are not included in the CPA. Hydro run-of-river does not have reservoirs.</p>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>
<p><b>Combined heat and power</b> (co-generation) systems are not eligible under this category.</p>	<p>The programme of activities does not include combined heat and power (co-generation) systems.</p>	<p>OK. The PoA is not applicable, since the PoA will not include projects</p>

		that involve a combined heat and power system.
<i>In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</i>	The programme of activities does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
<i>In the case of <b>retrofit or replacement</b>, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</i>	The programme of activities does not include retrofits or replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Hydro; run-of-river)</b>	<b>JCI's Determination</b>
<i>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).</i>	This tool is applicable since the generic project activity involves the generation of electricity from hydro (run-of-river) energy and its supply to the Kenyan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
<i>The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.</i>	The project electricity system is located in Kenya. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Hydro; run-of-river)</b>	<b>JCI's Determination</b>
<i>The tool can be used in cases where CO<sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.</i>	The project does not need to meet the applicability criteria of the Leakage tool as it is a hydro (run-of-river) energy project.	OK. The description is applicable.

**Table 11F Assessment on the applicability for the technology/measure;  
Hydro (with accumulation reservoir) project in Kenya**

<b>Applicability for technology/measure</b>	<b>Description of Generic CPA (Hydro; with accumulation reservoir)</b>	<b>JCI's Determination</b>
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<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use hydro energy that will supply electricity to the Kenyan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>For SSC-CPAs under the PoA that implement a hydro power plant with a reservoir at least one of the following conditions will be satisfied:</p> <ul style="list-style-type: none"> <li>· The SSC-CPA is implemented in an existing reservoir with no change in the volume of reservoir;</li> <li>· The SSC-CPA is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the SSC-CPA, as per definitions given in the Project Emissions section, is greater than 4 W/m<sup>2</sup>;</li> <li>· The SSC-CPA results in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, is greater than 4 W/m<sup>2</sup>.</li> </ul>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>

<i>limit of 15 MW.</i>		
<b>Combined heat and power</b> (co-generation) systems are not eligible under this category.	The programme of activities does not include combined heat and power (co-generation) systems.	OK. The PoA is not applicable, since the PoA will not include projects that involve a combined heat and power system.
<i>In the case of project activities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</i>	The programme of activities does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
<i>In the case of retrofit or replacement, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</i>	The programme of activities does not include retrofits or replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Hydro; with accumulation reservoir)</b>	<b>JCI's Determination</b>
<i>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).</i>	This tool is applicable since the generic project activity involves the generation of electricity from hydro (with accumulation reservoir) energy and its supply to the Kenyan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
<i>The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.</i>	The project electricity system is located in Kenya. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Hydro; with accumulation reservoir)</b>	<b>JCI's Determination</b>
<i>The tool can be used in cases where CO<sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.</i>	The project does not need to meet the applicability criteria of the Leakage tool as it is a hydro (with accumulation reservoir) energy project.	OK. The description is applicable.

**Table 11G Assessment on the applicability for the technology/measure;  
Wind energy project in Rwanda**

<b>Applicability criteria of AMS-I.D.</b>	<b>Description of Generic CPA</b>	<b>JCI's Determination</b>
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	(Wind)	
<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPAs under the PoA will use wind energy that will supply electricity to the Rwandan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>N/A. These types of projects are not included in the CPA.</p>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>

<b>Combined heat and power</b> (co-generation) systems are not eligible under this category.	The PoA does not include combined heat and power (co-generation) systems.	The PoA is not applicable, since the PoA will not include projects that involve a combined heat and power system.
In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.	The PoA does not include capacity additions.	The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
In the case of <b>retrofit or replacement</b> , to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.	The PoA will not include retrofits and replacements.	The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
Applicability of Emission tool	Description of Generic CPA (Wind)	JCI's Determination
This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	This tool is applicable since the generic project activity involves the generation of electricity from wind energy and its supply to the Rwandan grid system.	The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.	The project electricity system is located in Rwanda. This country is not an annex I country.	The PoA is correctly applied the Emission tool.
Applicability criteria of Leakage tool (Version 02)	Description of Generic CPA (Wind)	JCI's Determination
The tool can be used in cases where CO <sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.	The project does not need to meet the applicability criteria of the Leakage tool, as it is a wind energy project.	The PoA is no need to apply the Leakage tool.

**Table 11H Assessment on the applicability for the technology/measure; Solar photovoltaic (PV) energy project in Rwanda**

Applicability for technology/measure	Description of Generic CPA	JCI's Determination
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<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use solar PV that will supply electricity to the Rwandan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>N/A. These types of projects are not included in the CPA.</p>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>
<p><b>Combined heat and power</b> (co-generation) systems are not eligible under this category.</p>	<p>The PoA does not include combined heat and power (co-generation) systems.</p>	<p>OK. The PoA is not applicable, since the PoA will not include projects</p>

		that involve a combined heat and power system.
<i>In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</i>	The PoA does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
<i>In the case of <b>retrofit or replacement</b>, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</i>	The PoA will not include retrofits and replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Solar photovoltaic)</b>	<b>JCI's Determination</b>
<i>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).</i>	This tool is applicable since the generic project activity involves the generation of electricity from solar energy and its supply to the Rwandan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
<i>The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.</i>	The project electricity system is located in Rwanda. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Solar photovoltaic)</b>	<b>JCI's Determination</b>
<i>This tool provides procedures to calculate project and/or leakage CO<sub>2</sub> emissions from the combustion of fossil fuels. It can be used in cases where CO<sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties. Methodologies using this tool should specify to which combustion process this tool is being applied.</i>	The project does not need to meet the applicability criteria of the Tool to calculate project or leakage CO <sub>2</sub> emissions from fossil fuel combustion (version 02), as it is a solar energy project.	OK. The PoA is no need to apply the Leakage tool.

**Table 11I Assessment on the applicability for the technology/measure; Geothermal (with fossil fuel combustion) energy project in Rwanda**

Applicability for technology/measure	Description of Generic CPA (Geothermal with fossil fuel combustion)	JCI's Determination
<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use geothermal energy that will supply electricity to the Rwandan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>N/A. These types of projects are not included in the CPA.</p>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>

<b>Combined heat and power</b> (co-generation) systems are not eligible under this category.	The PoA does not include combined heat and power (co-generation) systems.	OK. The PoA is not applicable, since the PoA will not include projects that involve a combined heat and power system.
In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.	The PoA does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
In the case of <b>retrofit or replacement</b> , to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.	The PoA does not include retrofits and replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Geothermal with fossil fuel combustion)</b>	<b>JCI's Determination</b>
This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	This tool is applicable since the generic project activity involves the generation of electricity from geothermal energy and its supply to the Rwandan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.	The project electricity system is located in Rwanda. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Geothermal with fossil fuel combustion)</b>	<b>JCI's Determination</b>
The tool can be used in cases where CO <sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.	Project emissions from fossil fuel combustion from geothermal CPAs will be calculated based on the fuel combusted and its properties.	OK. The description is applicable.

**Table 11J Assessment on the applicability for the technology/measure; Geothermal (without fossil fuel combustion) energy project in Rwanda**

<b>Applicability for technology/measure</b>	<b>Description of Generic CPA (Geothermal with fossil fuel combustion)</b>	<b>JCI's Determination</b>
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<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use geothermal energy that will supply electricity to the Rwandan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>N/A. These types of projects are not included in the CPA.</p>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>
<p><b>Combined heat and power</b> (co-generation) systems are not eligible under this category.</p>	<p>The programme of activities does not include combined heat and power (co-generation) systems.</p>	<p>OK. The PoA is not applicable, since the PoA will not include projects</p>

		that involve a combined heat and power system.
<i>In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</i>	The programme of activities does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
<i>In the case of <b>retrofit or replacement</b>, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</i>	The programme of activities does not include retrofits or replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Geothermal without fossil fuel combustion)</b>	<b>JCI's Determination</b>
<i>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).</i>	This tool is applicable since the generic project activity involves the generation of electricity from geothermal energy and its supply to the Rwandan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
<i>The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.</i>	The project electricity system is located in Rwanda. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Geothermal without fossil fuel combustion)</b>	<b>JCI's Determination</b>
<i>The tool can be used in cases where CO<sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.</i>	The project does not need to meet the applicability criteria of the Leakage tool as it is a geothermal energy project without fossil fuel combustion.	OK. The description is applicable.

**Table 11K Assessment on the applicability for the technology/measure; Hydro (run-of-river) project in Rwanda**

<b>Applicability for technology/measure</b>	<b>Description of Generic CPA (Hydro; run-of-river)</b>	<b>JCI's Determination</b>
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<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use hydro (run-of-river) energy that will supply electricity to the Rwandan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>N/A. These types of projects are not included in the CPA. Hydro run-of-river does not have reservoirs.</p>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of <b>15 MW</b>.</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>
<p><b>Combined heat and power</b> (co-generation) systems are not eligible under this category.</p>	<p>The programme of activities does not include combined heat and power (co-generation) systems.</p>	<p>OK. The PoA is not applicable, since the PoA will not include projects</p>

		that involve a combined heat and power system.
<i>In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</i>	The programme of activities does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
<i>In the case of <b>retrofit or replacement</b>, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</i>	The programme of activities does not include retrofits or replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Hydro; run-of-river)</b>	<b>JCI's Determination</b>
<i>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).</i>	This tool is applicable since the generic project activity involves the generation of electricity from hydro (run-of-river) energy and its supply to the Rwandan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
<i>The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.</i>	The project electricity system is located in Rwanda. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Hydro; run-of-river)</b>	<b>JCI's Determination</b>
<i>The tool can be used in cases where CO<sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.</i>	The project does not need to meet the applicability criteria of the Leakage tool as it is a hydro (run-of-river) energy project.	OK. The description is applicable.

**Table 11L Assessment on the applicability for the technology/measure; Hydro (with accumulation reservoir) project in Rwanda**

<b>Applicability for technology/measure</b>	<b>Description of Generic CPA (Hydro; with accumulation reservoir)</b>	<b>JCI's Determination</b>
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<p><i>This methodology comprises <b>renewable energy generation</b> units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</i></p> <p><i>(a) Supplying electricity to a national or a regional grid; or</i></p> <p><i>(b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</i></p>	<p>The generic SSC-CPA under the Programme will use hydropower energy that will supply electricity to the Rwandan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>OK. The CPAs will use renewable energy generation units and the plant supplies electricity to national grid system.</p>
<p><i>This methodology is applicable to project activities that: (a) Install a <b>new power plant</b> at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a <b>capacity addition</b>; (c) Involve a <b>retrofit</b> of (an) existing plant(s); or (d) Involve a <b>replacement</b> of (an) existing plant(s).</i></p>	<p>The generic SSC-CPAs under the PoA will include activities that:</p> <p>(a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);</p>	<p>OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.</p>
<p><i>Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</i></p> <ul style="list-style-type: none"> <li><i>· The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</i></li> <li><i>· The project activity is implemented in an <b>existing reservoir</b>, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>;</i></li> <li><i>· The project activity results in <b>new reservoirs</b> and the power density of the power plant, as per definitions given in the project emissions section, is greater than <b>4 W/m<sup>2</sup></b>.</i></li> </ul>	<p>For SSC-CPAs under the PoA that implement a hydro power plant with a reservoir at least one of the following conditions will be satisfied:</p> <ul style="list-style-type: none"> <li>· The SSC-CPA is implemented in an existing reservoir with no change in the volume of reservoir;</li> <li>· The SSC-CPA is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the SSC-CPA, as per definitions given in the Project Emissions section, is greater than 4 W/m<sup>2</sup>;</li> <li>· The SSC-CPA results in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, is greater than 4 W/m<sup>2</sup>.</li> </ul>	<p>OK. The description is applicable.</p>
<p><i>If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a <b>small-scale</b> CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the</i></p>	<p>N/A. These types of projects are not included in the PoA.</p>	<p>OK. The PoA is not applicable since the PoA will not include projects with both renewable and non-renewable components or units that co-fire fossil fuel.</p>

<i>limit of 15 MW.</i>		
<b>Combined heat and power</b> (co-generation) systems are not eligible under this category.	The programme of activities does not include combined heat and power (co-generation) systems.	OK. The PoA is not applicable, since the PoA will not include projects that involve a combined heat and power system.
<i>In the case of project activities that involve the addition of renewable energy generation units at an <b>existing renewable power generation</b> facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</i>	The programme of activities does not include capacity additions.	OK. The PoA is not applicable, because the PoA will not include projects that involve capacity additions.
<i>In the case of <b>retrofit or replacement</b>, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</i>	The programme of activities does not include retrofits or replacements.	OK. The PoA is not applicable, because the PoA will not include projects that involve retrofits or replacements additions.
<b>Applicability of Emission tool</b>	<b>Description of Generic CPA (Hydro; with accumulation reservoir)</b>	<b>JCI's Determination</b>
<i>This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).</i>	This tool is applicable since the generic project activity involves the generation of electricity from hydro (with accumulation reservoir) energy and its supply to the Rwandan grid system.	OK. The PoA is correctly applied the Emission tool to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity.
<i>The tool is not applicable if the project electricity system is located partially or totally in an Annex-I country.</i>	The project electricity system is located in Rwanda. This country is not an annex I country.	OK. The PoA is correctly applied the Emission tool.
<b>Applicability criteria of Leakage tool (Version 02)</b>	<b>Description of Generic CPA (Hydro; with accumulation reservoir)</b>	<b>JCI's Determination</b>
<i>The tool can be used in cases where CO<sub>2</sub> emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties.</i>	The project does not need to meet the applicability criteria of the Leakage tool as it is a hydro (with accumulation reservoir) energy project.	OK. The description is applicable.

As a result of above assessment, JCI determines the selected methodology (AMS-I.D.) is applied to the whole Generic CPA-DD (Part II of PoA-DD) and correctly applied with respect to the Monitoring methodology.

## 2) Specific CPA-DD (CPA-001)

Table 12 is shown the assessment on applicability for technology/measure of specific CPA-DD (CPA-001) and JCI's determination.

**Table 12 Assessment on the applicability for the technology/measure on specific CPA-DD**

No	Description on Generic CPA of Hydro (run-of-river) project in Kenya	Description on specific CPA (CPA-001)	JCI's Determination
1	<b><u>Renewable energy generation</u></b> The generic SSC-CPA under the Programme will use hydro (run-of-river) energy that will supply electricity to the Kenyan national grid, or to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.	The proposed project will use hydropower to generate electricity specifically run-of river technology. . The plant will supply electricity to the Kenyan national grid system. (See the detailed project report and the draft PPA as well as the records of discussion with the utility company)	OK. The CPA will use renewable energy generation unit with run-of river technology and the plant supplies electricity to national grid system.
3	<b><u>New power plant</u></b> The generic SSC-CPAs under the PoA will include activities that: (a) Install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (greenfield plant);	The proposed project is a greenfield power plant that will install a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity. (See detailed project report)	OK. The Category (a): Greenfield plant is applicable. Capacity additions (b), retrofits (c) and replacement of existing plants (d) are not included in the PoA.
4	<b><u>Reservoir</u></b> N/A. These types of projects are not included in this CPA. Hydro run-of-river does not have reservoirs.	Not applicable since the proposed project will not install a hydro power plant that has a reservoir. The project is a run-of-river type. (See detailed project report)	OK
6	<b><u>Renewable and non-renewable components</u></b> N/A. These types of projects are not included in the PoA.	Not applicable	OK
7	<b><u>Combined heat and power</u></b> The programme of activities does not include combined heat and power (co-generation) systems.	Not applicable.	OK
8	<b><u>Existing renewable power generation</u></b> The programme of activities does not include capacity additions.	Not applicable.	OK
9	<b><u>Retrofit or replacement</u></b> The programme of activities does not include retrofits or replacements.	Not applicable.	OK

As a result of above assessment, JCI determines the description on Generic CPA-DD of Hydro (run-of-river) project in Kenya is applied to the Specific CPA-DD (CPA-001) and correctly applied with respect to the Monitoring methodology.

Therefore, JCI determines that project activity meets all the applicability criteria of the methodology in accordance with the CDM requirements with evidences.

### 8.3 Boundary

According to the Para. 191 and 192 of VVS, JCI assesses boundary of the PoA by the following steps of Document review, Follow-up action and Findings of CARs, CLs.

- (a) Document review, involving:
  - (i) A review of data and information;
  - (ii) Cross checks between information provided in the DDs and information from sources other than those used, if available, the DOE's sectoral or local expertise 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 checks between information provided by interviewed personnel (i.e. by checking sources or other interviews) to ensure that no relevant information has been omitted.
- (c) Reference to available information relating to projects or technologies similar to the proposed CDM project activity registered and under validation; and
- (d) Review, based on the approved methodology being applied, of the appropriateness of formulae and correctness of calculations.

JCI assesses the project boundary as follows:

- 1) *Project boundary*
- 2) *Sources and GHGs in generic CPA*
- 3) *Avoidance of double counting*
- 4) *Location of the project activities implanted under the CPA*
- 5) *GHG emissions more than 1% of the overall*

#### 1) Project boundary

The project boundary of electricity system is included national grid of each of the Host Countries included in the PoA, Kenya and Rwanda. The project boundary of electricity system and the project activity is reported in Figure 1 and Table 1 of PoA-DD (Part I of PoA-DD).

JCI raises CL-14 for clarifying the applicability of parameter  $EF_{CO_2,grid,y}$  and the reason of Appendix 4 for Kenya in particular. The CME of PoA demonstrated the reason as follows:

- In line with EB 70, Annex 02 Clean Development Mechanism Project Standard version 02.1/7-14/, paragraph 237, the CME may request changes to the registered CDM PoA to under the conditions specified by the Project Cycle Procedure/7-15/. According to the Clean Development Mechanism project cycle procedure version 03.1 (EB 70, Annex 04), paragraph 131 (a), “for CDM PoAs [...] the following changes shall be allowed: Changes to programme boundary to expand geographical coverage or to include additional host Parties. Therefore, additional host Parties may be included in the future following the appropriate procedures.
- As the first CPA is located in Kenya, the grid emission factor has been calculated for this country, by applying ex-ante option including both grid and off-grid power plants in Kenya as guided by the Emission Tool/7-02/. Other CPAs located in Kenya will apply the same ex-ante grid emission factor

as it has been defined at PoA level for the first credit period. For other CPAs located in different host countries other than Kenya, the grid emission factor calculations will be described at the specific CPA-DDs under B.6. of each Generic CPA-DD (Part II of PoA-DD).

- The specific parameters applied in the calculation of the Kenyan grid emission factor had not been included in the earlier versions of the PoA-DD but had been included in the CPA-DD. The latest version of the PoA-DD is reported each specific parameters of grid emission factor for Kenya in section B.6.2 since the grid emission factor will be fixed on the PoA level. JCI assesses the project boundary system through the document review and the following actions such as on-site visit and interviews, and judges the description of the each specific parameters of grid emission factor (Kenya and Rwanda) in section B.6.2 of each Generic CPA-DDs "Specific parameters for calculation of grid emission factor" are reported appropriately.

Therefore, JCI determines that project boundary of electricity system is reported appropriately. CL-14 is resolved and closed.

## 2) Sources and GHGs in generic CPA-DD

The Table 13 is shown the assessment on the system boundary of emission sources and GHGs for the generic CPA-DDs (Part II of PoA-DD) and JCI's determination.

**Table 13 Assessment on the emission sources and GHGs**

Emissions	GHGs involved	Generic CPA-DDs	Emission source	JCI's Determination
Baseline emissions	CO <sub>2</sub>	Yes	Major	OK
	CH <sub>4</sub>	No	Minor	OK
	N <sub>2</sub> O	No	Minor	OK
Project emissions*1	CO <sub>2</sub>	In case of geothermal: Yes Other Project: No	Major	OK
	CH <sub>4</sub>	In case of geothermal: Yes Other Project: No	Major	OK
	N <sub>2</sub> O	No	Minor	OK
Project emissions*2	CO <sub>2</sub>	In case of geothermal (with fossil fuel combustion): Yes Other Project: No	Major	OK
	CH <sub>4</sub>	No	Minor	OK
	N <sub>2</sub> O	No	Minor	OK
Project emissions*3	CO <sub>2</sub>	No	Minor	OK
	CH <sub>4</sub>	In case of Hydro (with accumulation reservoir) with reservoirs: Yes Other Project: No	Major	OK
	N <sub>2</sub> O	No	Minor	OK

Note:

\*1: Project Activity for geothermal power plants, fugitive emissions of CH<sub>4</sub> and CO<sub>2</sub> from non-condensable gases contained in geothermal steam

\*2: Project Activity for CO<sub>2</sub> emissions from combustion of fossil fuels for electricity generation in geothermal power plants

\*3: Project Activity for hydro power plants, emissions of CH<sub>4</sub> from the reservoir

As the methodology allows project participants to choose whether a source or gas is to be included within the project boundary, JCI determines that the project participants have justified that choice and also determines that the justification provided is reasonable. It is based on an assessment of supporting documented evidence provided by the project participants and the following actions such as on-site visit and interviews.

### 3) Avoidance of double counting

JCI assesses whether to avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo). The CME of PoA demonstrated that the CPA has not yet been included in another Programme of Activities or has not yet been registered as a single CDM project activity. Signed confirmation from the CME and the CPA implementing entity confirmed that the project has not yet been included in another PoA or has not yet been registered as a single CDM project activity.

JCI raises CL-23b to clarify the role of Uni-Power, UPL and confirms that UPL has concluded the “*Emission Reduction Purchase Agreement (ERPA)/3-02/*” with SB. Therefore, CL-23b is resolved and closed.

### 4) Location of the project activities implemented under the CPA (CPA-001)

JCI judges the geographical area of PoA will be defined by the national boundaries of each of the Host Countries included in the PoA, Kenya and Rwanda. The boundary is reported in Figure 1 and Table 1 of PoA-DD (Part I of PoA-DD). JCI also judges the geographical area by the geo-coordinate of “Google map” and on-site visit of CPA-001.

JCI raises CL-3 and CL-15 (Electricity imports/exports; Generic CPA-DD) for clarifying the electricity grid in each country is in connection to each other. The CME of PoA demonstrated that the Kenyan electricity grid is connected to the Ugandan electricity grid. “*KPLC Annual Reports 2010-2011*”<sup>12</sup>/6-07/ is shown the exports/imports to Uganda and Tanzania. However imports/exports are not significant, based on *KPLC Annual Reports/6-07/*. According to Table 1 of page 115 of the above report/6-07/, Kenya imported 30 GWh and 0.9 GWh from the Ugandan Electricity Transmission Company Limited (UETCL) and the Tanzanian Electric Supply Company (TANESCO) in 2010/2011. UETCL and TANESCO represent 0.41% and 0.012% of the total electricity supplied to the Kenyan grid in that year respectively. JCI judges the imports/ exports to the Kenyan grid are not significant.

Therefore, JCI determines that geographical area is appropriate and complied with the Para. 191 of VVS. CL-3 and CL-15 are resolved and closed.

As a result of above assessment for the proposed project boundary, JCI concludes project boundary of the PoA included the Specific CPA (CPA-001) are complied with the Para. 191 and 192 of VVS.

## 8.4 Description of baseline scenario

JCI assesses description of baseline scenario by the following steps of Document review, Follow-up action and Findings of CARs, CLs.

(a) Document review, involving:

- (i) A review of data and information;
- (ii) Cross checks between information provided in the DDs and information from sources other than those used, if available, the DOE's sectoral or local expertise 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 checks between information provided by interviewed personnel (i.e. by checking sources or other interviews) to ensure that no relevant information has been omitted.

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<sup>12</sup> Page 58 of the “National Baseline Emission Factors for Power Grids”

- (c) Reference to available information relating to projects or technologies similar to the proposed CDM project activity registered and under validation; and
- (d) Review, based on the approved methodology being applied, of the appropriateness of formulae and correctness of calculations.

### 1) Generic CPA-DD (Part II of PoA-DD)

JCI assesses description on baseline scenario of each Generic CPA-DDs (Part II of PoA-DDs) in accordance with the requirements of the selected methodology of AMS-I.D (Version 17.0) /7-01/.

The CME provides "*Installed Capacity in MW*" and demonstrated the energy source in Kenya or Rwanda (Table 2 through 13 of Generic CPA-DD). The total generation capacity is estimated in "*Table 3: Regional Grid-Connected Installed Capacity (MW), 2005-2010 - excluding Ethiopia*". The CME demonstrated detailed baseline information of Kenya and Rwanda and tabulated the information of Energy policy and regulation, Regulatory body, Rural energy, Feed-in-Tariff Policy, Unbundling and Independent Power Producers in Appendix 6 of PoA-DD. JCI confirms the information are based on national codes and regulation such as Renewable Energy Policy, Electric Power Act, Feed-in-Tariffs Policy and so on<sup>13</sup>.

JCI judges the description of baseline scenario for the each Generic CPA-DDs (Part II of PoA-DDs) are appropriate.

### 2) Specific CPA-DD (CPA-001)

JCI assesses description on baseline scenario of Specific CPA-DD (CPA-001) and the description is fully consistent with the Generic CPA-DD of Hydro (run-of-river) project in Kenya. Therefore, JCI judges the description of baseline scenario for the Specific CPA-DD (CPA-001) is applicable.

As a result of above assessment on the Section 8.4, JCI determines the description on baseline scenario of the proposed PoA including CPA-001 is complied with Para.88 through 95 of VVS.

## 8.5 Estimation of emission reductions of a generic CPA and a Specific CPA

JCI assesses estimation of emission reductions of each generic CPA-DDs (Part II of PoA-DD) and a Specific CPA-DD (CPA-001) for the proposed PoA in accordance with the Para. 96 through 100 of VVS.

The requirement of the Para. 96 of VVS is stated "*To be determined that the steps taken and the equations and parameters applied in the DDs to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected methodology including applicable tools*".

### 1) Generic CPA-DD (Part II of PoA-DD)

#### a. Assessment on algorithms for estimation of emission reductions

Table 14 is shown the assessment on algorithms for estimation of emission reductions of a generic CPA (Part II of PoA-DD) in accordance with the Para.99 (a) through (e) of VVS.

**Table 14 Assessment on the estimation of emission reductions of Generic CPA-DDs**

<sup>13</sup> Kenya Power and Lighting Company (KPLC) Annual Report and Financial Statements for the Year Ended 30 June 2010

No	Requirement of Para.99 of VVS	Validation opinion for Generic CPA-DDs	JCI's Determination
Para. 99(a)	<i>All assumptions and data used by the project participants are listed in the DDs, including their references and sources;</i>	As the methodology allows for selection between options for equations or parameters, JCI determines that adequate justification has been provided (based on the choice of the baseline scenario, context of the proposed project activity and other evidence provided) and that the correct equations and parameters have been used, in accordance with the methodology selected including applicable tools.	OK
Para. 99(b)	<i>All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the DDs;</i>	JCI verifies the justification given in the PoA-DD for the choice of data and parameters used in the equations.	OK
Para. 99(c)	<i>All values used in the DDs are considered reasonable in the context of the proposed project activity;</i>	As the data and parameters will not be monitored throughout the crediting period of the proposed project activity but have already been determined and will remain fixed throughout the crediting period.	OK
Para. 99(d)	<i>The baseline methodology and corresponding tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions;</i>	JCI determines that all data sources and assumptions are reported appropriately and calculations are correct as applicable to the proposed project activity, and will result in an accurate or otherwise conservative estimate of the emission reductions.	OK
Para. 99(e)	<i>All estimates of the baseline emissions can be replicated using the data and parameter values provided in the DDs.</i>	As the data and parameters will be monitored or estimated on implementation and hence become available only after validation of the project activity, JCI determines that the estimates provided in each Generic CPA-DDs for these data and parameters are reasonable.	OK

As a result, JCI judges that the data and parameters has verified used in the equations, including references to any other data sources used and provide an opinion in the Table 15, and describes other steps taken and sources of information used to cross-check the information contained in the PoA-DD.

#### b. Assessment on calculation of CO<sub>2</sub> emission factor in Kenya

JCI assesses applicability of the description of calculation step of the grid emission factor in accordance with "D.6.1. Explanation of methodological choices" and "Appendix 4: Further background information on ex ante calculation of emission reductions" of each Generic CPA-DDs (Part II of PoA-DD). The calculation step of the grid emission factor in Rwanda will be determined by each Generic CPA-DD for Rwanda.

The CME demonstrates the calculation step complied with the "Tool to calculate the emission factor for an electricity system (Emission Tool)"/7-02/ as followings:

- Step 1. Identify the relevant electricity systems

- Step 2. Choose whether to include off-grid power plants in the project electricity system (optional)
- Step 3. Select a method to determine the operating margin (OM)
- Step 4. Calculate the operating margin emission factor according to the selected method
- Step 5: Calculate the build margin (BM) emission factor
- Step 6: Calculate the combined margin emissions factor

The assessment result is shown in below Table 15.

**Table 15 Calculation step of CO<sub>2</sub> emission factor of Generic CPA-DD (Part II of PoA-DD)**

Step	Description on Appendix 4 of each Generic CPA-DDs	Evidences	JCI's determination
<b>Step 1 Identify the relevant electricity systems</b>			
	<p>For calculating the grid emission factor, the project activity has identified the Kenyan national grid as the relevant electricity system. The identification of the Kenyan national grid as the relevant electricity system is based on the following arguments:</p> <ul style="list-style-type: none"> <li>· The Kenyan DNA has not published a delineation of the project electricity system and connected electricity system.</li> <li>· The Kenya grid is connected to the Ugandan grid through a double circuit 132 kV transmission line. However, the Ugandan grid is not considered a connected electricity system because there are no spot markets in the Kenyan and Ugandan electricity system and the transmission line is not operated at 90% of its rated capacity during 90% or more of the hours of the year.</li> <li>· Finally, Kenya does not have a layered dispatch system and the country has only one electricity grid system that serves the entire country. Therefore, and in line with version 02.2.1 of the Tool to calculate the emission factor for an electricity system (Emission Tool), the national grid definition is used by default.</li> </ul>	Emission Tool	OK
<b>Step 2 Choose whether to include off-grid power plants in the project electricity system (optional)</b>			
	<p>STEP 1*: Obtain data on off-grid power generation</p> <p>Note *: The "STEP" is defined by Annex 2 of the Tool to calculate the emission factor for an electricity system</p>		
	STEP 1.1*: Choose the data to be collected		
	CAP <sub>p</sub> :	Annex 2 of the Emission Tool/7-02/	OK
	<p>TECH<sub>p</sub> : The type of technology of the off-grid power plant p.</p> <ul style="list-style-type: none"> <li>(a) Reciprocating engines</li> <li>(b) Steam turbine</li> <li>(c) Gas turbine</li> <li>(d) Combined cycle power generation</li> <li>(e) Hydro, solar wind or geothermal power generation</li> </ul>		OK

	FUEL <sub>p</sub> : The fuel type(s) used in the off-grid power plant p. This should include at least the following fuel types: (a) Diesel (b) Gasoline (c) Kerosene (d) Natural gas (e) Coal (f) Biomass/biofuels (g) Any relevant blends or other fuels		OK
	GRID <sub>p</sub> : Are the consumers supplied by the off-grid power plant also connected to an electricity grid which is capable of supplying their power demand entirely during time intervals where grid electricity is available, reliable and stable? (True/false)		OK
	SWITCH <sub>p</sub> : Can the consumers supplied by the off-grid power plant easily switch between electricity supply from the grid and off-grid power plants? This applies, for example, if the consumers have a manual or automatic change-over-switch system in place. (True/false)		OK
STEP 1.2*: Define the classification of off-grid power plants			
	The power plant classification as provided in Annex 1 of the Tool to calculate the emission factor of an electricity system is used to classify off-grid power plants.  Off-grid power plants are not included in the build margin.	Annex 1 of the Emission Tool/7-02/	OK
STEP 1.3*: Define the sectors for which data is collected			
	Data is collected for the whole economy, including: · Households · Commercial sector · Industrial sector	"Research Solutions Africa"/6-16/	OK. The data is covered with the whole economy.
Stub-step 1.4: Establish the survey design and management scheme			
	The survey was carried out by Research Solutions Africa which was conducted in August 2011. Interviewees were the persons responsible for the operation of a generator and/or persons who were in charge of the documentation of generator related costs (acquisition, fuel, maintenance, etc.).  In order to address the issue of identifying the capacity of the off-grid power plants, the project engaged an expert on back-up power systems in Kenya. The expert went through all the data records to carry out a quality check. Based on the surveillance, 58% of the off-grid power plants is excluded from the sample. For the remaining 42% of the data, the expert confirmed the capacity and provided a web link to documentation that confirms the listed capacity. The analysis only considered the off-grid systems for which reliable data	"Research Solutions Africa"/6-16/	OK. The CME selected the survey expert who conducted the survey with principles and best practices.

	was collected. The survey covered a total of 1,174 back-up generators, distributed over sectors as outlined in the table below. The table also provides the number and percentage (%) of generators for which reliable data was obtained:																														
	The pre-survey is conducted the reliable data percentage for each sector out of a total 1,174 back-up generators.		OK																												
	STEP 1.5*: Collect the data																														
	266 households (40.6%) had backup generation systems, which were used during interruptions of grid supply. The remaining 389 interviews with households without backup generation capacity were terminated at that point. Of the 266 generators, complete information was gathered for 119 generators. Households in socio-economic class AB were considered as the sampling frame. 92 generators (77%) of the 119 generators had a capacity of less than 10 kW and 13 generators (11 %) a capacity of 10 to 50 kW. The remaining 12 % were split among 50 to 100 kW (4 generators; 3%), 100 to 200 kW (9 generators; 7.5%), 200 to 400 kW (2 generators; 1.5%) and a single 440 kW generator in Nairobi. The average capacity of all household generators was 27 kW. In terms of off-grid power systems used by industrial, commercial and government entities, the survey team randomly sampled a total of 908 backup generators. Reliable data was available for 373 generators (41.3%) the rest, i.e. 531 generators were considered to have unreliable information. The total installed capacity of off-grid power plants in the sample of industrial, commercial and government entities amounted to 35.17 MW. The generators included in the sample were divided as follows between different fuel types:	"Kenyan Census 1999"/6-08/ and "Research Solutions Africa"/6-16/	OK																												
	<table><thead><tr><th></th><th>Capacity (MW)</th></tr></thead><tbody><tr><td>Combined Cycle (total):</td><td>217</td></tr><tr><td>  Diesel:</td><td>138</td></tr><tr><td>  Gasoline/Petrol:</td><td>78</td></tr><tr><td>  Other:</td><td>1</td></tr><tr><td>Reciprocating Engines (total):</td><td>153</td></tr><tr><td>  Diesel:</td><td>113</td></tr><tr><td>  Gasoline/Petrol:</td><td>39</td></tr><tr><td>  Other:</td><td>1</td></tr><tr><td>Gas turbines (total):</td><td>2</td></tr><tr><td>  Diesel</td><td>2</td></tr><tr><td>Steam Turbines (total):</td><td>1</td></tr><tr><td>  Gasoline/Petrol</td><td>1</td></tr><tr><td>Total</td><td>373</td></tr></tbody></table>		Capacity (MW)	Combined Cycle (total):	217	Diesel:	138	Gasoline/Petrol:	78	Other:	1	Reciprocating Engines (total):	153	Diesel:	113	Gasoline/Petrol:	39	Other:	1	Gas turbines (total):	2	Diesel	2	Steam Turbines (total):	1	Gasoline/Petrol	1	Total	373	"Kenyan Census 1999"/6/08/ and "Research Solutions Africa"/6-16/	OK
	Capacity (MW)																														
Combined Cycle (total):	217																														
Diesel:	138																														
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Other:	1																														
Gas turbines (total):	2																														
Diesel	2																														
Steam Turbines (total):	1																														
Gasoline/Petrol	1																														
Total	373																														
	STEP 2*: Exclude plants that do not qualify as off-grid power plants																														
	Option (c): $OMC_{p,y} > T_{EL}$		OK																												
	$OMC_{p,y}$ = Variable operation and maintenance costs of off-grid power plant p in year y (currency/MWh)	Fuel costs: official statistics or projections on fuel	OK																												

	$T_{EL,p,y}$ = Tariff of purchasing grid electricity for consumers supplied by off-grid power plant p in year y	prices Efficiency of the plants in that class: typical the default efficiencies provided in Annex 1 of Emission tool. Relevant information on electricity purchase costs in the sector: statistics on electricity prices	
	Price of diesel: 104.18 KES/l	Energy Regulatory Commission (Average diesel price in 2011)/6-11/	OK
	NCV of diesel: 0.043 GJ/kg	IPCC (2006)	OK
	Density of diesel: 0.832 kg/l	Joint Research Centre of European Commission: Tanks to wheels report version 2c, March 2007	OK
	$EG_m = FC_{diesel,m} \times NCV_{diesel} \times \eta_m \times 1000/3.6$	Equation 4 of the Emission Tool/7-02/	OK
	$EG_m$ = Quantity of electricity generated by off-grid power plant class m (kWh) $FC_{diesel,m}$ = Amount of diesel consumed by off-grid power plant class m (kg) $NCV_{diesel}$ = Net calorific value of diesel (GJ/kg) $\eta_m$ = Default net energy conversion efficiency of off-grid power plant class m		OK
	From the above equation, it was concluded that the cost of grid electricity is generally much lower than the cost achieved using off-grid power plants. Therefore $OMC_{p,y} > TEL$ criteria is fulfilled		OK
	STEP 3*: Aggregate data according to classes of off-grid power plants		
	Estimated installed capacity among households: 141.39 MW	"Research Solutions Africa"/6-16/	OK
	Estimated installed capacity among industrial, commercial and government sector: 416.82 MW		OK
	Total installed capacity among all sectors: 558.21 MW		OK
	STEP 4*: Assess the extent of off-grid power		
	Estimated capacity of off-grid power plants: 558 MW (35% of the total capacity of grid power plants)	KPLC Annual report 2011/6-07/	OK
	The requirement is more than 10% of the total capacity	Emission Tool/7-02/	OK. The criteria by

	of grid power plants		the Tool about percentage of the estimated off-grid capacity was fulfilled.
STEP 5*: Assess the reliability and stability of the grid and that this is primarily due to constraints in generation, and not to other aspects such as transmission capacity.			
	Average number of outages: 6.9 times/month Average duration of power outages: 4.45 h Average black outs in Kenya: 368 h/y	World Bank Enterprise Survey 2008/6-15/	OK. JCI confirmed with the public information about the instability of the grid.
Note*: The "STEP"s are defined by Annex 2 of the Tool to calculate the emission factor for an electricity system.			
Step 3. Select a method to determine the operating margin (OM)			
	b) Simple adjusted OM method is selected.		OK
Step 4. Calculate the operating margin emission factor according to the selected method			
	$EF_{grid,OM-adj,y} = (1 - l_y) \cdot \frac{\sum_m \dot{A}EG_{m,y} \cdot EF_{EL,m,y}}{\sum_m \dot{A}EG_{m,y}} + l_y \cdot \frac{\sum_k \dot{A}EG_{k,y} \cdot EF_{EL,k,y}}{\sum_k \dot{A}EG_{k,y}}$	Equation 7, Option 3 of the Emission Tool/7-02/	OK
	EF <sub>grid,OM-adj,y</sub> = Simple adjusted operating margin CO <sub>2</sub> emission factor in year y (tCO <sub>2</sub> /MWh) λ <sub>y</sub> = Factor expressing the percentage of time when low cost/must-run power units are on the margin in year y EG <sub>m,y</sub> = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh) EG <sub>k,y</sub> = Net quantity of electricity generated and delivered to the grid by power unit k in year y (MWh) EF <sub>EL,m,y</sub> = CO <sub>2</sub> emission factor of power unit m in year y (tCO <sub>2</sub> /MWh) EF <sub>EL,k,y</sub> = CO <sub>2</sub> emission factor of power unit k in year y (tCO <sub>2</sub> /MWh) m = All grid power units serving the grid in year y except low-cost/must-run power units k = All low-cost/must run grid power units serving the grid in year y y = The relevant year as per the data vintage chosen in Step 3		OK
	$EG_{m,y} = CAP_m \cdot PLF_{default.off-grid,y} \cdot 8760$	Equation 4 of	OK

		Emission Tool/7-02/	
	<p><math>EG_{m,y}</math> = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)</p> <p><math>CAP_m</math> = Total capacity of off-grid power plants included in off-grid power plant class m (MW)</p> <p><math>PLF_{\text{default,off-grid},y}</math> = Default plant load factor for off-grid generation in year y (ratio)</p> <p>m = Off-grid power plant class considered as one power unit (as per the provisions in Annex 2 to this tool)</p> <p>y = The relevant year as per the data vintage chosen in Step 3</p>		OK
	$EF_{EL,m,y} = \frac{\sum_i FC_{i,m,y} \cdot NCV_{i,y} \cdot EF_{CO2,i,y}}{EG_{m,y}}$	Equation 2 of Emission Tool/7-02/	OK
	<p><math>EF_{EL,m,y}</math> = CO<sub>2</sub> emission factor of power unit m in year y (tCO<sub>2</sub>/MWh)</p> <p><math>FC_{i,m,y}</math> = Amount of fossil fuel type i consumed by power unit m in year y (Mass or volume unit)</p> <p><math>NCV_{i,y}</math> = Net calorific value (energy content) of fossil fuel type i in year y (GJ/mass or volume unit)</p> <p><math>EFCO2_{i,y}</math> = CO<sub>2</sub> emission factor of fossil fuel type i in year y (t CO<sub>2</sub>/GJ)</p> <p><math>EG_{m,y}</math> = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)</p> <p>m = All grid power units serving the grid in year y except low-cost/must-run power units</p> <p>i = All fossil fuel types combusted in power unit m in year y</p> <p>y = The relevant year as per the data vintage chosen in Step 3</p>		OK
	$EF_{EL,m,y} = \frac{EF_{CO2,m,i,y} \cdot 3.6}{h_{m,y}}$	Equation 3 of Emission Tool/7-02/	OK
	<p><math>EF_{EL,m,y}</math> = CO<sub>2</sub> emission factor of power unit m in year y (t CO<sub>2</sub>/MWh)</p> <p><math>EF_{CO2,m,i,y}</math> = Average CO<sub>2</sub> emission factor of fuel type i used in power unit m in year y (t CO<sub>2</sub>/GJ)</p> <p><math>\eta_{m,y}</math> = Average net energy conversion efficiency of power unit m in year y (ratio)</p> <p>m = Off-grid power unit</p>		OK
	<p>Average emission factor of off-grid power plants m</p> <p>Gasoline/petrol: 0.0675 t CO<sub>2</sub>/GJ</p> <p>Diesel: 0.0726 t CO<sub>2</sub>/GJ</p> <p>For off-grid power plants m it was assumed that they were all run on gasoline/petrol in order to be conservative.</p> <p>It was also assumed that all the off-grid power plants use the most efficient generation technology i.e. reciprocating engine system.</p>		OK
	<p><math>\lambda_y(\%)</math> = Number of hours low-cost must-run sources are on the margin in year y/8760 hours per year</p>		OK

	1- $\lambda_y$ for the most recent three years July 2008 – June 2009: 0.973 July 2009 – June 2010: 0.976 July 2010 – June 2011: 0.954		OK
	Simple Adjusted Operating Margin = Operating Margin ( $EF_{grid,OM-adj,y}$ ) = 0.65530 t CO <sub>2</sub> /MWh		OK
<b>Step 5: Calculate the build margin (BM) emission factor</b>			
	$EF_{grid,BM,y} = \frac{\sum_m EG_{m,y} \cdot EF_{EL,m,y}}{\sum_m EG_{m,y}}$	Equation 12 of Emission Tool/7-02/	OK
	EF <sub>EL,m,y</sub> = CO <sub>2</sub> emission factor of power unit m in year y (t CO <sub>2</sub> /MWh) FC <sub>i,m,y</sub> = Amount of fossil fuel type i consumed by power unit m in year y (Mass or volume unit) NCV <sub>i,y</sub> = Net calorific value (energy content) of fossil fuel type i in year y (GJ/mass or volume unit) EF <sub>CO<sub>2</sub>,i,y</sub> = CO <sub>2</sub> emission factor of fossil fuel type i in year y (t CO <sub>2</sub> /GJ) EG <sub>m,y</sub> = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh) m = The power units included in the build margin i = All fossil fuel types combusted in power unit m in year y y = The relevant year as per the data vintage chosen in Step 3		OK
	Build margin, EF <sub>grid,BM,y</sub> = 0.49000 t CO <sub>2</sub> /MWh		OK
<b>Step 6: Calculate the combined margin emissions factor</b>			
	$EF_{grid,CM,y} = EF_{grid,OM,y} \cdot w_{OM} + EF_{grid,BM,y} \cdot w_{BM}$	Equation 12 of Emission Tool/7-02/	OK
	EF <sub>grid,BM,y</sub> = Build margin CO <sub>2</sub> emission factor in year y (t CO <sub>2</sub> /MWh) EF <sub>grid,OM,y</sub> = Operating margin CO <sub>2</sub> emission factor in year (t CO <sub>2</sub> /MWh) w <sub>OM</sub> = Weighting of operating margin emissions factor (%) w <sub>BM</sub> = Weighting of build margin emissions factor (%)		OK
	EF <sub>grid,BM,y</sub> = 0.49000 w <sub>BM</sub> (Wind/Solar) = 0.25 <sup>*1</sup> w <sub>BM</sub> (Other) = 0.5 <sup>*2</sup> EF <sub>grid,OM,y</sub> = 0.65530 w <sub>OM</sub> (Wind/Solar) = 0.75 <sup>*1</sup> w <sub>OM</sub> (Other) = 0.5 <sup>*2</sup> *1: w <sub>OM</sub> = 0.25 and w <sub>BM</sub> = 0.75 for the first crediting period and subsequent crediting period; *2: w <sub>OM</sub> = 0.5 and w <sub>BM</sub> = 0.5 for the first crediting period. w <sub>OM</sub> = 0.25 and w <sub>BM</sub> = 0.75 for the second and third crediting period		OK

Therefore, JCI judges the description of calculation step of the grid emission factor in the Appendix 4 of each Generic CPA-DD (Part II of PoA-DD) in Kenya are applicable and complied with the Emission Tool/7-02/.

### c. Assessment on parameter and calculation equation

JCI assesses parameter and equation of "B.6. Estimation of emission reductions of a Generic CPA" (Part II of PoA-DD). The assessment result is shown in below Table16.

**Table 16 Parameters and equation for emission reduction of Generic CPA-DD (Part II of PoA-DD)**

Parameter	Equation	Source	JCI's determination
$BE_y$	$BE_y = EG_{BL,y} \times EF_{CO_2,grid,y}$	Equation (1) of AMS-I.D. <sup>*1</sup>	OK
	$BE_y$ = Baseline Emissions in year $y$ (tCO <sub>2</sub> ) $EG_{BL,y}$ = Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year $y$ (MWh) $EF_{CO_2,grid,y}$ = CO <sub>2</sub> emission factor of the grid in year $y$ (tCO <sub>2</sub> /MWh)		
$PE_y$	$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$	Equation (1) in ACM0002 <sup>*2</sup>	OK
	$PE_y$ = Project emissions in year $y$ (tCO <sub>2</sub> e/yr) $PE_{FF,y}$ = Project emissions from fossil fuel consumption in year $y$ (tCO <sub>2</sub> /yr) $PE_{GP,y}$ = Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year $y$ (tCO <sub>2</sub> e/yr) $PE_{HP,y}$ = Project emissions from water reservoirs of hydro power plants in year $y$ (tCO <sub>2</sub> e/yr)		
$PE_{FC,y}$	$PE_{FC,y} = \sum FC_{i,j,y} \times COEF_{i,y}$	Equation (1) of the relevant Tool <sup>*3</sup>	OK
	$PE_{FC,j,y}$ = CO <sub>2</sub> emissions from fossil fuel combustion in process $j$ during the year $y$ (tCO <sub>2</sub> /yr); $FC_{i,j,y}$ = Quantity of fuel type $i$ combusted in process $j$ during the year $y$ (mass of volume unit/yr) $COEF_{i,y}$ = CO <sub>2</sub> emission coefficient of fuel type $i$ in year $y$ (tCO <sub>2</sub> /mass or volume unit) $i$ = Fuel types combusted in process $j$ during the year $y$		
$COEF_{i,y}$	$COEF_{i,y} = NCV_{i,y} \times EF_{CO_2,i,y}$	Option B (equation 4) in relevant Tool <sup>*3</sup>	OK
	$COEF_{i,y}$ = CO <sub>2</sub> emission coefficient of fuel type $i$ (tCO <sub>2</sub> /mass or volume unit) $NCV_{i,y}$ = Weighted average net calorific value of the fuel type $i$ in year $y$ (G /mass or volume unit) $EF_{CO_2,i,y}$ = Weighted average CO <sub>2</sub> emission factor of fuel type $i$ in year $y$ (tCO <sub>2</sub> /GJ) $i$ = Fuel types combusted in process $j$ during the year $y$		
$PE_{GP,y}$	$PE_{GP,y} = (W_{steam,CO_2,y} + W_{steam,CH_4,y} \times GWP_{CH_4}) \times M_{steam,y}$	Equation (2) in ACM0002 <sup>*2</sup>	OK
	$PE_{GP,y}$ = Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year $y$ (tCO <sub>2</sub> e/yr) $W_{steam,CO_2,y}$ = Average mass fraction of carbon dioxide in the produced steam in year $y$ (tCO <sub>2</sub> /t steam) $W_{steam,CH_4,y}$ = Average mass fraction of methane in the produced steam in year $y$ (tCH <sub>4</sub> /t steam) $GWP_{CH_4}$ = Global warming potential of methane valid for the relevant commitment period (tCO <sub>2</sub> e/tCH <sub>4</sub> )		

	$M_{\text{steam},y}$ = Quantity of steam produced in year $y$ (t steam/y)		
$PE_{HP,y}$	$PE_{HP,y} = (EF_{\text{Res}} - TEG_y) / 1000$	Equation 3 in ACM0002 <sup>*2</sup>	OK
	$PE_{HP,y}$ = Project emissions from water reservoirs (tCO <sub>2</sub> e/yr) $EF_{\text{Res}}$ = Default emission factor for emissions from reservoirs of hydro power plants in year $y$ (kgCO <sub>2</sub> e/MWh) $TEG_y$ = Total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year $y$ (MWh)		
PD	$PD = (Cap_{PJ} - Cap_{BL}) / (A_{PJ} - A_{BL})$	Equation 5 in ACM0002 <sup>*2</sup>	OK
	PD = Power density of the project activity (W/m <sup>2</sup> ) Cap <sub>PJ</sub> = Installed capacity of the hydro power plant after the implementation of the project activity (W). Cap <sub>BL</sub> = Installed capacity of the hydro power plant before the implementation of the project activity (W). For new hydro power plants, this value is zero A <sub>PJ</sub> = Area of the single or multiple reservoirs measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (m <sup>2</sup> ) A <sub>BL</sub> = Area of the single or multiple reservoirs measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m <sup>2</sup> ). For new reservoirs, this value is zero		
$ER_y$	$ER_y = BE_y - PE_y - LE_y$	Equation 10 in AMS-I.D. <sup>*1</sup>	OK
	$ER_y$ = Emission reductions in year $y$ (t CO <sub>2</sub> /y) $BE_y$ = Baseline Emissions in year $y$ (t CO <sub>2</sub> /y) $PE_y$ = Project emissions in year $y$ (t CO <sub>2</sub> /y) $LE_y$ = Leakage emissions in year $y$ (t CO <sub>2</sub> /y)		

Note\*1: AMS-I.D. is defined as AMS-I.D. version 17.

Note\*2: ACM0002 is defined as ACM0002<sup>\*2</sup> (version 13.0.0)

Note\*3: "Relevant Tool" is defined as "Tool to calculate project or leakage CO<sub>2</sub> emissions from fossil fuel combustion Leakage tool" (Version 02)/7-16/"

As a result of the above assessment, JCI judges the each equation and parameters in B.6.2 of each Generic CPA-DDs (Part II of PoA-DD) are fully complied with the relevant methodologies.

Therefore, JCI determines the algorithms and equation for estimation of emission reductions of each Generic CPA-DDs (Part II of PoA-DDs) are applicable.

## 2) Specific CPA-DD (CPA-001)

JCI assesses input data and calculation for estimation of emission reduction of Specific CPA-DD (CPA-001) in accordance with the requirements of the selected methodology of AMS-I.D. (Version 17.0) /7-01/.

### a. Applicability of equation

JCI judges the used equation and calculation of the Baseline emission ( $BE_y$ ), Project emission ( $PE_y$ ), Leakage emission ( $LE_y$ ) and Emission reduction ( $ER_y$ ) are fully consistent with the Table 16. Therefore, used equation is applicable.

### b. Applicability of input values

The assessment result of "D.6.3. Ex-ante calculation of emission reductions" of Specific CPA" (CPA-001) is tabulated in Table 17.

**Table 17 Input data and calculation for emission reduction of Specific CPA-DD (CPA-001)**

Parameters of Hydro (run-of-river) project in Kenya	Unit	Input value	Source	JCI's determination
Calculation of $EF_{grid,CM,y} = EF_{grid,BM,y} \times W_{BM} + EF_{grid,OM,y} \times W_{OM}$				OK
$EF_{grid,BM,y}$	tCO <sub>2</sub> /MWh	0.49000	Emission tool and Appendix 4 of Generic CPA-DD (PoA-DD)	OK
$W_{BM}$	-	0.5		OK
$EF_{grid,OM,y}$	tCO <sub>2</sub> /MWh	0.65530		OK
$W_{OM}$	-	0.5		OK
$EF_{grid,CM,y}$	tCO <sub>2</sub> /MWh	0.57265		
$EF_{grid,CM,y} = EF_{CO2,grid,y} = 0.57265 \text{ tCO}_2/\text{MWh}$				OK
$EG_{BL,y}$	MWh	32,205	DPR (page 83)	OK
Plant load factor	%	73.53	DPR (page 83)	OK
Internal consumption rate	%	0.5	DPR (page 83)	OK
Transmission loss rate	%	0.5	DPR (page 83)	OK
Calculation of $BE_y = EG_{BL,y} \times EF_{CO2,grid,y} = \underline{18,442} \text{ tCO}_2/\text{y}$				OK
$PE_y = 0 \text{ tCO}_2/\text{y}$				OK
$LE_y = 0 \text{ tCO}_2/\text{y}$				OK
Calculation of $ER_y = BE_y - PE_y - LE_y = 18,442 - 0 - 0 = 18,442 \text{ tCO}_2/\text{y}$				OK

Where

$EG_{BL,y} = \text{Installed capacity (MW)} \times \text{Annual hours (h/y)} \times \text{Plant load factor} \times (1 - (\text{Internal consumption rate} + \text{transmission loss rate}))$

$$= 5 \times 24 \times 365 \times 0.7427 \times (1 - 0.005) \times (1 - 0.005)$$

$$= 43,800 \times 0.7353$$

$$= 32,205 \text{ MW/y}$$

The DPR is reported the reason of Plant load factor as following:

*"On this basis two units of 2,500 kW of horizontal Francis turbine are proposed. This Detailed Project Report (DPR) is based on the computed daily discharges in the Thiba River for period 1947 to 1972. On this basis daily energy generation studies have been carried out. The 50% energy generation works out as 37.84MUs (PLF 86.40%) and 75% energy generation works out as 32.86MUs (PLF 74.27%). This 75% dependable generation has been considered for economic viability calculations."*

JCI judges the demonstration of DPR is appropriate and the input values are consistent with each source and calculation result is reliable. Therefore, JCI determines the input data and calculation for estimation of emission reduction of Specific CPA-DD (CPA-001) is applicable.

As a result of assessment on the Section 8.5, "Estimation of emission reductions of a generic CPA and Specific CPA", JCI determines the description of the estimation of emission reductions of proposed PoA including CPA-001 is complied with Para.96 through 100 of VVS.

## 8.6 Monitoring plan

JCI assesses monitoring plan for the proposed PoA in accordance with the Para. 198 of VVS.

The requirement of the Para.198 of VVS is stated "To be determined the monitoring plan for a CPA is in accordance with the approved monitoring methodology, including applicable tools".

JCI applies a two-step process for the assessment to meet the above requirement.

- 1) Compliance of the monitoring plan
- 2) Implementation of the plan

### 1) Compliance of the monitoring plan

JCI identifies the list of parameters required by the selected approved methodology including applicable tools by means of document review such as each Generic CPA-DDs (Part II of PoA-DDs) and specific CPA-DD (CPA-001).

#### (a) Generic CPA-DDs (Part II of PoA-DDs)

The parameters of Generic CPA-DD (Part II of PoA-DD) are reported such as:

##### i) General parameters for each types of Generic CPA-DDs (Part II of PoA-DDs):

- $EG_{BL,y}$ : Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year  $y$  (MWh/y)

##### ii) Hydro (with accumulation reservoir):

- $TEG_y$ : Total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year  $y$  (MWh/yr), (applicable with a power density (PD) greater than  $4 \text{ W/m}^2$  and less than or equal to  $10 \text{ W/m}^2$ )
- $CAP_{PJ}$ : Installed capacity of the hydro power plant after the implementation of the project activity (W), (applicable with a PD greater than  $10 \text{ W/m}^2$ )
- $A_{PJ}$ : Area of the single or multiple reservoirs measured in the surface of the water, after the implementation of the project activity, when the reservoir is full ( $m^2$ ), (applicable with a PD greater than  $10 \text{ W/m}^2$ )

##### iii) Geothermal (with fossil fuels):

- $FC_{i,j,y}$ : Quantity of fuel type  $i$  combusted in process  $j$  during the year  $y$  ( ton/y or  $m^3/y$ )
- $EF_{CO_2,i,y}$ : Weighted average  $CO_2$  emission factor of fuel type  $i$  in year  $y$
- $NCV_{i,y}$ : Weighted average net calorific value of fuel type  $i$  in year  $y$
- $w_{steam,CO_2,y}$ : Average mass fraction of carbon dioxide in the produced steam in year  $y$  (v)
- $w_{steam,CH_4,y}$ : Average mass fraction of methane in the produced steam in year  $y$  ( $tCH_4/t \text{ steam}$ )
- $M_{steam,y}$ : Quantity of steam produced in year  $y$  (t steam/yr)

##### iv) Geothermal (without fossil fuels):

- $w_{steam,CO_2,y}$ : Average mass fraction of carbon dioxide in the produced steam in year  $y$  (v)
- $w_{steam,CH_4,y}$ : Average mass fraction of methane in the produced steam in year  $y$  ( $tCH_4/t \text{ steam}$ )
- $M_{steam,y}$ : Quantity of steam produced in year  $y$  (t steam/yr)

##### v) Specific parameters for the calculation of the grid emission factor in Rwanda

- $FC_{i,m,y}$ ,  $FC_{i,y}$ ,  $FC_{i,k,y}$ ,  $FC_{i,n,y}$  and  $FC_{i,n,h}$ : Amount of fossil fuel type  $i$  consumed by power plant / unit  $m$ ,  $k$  or  $n$  (or in the project electricity system in case of  $FC_{i,y}$ ) in year  $y$  or hour  $h$  (mass or volume unit)
- $EG_{m,y}$ ,  $EG_y$ ,  $EG_{k,y}$  and  $EG_{n,h}$ : Net electricity generated by power plant/unit  $m$ ,  $k$  or  $n$  (or in the project electricity system in case of  $EG_y$ ) in year  $y$  or hour  $h$  (MWh)
- $EG_{PJ,h}$  and  $EG_{PJ,y}$ : Electricity displaced by the project activity in hour  $h$  of year  $y$  or in year  $y$  (MWh)

#### (b) Specific CPA-DD (CPA-001)

The parameter of specific CPA-DD (CPA-001) is reported such as:

- $EG_{BL,y}$ : Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year  $y$  (MWh/y)

JCI judges that the compliance for each Generic CPA-DDs (Part II of PoA-DDs) and specific CPA-DD (CPA-001) are included all necessary parameters, that they are described and that the means of monitoring described in the plan complies with the relevant methodology /7-01/, the Emission Tool/7-02/ and the Para. 198 of VVS/7-08/.

## 2) Implementation of the plan

JCI assesses on the implementation of the plan for Generic CPA-DD (Part II of PoA-DD) and specific CPA-DD (CPA-001), by means of review of the documented procedures, interviews with relevant personnel.

#### (a) Generic CPA-DD (Part II of PoA-DD)

The implementation on CME and CPA implementing entity are reported in each Generic CPA-DDs (Part II of PoA-DDs).

##### i) Implementation on CME

- Upon receipt of data and information from the CPA implementing entity, the CME will carry out a quality assurance (QA) and quality control (QC).
- If problems occur that may affect the quality of data, the consultant will inform the project proponent and off taker of the need for corrective actions.
- Once the CME has carried out the QA/QC, the CME will store all data and information as received from the CPA implementing entity (including supporting evidence) in an electronic database.
- Before the implementation of a CPA, the CME will provide training and guidance regarding the implementation of the monitoring plan.
- In addition to collecting, processing and archiving data and information from the CPA implementing entities, the CME will also be responsible for the collection, processing and archiving of data and information for the calculation of the grid emission factor.

##### ii) Implementation of the plan on CPA implementing entity

- The CPA implementing entity will be responsible for the technical aspects related to on-site monitoring such as training of personnel, calibration and maintenance of equipment and physical reading, day-to-day handling and long-term storage of metered data.
- Metering will be conducted with calibrated measurement equipment according to the national standards and reference points or IEC standards as agreed with the grid operator industry standards.

- Each CPA implementing entity will monitor and keep records of the quantity of net electricity supplied to the grid.
- The CPA will keep electronic copies of all CDM related data at its headquarters, at least until two years after the end of the last crediting period.

JCI judges the implementation plan on CME and CPA implementing entities in each Generic CPA-DDs (Part II of PoA-DDs) are feasible and complied with Para. 132(b) of VVS (Means of validation of Monitoring plan).

(b) Specific CPA-DD (CPA-001)

The implementation plan on the CPA-001 is reported in the D.7.2 of Specific CPA-DD (CPA-001).

- i) UPL (CPA-001 implementing entity) will be responsible for the technical aspects related to on-site monitoring such as:
  - Employment and training of personnel responsible for gathering and recording monitoring data
  - Calibration and maintenance of metering equipment
  - Physical reading, day-to-day handling and long-term storage of metered data as stipulated in the PoA participation agreement with the CME.
- ii) Metering will be conducted with calibrated measurement equipment according to relevant industry standards.
- iii) UPL will monitor and keep records of the quantity of net electricity supplied to the grid. The quantity of electricity supplied to the grid will be reported to the CME.
- iv) UPL will keep electronic copies of all CDM related data at its headquarters.
- v) UPL will appoint a Monitoring Officer. The Monitoring Officer will be responsible person to handle all the CDM project data including monitoring, keeping records, and report to the CME and its Programme Officer on a quarterly basis.
- vi) The CME will appoint a Programme Officer. The Programme Officer will be responsible of maintaining the database and managing the logistics of the PoA and will be the responsible person to handle all the CDM project data including monitoring, record keeping, and report to the CME.

JCI judges the implementation plan on the CPA-001 implementing entity in Specific CPA-DD (CPA-001) is feasible and complied with referred Para. 132(b) of VVS (Means of validation of Monitoring plan).

JCI determines that the monitoring arrangements described in the monitoring plan are feasible within the Generic CPA and Specific CPA-DD (CPA-001). JCI also determines 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 reductions achieved by/resulting from the proposed project activity can be reported ex post and verified.

On the other hand, JCI raised CL-28 (28a through 28c) for assessment of the monitoring system as followings:

- CL-28a: To be shown Monitoring organization in B.6. of GSC version (prepared by VVM form) or D.7.2 of Finalized version (VVS form). The CME revised the diagram as figure 3 and shown the position of the metering system in the CPA-DD as figure 4. JCI judges the revision is appropriate and closed CL-28a.
- CL-28b: To be shown Diagram of project including measurement devices installation. The CME demonstrates the project owner will transfer ownership of the back-up meter to KPLC while it will be responsible for the main metering system. The CME also demonstrates the accuracy is complied with "Regulation Code for electricity monitoring meter/6-06/. JCI judges the

demonstration is appropriate and closed CL-28b.

-CL-28c: To be clarified whether the accuracy of the main meter and backup meter applied with national regulation or industry standards. The CME demonstrates the accuracy is complied with "Regulation Code for electricity monitoring meter/6-06/. JCI judges the demonstration is appropriate and closed CL-28c. As for CDM monitoring manual, the CME explains it will be prepared after the signing of the construction contract. Therefore, FAR-1 is raised.

As a result of the assessment for the monitoring plan, JCI determines that the plan for the proposed PoA is compiled with the Para. 198 of VVS.

## 8.7 Environmental impacts

JCI assesses environmental impacts for the proposed PoA and CPA-001 in accordance with the Para. 199 and 200 of VVS and Category (g) of the Eligibility criteria for each CPA.

The requirements of the VVS are:

- Para.134: *To determine whether the project participants conducted an analysis of the environmental impacts of the proposed project activity, including trans-boundary impacts, and whether those impacts are considered significant by the project participants or the host Party"*
- Para.135 : *To determine whether the project participants conducted an environmental impact assessment, if required to do so by the host Party, in accordance with the host Party's procedures.*
- Para.199 : *To determine whether an analysis of the environmental impacts of the PoA was undertaken as per the requirements of the CDM modalities and procedures.*
- Para.200 : *If the analysis was not undertaken for the PoA but conducted at the CPA level, the DOE shall determine whether the analysis of the environmental impacts was conducted as described in the PoA-DD and the CPA-DD.*

Category (g) of the Eligibility criteria:

*"The CPA has carried out an environmental impact assessment in line with host country laws and regulations."*

JCI conforms that the project participants have undertaken an analysis of environmental impacts based on the Local stakeholder consultation (Below Section 8.8).

JCI judges the reporting on the analysis of environmental impacts in the B.1 of specific CPA-DD (CPA-001) is appropriate by document review and following actions.

- As the Environmental and Coordination Act (the Act)<sup>14</sup>/6-04A, 6-04B/ was promulgated in Kenya on 1999, the project activity is required to carry out an environmental impact assessment. The Act states that *"Any person shall submit a project report to the Authority giving the prescribed information"*.
- The Act /6-04A, 6-04B/ also states that *"The proponent of the project shall undertake or cause to be undertaken at his own expense an EIA study and prepare a report that the intended project may or is likely to have a significant impact on the environment, so directs"*.
- The EIA report/1-04/ of the proposed project was reported such as Ecological survey, Water sampling, Noise measurements, Socio-economic analysis; and Stakeholder engagement & public

<sup>14</sup> "Environmental Management and Coordination Act (EMCA) 1999"/6-04A/ is promulgated by Kenyan government on 1999. The Second Schedule of the National Regulation for Environmental Protection/6-04B/ has been promulgated on 2003.

consultations. The report included the most significant negative impacts of during construction, during operation and during decommissioning, and the recommended mitigation actions.

- The EIA report/1-04/ was submitted to the National Environmental Management Authority (NEMA), and approval letter/2-04/ has been issued by NEMA on 02/10/2012.
- JCI judges the CPA has carried out an environmental impact assessment in line with host country laws and regulation.

Therefore, JCI determines that the environmental impact for the proposed PoA and CPA-001 is reported appropriately and complied with the Para. 199 and 200 of VVS.

## 8.8 Local stakeholder consultation

JCI assesses local stakeholder consultation for the proposed PoA and CPA-001 in accordance with the Para. 201 and 202 of VVS and the Category (g) of the Eligibility criteria for each CPA.

The requirements of the VVS are stated following Paragraphs and Category:

- Para.201 of VVS:

*"To determine whether the local stakeholder consultation process was carried out for the whole PoA or at the CPA level." and "To determine how these comments were invited; whether the summary of the comments received is complete and how due account was taken of all comments received."*

- Category (g) of the Eligibility criteria:

*"The CPA has carried out a local stakeholder consultation."*

### 1) PoA-DD (Part 1 of PoA-DD)

Not applicable. The local stakeholder consultation is carried out at the CPA level.

### 2) Specific CPA-DD (CPA-001)

JCI applies by means of document review and interviews with local stakeholders and expertise to assess the above requirement.

- The project participant has identified the local stakeholders attending the public hearing meeting with local farmers/ landowners in the project area, area representatives and local government officers.
- The stakeholder engagement meeting has been held on 26 May 2011 at the Gichugu Constituency Development Fund (CDF) Boardroom in Kinyaga town.
- The stakeholder consultation meeting has been held on 7 December 2011 at the CDF office, Kianyaga Town, Kirinyaga East District.
- The meetings provided an opportunity for stakeholders to provide comments and inputs to the project. Comments from stakeholders unable to attend the meeting were also invited by email and phone. No further comments were received.
- Consultation meetings were announced publicly by the local government and explained about the project. At the meeting many opinions and questions were submitted. There were some concerns to the project at the beginning, but after further explanations about merit of the project by the project owner, all attendants understood and supported the project.
- JCI judges that the situation on local stakeholders by on-site visit and interviews. All interviewee testimony the project is nice and will be able to support the project. Some interviewees expect

employment and also expect some improvement for their living environment such as construction of bridges over the river etc.

As the result of above assessment, JCI determine the local stakeholder consultation process was carried out at the CPA level and specified by the CME and the local stakeholder comments were taken into account and described in the specific CPA-DD (CPA-001).

Therefore, JCI determines that the local stakeholder consultation for the proposed PoA is adequate and complied with the Para. 201 and 202 of VVS.

## 8.9 Determination of occurrences of de-bundling under a PoA

JCI assesses determination of occurrences of de-bundling under a PoA and CPA-001 in accordance with the referred Para. 203 of VVS and the Category (I) of the Eligibility criteria for each CPA.

- Para.203 of VVS:

*"To ascertain that the proposed small-scale CPA of a PoA is not a debundled component of a large-scale project activity in accordance with the "Guidelines on assessment of debundling for SSC project activities".*

- Category (I) of the Eligibility criteria:

*"The CPA is not a de-bundled component of a large-scale project activity in accordance with the latest approved version of the Guidelines on assessment of de-bundling for SSC project activities."*

### 1) PoA-DD (Part 1 of PoA-DD)

- The CME stated that de-bundling check is carried out in line with the *"Guidelines on assessment of de-bundling for SSC project activities"/7-10/* in the Section B.2. of PoA-DD (Part I of PoA-DD).

### 2) Generic CPA-DD (Part II of PoA-DD)

- The CME stated that de-bundling check carried out in line with the latest approved version of the *"Guidelines on assessment of de-bundling for SSC project activities/7-10/"* shows that the project is not a de-bundled component of a large-scale project activity." in the Section B.5. of Generic CPA-DD (Part II of PoA-DD).

### 3) Specific CPA-DD (CPA-001)

- The de-bundling check will be applied with the *" Guidelines on assessment of de-bundling for SSC project activities"* (Version 03)/7-10/ (Section A.12 of specific CPA-DD (CPA-001)).
- CPA-001 implementing entity has signed an agreement with the CME/3-02, 3-03/ which will ensure that the CPA has not been included to another PoA (Section A.13 of Specific CPA-DD (CPA-001)).
- JCI raises CL-22 for de-bundling check, the PP states there are no similar CDM activities being developed within one kilometer radius of the project area and no river development scheme or location map currently exists on neighbor stations. JCI confirms no similar CDM projects near the project site by on-site visit and CL-22 is closed.

As the result of above assessment, JCI ascertain that the proposed small-scale CPA of a PoA is not a de-bundled component of a large-scale project activity.

Therefore, JCI determines that the de-bundling check under a PoA and Specific CPA-DD (CPA-001) are adequate and complied with the referred Para. 203 of VVS.

### **8.10 Inclusion or renewal of a crediting period of a CPA under a registered PoA**

Not applicable. The proposed project is not registered yet.

## Appendix A Protocol for CDM (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>PA</b>	Project Activities	<b>PP</b>	Project Participants
<b>PoA</b>	Programme of Activities	<b>CPA</b>	Component Project Activity	<b>PoA GL, CPA GL</b>	PoA-DD, 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-1 REQUIREMENTS CHECKLIST (POA)**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 12 “ Guidelines for Completing The Programme Design Document Form For CDM Programs of Activities”(Ver.01.0)	Reference GL,DD	Check Comment	CAR, CL, No.
	<b>General guidelines(PoA)</b>		--	--
	<b>Title of the project activity:</b>		--	--
1.	Confirm that the PoA-DD Form applies <u>version 02.0 of F-CDM-PoA-DD.</u> (Guideline Para.8)	PoA GL	OK	
2.	Confirm that the PoA-DD is completed <u>in English.</u> (all attached documents must be <u>in English</u> ) (Guideline Para.11)	PoA GL	OK	
3.	Confirm that the PDD is completed using the same format <u>without modifying its font, headings or logo,</u> and without any other alteration to the form. (Guideline Para. 12)	PoA GL	OK	
4.	Confirm that the tables and their columns in the PoA-DD are <u>not modified or deleted.</u> (Guideline Para. 13)	PoA GL	OK	
5.	Confirm that the <u>blanks are left intentionally</u> for the “not applicable section” of the PoA-DD. (Guideline Para. 14)	PoA GL	OK	
6.	Confirm that the values in the 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)	PoA GL	OK	
<b>Check for PoA-DD</b>				
<b>PART I.</b>	<b>Programme of activities (PoA)</b>		--	--
<b>Section A.</b>	<b>General description of PoA</b>			
<b>A.1</b>	<b>Title of the PoA:</b>			
(a)	Confirm the followings related to the title of the PoA. (a) the title of the PoA.	PoA GL		
			OK	
(b)	(b) the version number of the PoA-DD.		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-1 REQUIREMENTS CHECKLIST (PoA)**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 12 “ Guidelines for Completing The Programme Design Document Form For CDM Programs of Activities”(Ver.01.0)	Reference GL,DD	Check Comment	CAR, CL, No.
(c)	(c) the date the PoA-DD in DD/MM/YYYY.		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.	PoA GL	OK	
(b)	Confirm that the description is provided on the framework for the implementation of the PoA.	PoA GL	OK	
(c)	Confirm that the description is provided on the voluntary action by the CME for PoA.	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.	PoA GL	OK	
(b)	Confirm that the description is provided on Project participants of the PoA.	PoA GL	<del>Tbv</del> OK	CL-1
<b>A.4</b>	<b>Party(ies)</b>			
(a)	Confirm that the Party(ies), PPs and CMEs are listed in the table.	PoA GL	OK	
(b)	Confirm that the “(host)” is indicated in the table.	PoA GL	OK	
(c)	Confirm that the name of PPs are consistent with the contact information in Appendix 1	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)	PoA GL	<del>Tbv</del> OK	CL-2
<b>A.6.</b>	<b>Technologies/measures</b>			
A.6	Confirm that the description is provided on the technologies for the CPAs.	PoA GL	OK	
<b>A.7.</b>	<b>Public funding of PoA</b>			
A.7	Confirm that the description is provided on no public funding from Parties for PoA.	PoA GL	OK	
	If public fund has received for PoA, (a)Provide information on Parties providing public funding; (b)Attach in Appendix 2: the affirmation obtained from such Parties	PoA GL	NA	
<b>Section B.</b>	<b>Demonstration of additionality and development of eligibility criteria</b>			
<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	OK	CL-3

**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-1 REQUIREMENTS CHECKLIST (PoA)**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 12 “ Guidelines for Completing The Programme Design Document Form For CDM Programs of Activities”(Ver.01.0)	Reference GL,DD	Check Comment	CAR, CL, No.
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.	<del>Tbv</del> 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>attachment A of Appendix B of the “Simplified modalities and procedures for small-scale CDM project activities”</i> .	Std Add. Para.9	<del>Tbv</del> OK	
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	NA	
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 29(a) to 29(d) of Std Add. shall be taken into account.	Std Add. Para.14	NA	
<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.	PoA GL	<del>Tbv</del> OK	CAR-2
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	CL-4 to CL-8
B.2.3	Confirm that the eligibility criteria shall cover as a minimum the following	Std Add. Para.15	<del>Tbv</del> OK	CL-4 to CL-8
(a)	(a) The geographical boundary of the CPA including any time-induced boundary <sup>3</sup> consistent with the geographical boundary set in the PoA;		—	
(b)	(b) Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);		—	
(c)	(c) The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications		—	
(d)	(d) Conditions to check the start date of the CPA through documentary evidence;		—	
(e)	(e) Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;		—	
(f)	(f) The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified in Section A above;		—	
(g)	(g) The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;		—	

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(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		—	
(i)	(i) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation);		—	
(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;		—	
(k)	(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;		—	
(l)	(l) Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories.		—	
B.2.4	Confirm that the eligibility criteria are verifiable.	Std Add.15.	<del>Tbv</del> OK	CL-4 to CL-8
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.16.	<del>Tbv</del> OK	CL-4 to CL-8
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.19	<del>Tbv</del> OK	CL-4 to CL-8
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.20.	<del>Tbv</del> OK	CL-4 to CL-8
<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.	PoA GL	OK	
<b>B.4</b>	<b>Identification of alternatives (Para. 113-116)</b>			
B.4.1	Confirm that the baseline scenario is prescribed in the methodology selected by the CDM PA. If no (no prescribed baseline scenarion), confirm that the PDD identified credible alternatives to the PA in order to determine the most realistic baseline scenario.	Para. 113	NA	
			—	
B.4.2	Confirm that the list of alternatives given in the PDD have been assessed and determined by considering the following conditions.	Para. 114	NA	
i	i. The list of alternatives includes the option that the PA is undertaken without being registered as CDM PA.		—	
ii	ii. The list contains all plausible alternatives that are considered to be viable means of supplying the outputs or services that are to be supplied by the proposed CDM PA on the basis of local and sectoral knowledge.		—	
iii	iii. The alternatives comply with all applicable and enforced legislation.		—	

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<b>B.5</b>	<b>Investment analysis (Para. 117-123)</b>			
B.5.1	Confirm whether the investment analysis is used to demonstrate the additionality of the CDM PA.	Para. 117	NA	
B.5.2	Confirm that the latest version of the “Guidelines on the assessment of investment analysis” been applied for assessment.	Para. 118	NA	
B.5.3	<b>&lt;Alternatives &gt;</b> Confirm that the PA is not the most economically or financially attractive alternative, or that it is not economically or financially feasible without CDM.	Para. 119	NA	
(a)	(a) Confirm that the PA would produce no financial or economic benefits other than CDM-related income. Confirm that the costs for the PA were documented. Confirm that there is at least one alternative which is less costly than the PA.		—	
(b)	(b) Confirm that the PA is less economically or financially attractive than at least one other credible and realistic alternative.		—	
(c)	(c) Confirm that the financial returns of the proposed PA would be insufficient to justify the required investment.		—	
B.5.4	<b>&lt;Accuracy &gt;</b> Confirm that the accuracy of financial calculations for investment analysis was verified with the following means of validation.	Para. 120	NA	
B.5.4 (a)	(a.1) Confirm that the suitability of the financial indicator selected by the PP is assessed. (a.2) Confirm that thorough assessment of all parameters and assumptions used in calculating such financial indicators was conducted. (a.3) Confirm that the accuracy and suitability of these parameters were determined using available evidence and expertise in relevant accounting practices.		NA	
(b)	(b) Confirm that the parameters are cross-checked against third-party or publicly available sources, such as invoices or price indices.		—	
(c)	(c) Confirm that the FSR, public announcements and annual financial reports related to the PA and the PP are as appropriate.		—	
(d)	(d) Confirm that the correctness of computations carried out and documented by the PP are adequate.		—	
(e)	(e.1) Confirm that the suitability of selected variations in sensitivity analysis is adequate. (e.2) Confirm that the suitability of conditions and ranges for selected variations in sensitivity analysis are adequate. (e.3) Confirm that the likelihood of the conditions for variations in sensitivity analysis are adequate.		—	
B.5.5	<b>&lt;Bench mark&gt;</b>	Para. 121	NA	

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	Confirm that the suitability of benchmark applied in the investment analys is confirmed with the following means.			
(a)	(a) Confirm that the type of benchmark applied is suitable for the type of financial indicator presented.		—	
(b)	(b) Confirm that risk premiums applied in determining the benchmark reflect the risks associated with the project type or activity.		—	
(c)	(c) Confirm that it is reasonable to assume that no investment would be made at a rate of return lower than the benchmark.		—	
B.5.6	<b>&lt; DPR &gt;</b> Confirm that the PP rely on values from DPR that are approved by national authorities for PA.	Para. 122	NA	
B.5.7	If yes, confirm the suitability of values from FSR with the following means of validation.		NA	
(a)	(a.1) Confirm that the DPR is the basis for the decision to proceed with the investment in the project. (a.2) Confirm that the period of time between the finalization of the DPR and the investment decision is sufficiently short. (a.3) Confirm that it is unlikely in the context of the underlying PA that the input values would have materially changed..		—	
(b)	(b) Confirm that the values used in the PDD and associated annexes are fully consistent with the DPR.		—	
(c)	If no, (the inconsistencies occurred), confirm that the appropriateness of the values in PDD is assessed.		OK	
B.5.7	(c.1) Confirm that the input values from the DPR are valid and applicable at the time of investment decision.		NA	
(c)	(c.2) Confirm that this is confirmed on the basis of specific local and sectoral expertise, by cross-checking or other appropriate means.		—	
<b>B.6</b>	<b>Barrier analysis (Para. 124-127)</b>			
B.6.1	Confirm that barrier analysis is used to demonstrate the additionality of the proposed CDM PA.	Para. 124	NA	
B.6.2	If yes (barrier analysis is used), Confirm whether the PA faces barriers that:	Para. 124	NA	
(a)	(a) prevent the implementation of this type of proposed PA.		—	
(b)	(b) do not prevent the implementation of at least one of the alternatives..		—	
B.6.3	Confirm whether there are issues that have direct impact on the financial returns of the PA other than:	Para. 125	NA	
(a)	(a) risk related barriers, for example risk of technical failure, that could have negative effects on financial performance.		—	
(b)	(b) barriers related to the unavailability of sources of finance for the PA. If yes, confirm that these issues cannot be considered as barriers and shall be assessed by investment		—	

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	analysis.			
B.6.4	Confirm that following two-step process are applied to assessing the barrier analysis .	Para. 126	NA	
(a)	(a) Confirm that the barriers are real through the following means. <ul style="list-style-type: none"> <li>Confirm that the barriers listed in the PDD exist by using the available evidence and/or conducting interviews with relevant individuals (including members of industry associations, government officials or local experts if necessary).</li> <li>Confirm that the existence of barriers is substantiated by independent sources of data such as relevant national legislation, surveys of local conditions and national or international statistics.</li> <li>Confirm that the existence of a barrier is substantiated only by the opinions of the project participants.</li> </ul> If yes, this barrier can not be considered as adequately substantiated. - If it is considered, on the basis of its sectoral or local expertise, that a barrier is not real or is not supported by sufficient evidence, confirm that it shall raise a CAR to have reference to this barrier removed from the project documentation.		—	
			—	
			—	
			—	
(b)	(b) Confirm that the barriers prevent the implementation of the PA but not the implementation of at least one of the possible alternatives:through the following means. <ul style="list-style-type: none"> <li>Confirm, by applying the local and sectoral expertise, that a barrier or set of barriers would prevent the implementation of the PA.</li> <li>Confirm that a barrier or set of barriers would not equally prevent implementation of at least one of the possible alternatives, in particular the identified baseline scenario.</li> </ul>	Para. 126	NA	
			—	
			—	
<b>B.7</b>	<b>Common practice analysis (Para. 128-130)</b>			
B.7.1	Confirm that a common practice analysis is used to demonstrate the additionality of the proposed CDM PA.	Para. 128	NA	
	If yes (a common practice analysis is used),	Para. 129	—	
B.7.2	Confirm that the PP have conducted a common practice analysis.		NA	
(a)	(a) Confirm, by using official sources and local and sectoral expertise, that: <ul style="list-style-type: none"> <li>the geographical scope (e.g. the defined region) of the common practice analysis is appropriate for the assessment of common practice related to the PA’s technology or industry type.</li> <li>for certain technologies, the relevant region for assessment will be local and for others it may be transnational/global.</li> <li>the defined region other than the entire host country was chosen.</li> </ul> If, yes confirm that the explanation of why this region is more appropriate.		—	
			—	
			—	
			—	
			—	
(b)	(b) Confirm that similar and operational projects (e.g. using similar technology or practice), other than project activities, have been undertaken in the defined region.		—	

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(c)	(c) Confirm that similar and operational projects, other than project activities, are already “widely observed and commonly carried out” in the defined region. If yes for above (b) or (C), confirm that there are essential distinctions between the proposed PA and the other similar activities.		—	
			—	
B.7.3	Confirm that the common practice analysis is assessed by applling the latest version of “Guideline for Common Practice”.	Tool for Additionality	NA	
B.7.4	Confirm that the stepwise approach for Common Practice in the Guideline is applied as follows. <ul style="list-style-type: none"><li>Step 1: Calculate applicable output range as +/-50% of the design output or capacity of the PA.</li><li>Step 2: In the applicable geographical area, identify all plants that deliver the same output or capacity, within the applicable output range calculated in Step 1, as the PA and have started commercial operation before the start date of the project. Note their number N<sub>all</sub>. Registered CDM project activities shall not be included in this step.</li></ul>		NA	
	<ul style="list-style-type: none"><li>Step 3: Within plants identified in Step 2, identify those that apply technologies different that the technology applied in the proposed PA. Note their number N<sub>diff</sub>.</li></ul>		—	
	<ul style="list-style-type: none"><li>Step 4: Calculate factor F=1-N<sub>diff</sub>/N<sub>all</sub> representing the share of plants using technology similar to the technology used in the proposed PA in all plants that deliver the same output or capacity as the proposed PA.</li></ul>		—	
	<ul style="list-style-type: none"><li>The proposed PA is a “common practice” within a sector in the applicable geographical area, if the factor F is greater than 0.2 and N<sub>all</sub>-N<sub>diff</sub> is greater than 3.</li></ul>		—	
Section C.	Management system			
C.1	Confirm that the description is provided on the management system.	PoA GL	<del>Tbv</del> OK	CL-9 to CL-11,
C.2	Confirm whether the management system described in the PoA design document (CDMPoA-DD) in accordance with the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities.	Std Add. Para. 186	<del>Tbv</del> OK	CL-9 to CL-11,
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. 17	<del>Tbv</del> OK	CL-9 to CL-11,
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. 17	<del>Tbv</del> OK	CL-9 to CL-11,
	(a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies		—	
	(b) Records of arrangements for training and capacity development for personnel		—	

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(c)	(c) Procedures for technical review of inclusion of CPAs		—	
(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);		—	
(e)	(e) Records and documentation control process for each CPA under the PoA			
(f)	(f) Measures for continuous improvements of the PoA management system		—	
(g)	(g) Any other relevant elements.		—	
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. 18	Tbv OK	CL-9 to CL-11
<b>Section D.</b>	<b>Duration of PoA</b>			
<b>D.1.</b>	<b>Start date of PoA</b>			
D.1	Confirm that the start date of any CPA is not prior to the commencement of the validation of the PoA, which is the date the CDM-PoA-DD is first published for global stakeholder consultation.	Para. 193.	OK	
D.2	It is not required to assess prior consideration of CDM for PoA, as it is expected that no component of the programme will commence prior to the start date of validation.	Para. 194	OK	
<b>D.2.</b>	<b>Length of the PoA</b>			
D.2	Confirm that the length of the PoA is described in years.	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 the environmental analysis is performed at the PoA and/or the CPA level.	PoA GL	OK	
	If yes, Confirm that the environmental analysis is performed for the CPA.	PoA GL	—	
E.1.2	Confirm that the PP has conducted an analysis of the environmental impacts of the PA, including trans boundary impacts,	Para. 134	OK	
E.1.3	Determine that those impacts are considered significant by the project participants or the host Party.	Para. 134	OK	
<b>E.2.</b>	<b>Analysis of the environmental impacts</b>			
E.2.1	Confirm whether the analysis of the environmental impacts is undertaken or not.	PoA GL	OK	
E.2.2	If yes, Confirm the description on the analysis for the PoA.	PoA GL	—	
<b>E.3.</b>	<b>Environmental impact assessment</b>			
E.3.1	Confirm if the EIA is required or not.	PoA GL	OK	

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E.3.2	If EIA required, Confirm that the conclusions of EIA is provided.	PoA GL	OK	
E.3.3	Confirm that the EIA is required by the host Party, in accordance with the host Party’s procedures.	Para. 135	OK	
E.3.4	Confirm that the requirement for the EIA is confirmed by means of a document review and/or using local official sources and expertise.	Para. 136	OK	
<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. If at PoA level, Confirm that the description is provided on process for local stakeholders in PoA-DD.	PoA GL PoA GL	OK —	
F.1.2	Confirm that the PP has completed a local stakeholder consultation process.	Para. 138	OK	
F.1.3	Confirm that the due steps were taken to engage stakeholders and solicit comments for the PA.	Para. 138	OK	
F.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.	Para. 139	OK	
<b>F.2.</b>	<b>Summary of comments received</b>			
F.2.1	Confirm that the summary is provided on stakeholders comments.	PoA GL	OK	
F.2.2	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.	Para. 139	OK	
<b>F.3.</b>	<b>Report on consideration of comments received</b>			
F.3.1	Confirm that the consideration is provided for all comments received.	PoA GL	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.	PoA GL	Tbv OK	CAR-1
G.2	If yes, Confirm that the LOA is provided with following information. (a) approval of the Party(ies) (b) authorization for CME from each Party.	PoA GL	—	
<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	PoA GL	OK	

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	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.			
<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 is provided on purpose of generic CPA.	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 <b>methodology</b> is exact.	PoA GL	OK	
(i)	(i) reference number of the methodology.	PoA GL	—	
(ii)	(ii) title of the methodology.	PoA GL	—	
(iii)	(iii) version number of the methodology	PoA GL	—	
B.1.1	Confirm that the following reference of the <b>Tool</b> is exact.	PoA GL	OK	
(i)	(i) title of the Tool	PoA GL	—	
(ii)	(ii) version number of the Tool	PoA GL	—	
<b>B.2.</b>	<b>Application of methodology(ies)</b>			
B.2.1	Confirm that the description is provided on application of methodology(ies) for generic CPA.	PoA GL	—	
B.2.2	If the multiple 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 “ <i>General guidelines to SSC CDM methodologies</i> ” may be applied without further assessment of cross effects, while other combinations can be applied with the analysis of cross effects. ) 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.28.	OK	
			—	
B.2.3	In other case of above combination,		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.	PoA GL	OK	
<b>B.4</b>	<b>Description of baseline scenario</b>			

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B.4.1	Confirm that the description is provided on the baseline scenario for generic CPA.	PoA GL	Tbv OK	CL-14 to CL-16
<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.	PoA GL	Tbv OK	CL-12 CL-13
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.	PoA GL	(B.6.1 part II) OK	
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.	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) .	Para. 97	OK	
B.6.1.6	Confirm that the correct equations and parameters have been used, in accordance with the methodology selected including applicable tool.	Para. 97	Tbv OK	CL-17
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.	Para. 98	OK	
B.6.1.8	Confirm that data and parameters will not be monitored and will remain fixed throughout the crediting period.	Para. 98	NA	
B.6.1.9	If yes, confirm that; <ul style="list-style-type: none"> <li>all data sources and assumptions are appropriate.</li> <li>calculations are correct as applicable to the PA.</li> <li>will result in an accurate or otherwise conservative estimate of the emission reductions.</li> </ul>		—	
			—	
			—	

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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)**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 12 “ Guidelines for Completing The Programme Design Document Form For CDM Programs of Activities”(Ver.01.0)	Reference GL,DD	Check Comment	CAR, CL, No.
B.6.1.10	Confirm that data and parameters will be monitored or estimated on implementation and hence become available only after validation of the PA. If yes, confirm that the estimates provided in the PDD for these data and parameters are reasonable.	Para. 98	NA	
			—	
<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.	PoA GL	(B.6.2 part II) 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.	PoA GL	(B.6.3 part II) 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 equations is provided.	PDD GL	OK	
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.6.4.</b>	<b>Summary of the ex ante estimation of emission reductions:</b>			
B.6.4.1	Confirm that the summary of the results of the ex ante estimation of emission reductions for all years of the crediting period is provided in the specified Table adequately.	PDD GL	OK	
B.6.4.2	Confirm that the crediting year and periods in the Table are consistent with those indicated in C.2.2. and C.2.3..	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.	PoA GL	NA	—
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	NA	—
B.7.1.3	Confirm that any relevant further background documentation is provided in Appendix 5.	PDD GL	NA	—
<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. (B.6.3 part II)	PoA GL	(B.7.2 part II) OK	

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

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 12 “ Guidelines for Completing The Programme Design Document Form For CDM Programs of Activities”(Ver.01.0)	Reference GL,DD	Check Comment	CAR, CL, No.
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 Para. 131	OK	
B.7.2.3	Confirm that the following two-step process is applied to assess compliance with the requirement of methodology.		OK	
(a)	(a) Confirm the compliance of the monitoring plan with the approved methodology and the applicable tool,	Para. 132	—	—
(i)	(i) Confirm that the list of parameters required by the selected approved methodology including applicable tool by means of document review are Identified.		—	—
(ii)	(ii) Confirm that the description of the monitoring plan contains all necessary parameters.		—	—
(iii)	(iii) Confirm that the means of monitoring described in the plan complies with the requirements of the methodology including applicable tool.		—	—
(b)	(b) Confirm the implementation of the plan,		—	—
	♦ by means of review of the documented procedures.		—	—
	♦ by the interviews with relevant personnel.		—	—
	♦ by any physical inspection of the project site.		—	—
(i)	(i) Confirm that the monitoring arrangements described in the monitoring plan are feasible within the project design.		—	—
(ii)	(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 reductions achieved by/resulting from the PA can be reported ex post and verified.		—	—
<b>B.7.3</b>	<b>Sampling plan</b>			
B.7.3.1	Confirm that the description of the sampling plan is provided in Section B.7.2. of PDD. (If data and parameters monitored in section B.7.1 are to be determined by a sampling approach)	PDD GL	Tbv(Geothermal)	CAR-4
B.7.3.2	Confirm that the parameter values are estimated by sampling in accordance with the requirements in the applied methodology separately and independently for each of the CPAs included in a PoA except when a single sampling plan covering a group of CPAs is undertaken applying 95/10 confidence/precision for the sample size calculation.	Std Sampling Para. 19.	Tbv	CAR-4
B.7.3.3	Determine whether the proposed sampling plans provide parameter value estimating in an unbiased and reliable manner including determining;	Std Sampling Para. 20.	Tbv	CAR-4
(a)	(a) Whether the proposed sample size and sampling method is adequate to achieve the minimum confidence/precision requirements. DOEs shall be able to reproduce the sample size calculation in order to validate the proposed sample size.		—	—
(b)	(b) Whether the proposed sampling plan will ensure that samples are randomly selected and are		—	—

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

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 12 “ Guidelines for Completing The Programme Design Document Form For CDM Programs of Activities”(Ver.01.0)	Reference GL,DD	Check Comment	CAR, CL, No.
	representative of the population.			
B.7.3.4	Verify whether the PP has implemented the sampling effort and surveys according to the validated sampling plans. The verification includes determining	Std Sampling 21.	Tbv	CAR-4
(a)	(a) Whether the required confidence/precision has been met;		—	—
(b)	(b) Whether the selected sample was representative of the population.		—	—
B.7.3.5	As one means of validation/verification, confirm that sampling approach will be applied when the PP have not applied a sampling approach provided the indicated level of assurance in paragraphs below is met. This is for example the case of a multi-site CDM project activities or CDM PoAs applying small-scale or large scale methodologies.	Std Sampling 22.	Tbv	CAR-4
B.7.3.6	Confirm that the acceptance sampling will be used as described in below steps as part of validation/verification activities to meet the requirements of paragraph 20 and 21 above:	Std Sampling 23.	Tbv	CAR-4
(a)	(a) Take a random sample of the PPs sample records;		—	—
(b)	(b) Check. using own professional judgment . the acceptability (or otherwise) of the data for each record in the PPs sample records, and then;		—	—
(c)	(c) Based on the number of records where there is agreement, determine if the PPs sample records meet the requirements.		—	—
B.7.3.7	Confirm that the size of the sample for field/onsite check is specified in advance, using own professional judgment:	Std Sampling 24.	Tbv	CAR-4
(i)	(i) Acceptable quality level or the Level of Assurance, i.e. the proportion of discrepancies between the PPs record and DOE record that are acceptable, e.g. 1%;		—	—
(ii)	(ii) The proportion of discrepancies between the PPs record and DOE record that are unacceptable, e.g. 10%.		—	—
B.7.3.8	Confirm that the maximum errors associated with the determination indicated in paragraph 24 shall remain at levels indicated below:	Std Sampling 25.	Tbv	CAR-4
(i)	(i) A 5% chance that the DOE will wrongly reject the PPs records (i.e. reject a set of records of acceptable quality);16		—	—
(ii)	(ii) A 5% chance that the DOE will wrongly accept the PPs records (i.e. accept a set of records which is unacceptable)		—	—
B.7.3.9	Determine the following parameters (n, c) using provisions under 24 to 25 the n: the size of the sample; c: the acceptance number  If the number of discrepant records in the sample is observed greater than c, then the PPs set of records is not accepted. If the number of discrepant records is equal to or less than c then the PPs set of	Std Sampling 26.	Tbv	CAR-4
			—	—
			—	—
			—	—

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**TABLE-1 REQUIREMENTS CHECKLIST (PoA)**

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 12 “ Guidelines for Completing The Programme Design Document Form For CDM Programs of Activities”(Ver.01.0)	Reference GL,DD	Check Comment	CAR, CL, No.
	records is accepted.			
<b>B.7.4.</b>	<b>Other elements of monitoring plan</b>			
B.7.4.1	Confirm that the operational and management structure including project operator in order to monitor emission reductions are described in Section B.7.3. of PDD.	PDD GL	NA	
B.7.4.2	Confirm that the will implement and any leakage generated by the PA is described.	PDD GL	NA	
B.7.4.3	Confirm that the responsibilities and institutional arrangements for data collection and archiving are indicated in Section B.7.3. of PDD.	PDD GL	NA	
<b>Appendix 1</b>	<b>Contact information on entity/individual responsible for the PoA</b>			
AP.1	Confirm that the following mandatory fields are filled in the table.	PoA GL	OK	
	♦ Organization	PoA GL	—	
	♦ Street/P.O. Box	PoA GL	—	
	♦ City, Postcode	PoA GL	—	
	♦ Country, Telephone	PoA GL	—	
	♦ Fax,	PoA GL	—	
	♦ e-mail	PoA GL	—	
	♦ Name of contact person	PoA GL	—	
	Confirm the consistency between the organization listed in above table and that in section A.4.	PoA GL	—	
<b>Appendix 2</b>	<b>Affirmation regarding public funding</b>			
AP.2	Confirm the description on no public funding from Parties for PoA.	PoA GL	NA	
(a)	If public fund has received for PoA, (a)Provide information on Parties providing public funding;	PoA GL	—	
(b)	(b)Attach in Appendix 2: the affirmation obtained from such Parties		—	
<b>Appendix 3</b>	<b>Application of methodology(ies)</b>			
AP.3	Confirm that further background information on the applicability of the selected methodology(ies) is provided.	PoA GL	NA	
<b>Appendix 4</b>	<b>Further background information on ex ante calculation of emission reductions</b>			
AP.4	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.	PoA GL	OK	
<b>Appendix 5</b>	<b>Further background information on the monitoring plan</b>			
AP.5	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	PoA GL	NA	

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

(OK/No/NA/Tbv)

PoA-DD Section	Check Points (according to EB 66 Annex 12 “ Guidelines for Completing The Programme Design Document Form For CDM Programs of Activities”(Ver.01.0)	Reference GL,DD	Check Comment	CAR, CL, No.
	measurement equipment, procedures etc. <ul style="list-style-type: none"> <li>♦ revision of existing methodologies to the Board</li> <li>♦ publication in a newspaper</li> <li>♦ interviews with the DNA</li> <li>♦ earlier correspondence on the project with the DNA or the secretariat.</li> </ul>	PoA GL  PoA GL	— — — —	

**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)	CPA GL	OK	
2.	Confirm that the CPA-DD is completed <b>in English.</b> (all attached documents must be <u>in English</u> ) (Guideline Para.13)	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)	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)	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)	CPA GL	OK	
	<b>Specific guidelines</b>			
Section A.	<b>General description of CPA</b>			
A.1.	<b>Title of the proposed or registered PoA</b>			
A.1	Confirm that the reference and title of the PoA to which this CPA is included.	CPA GL	OK	
A.2.	<b>Title of the CPA</b>			
A.2	Confirm the followings related to the title of the PoA.	CPA GL	OK	
(a)	(a) the title of the CPA and the unique identification of the CPA.	CPA GL	-	
(b)	(b) the current version number of the CPA-DD.	CPA GL	-	
(c)	(c) the date the CPA-DD in DD/MM/YYYY.	CPA GL	-	
A.3	<b>Description of the CPA</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.3	Confirm that the description is provided on the technology and/or measures for the CPA.	CPA GL	OK	
A.4	<b>Entity/individual responsible for CPA</b>			
A.4	Confirm that the description is provided on the CPA implementers. (Name of PPs of PoA)	CPA GL	OK	
A.5.	<b>Technical description of the CPA</b>			
A.5	Confirm that the description is provided on the technologies for the CPA.	CPA GL	Tbv OK	CAR-3, CL-18
A.6.	<b>Party(ies)</b>			
A.6.1	Confirm that the Party(ies) CPA implementers (PPs) and involvement are listed in the table.	CPA GL	OK	
A.6.2	Confirm that the “(host)” is indicated in the table.	CPA GL	OK	
A.6.3	Confirm that the name of PPs are consistent with the contact information in Appendix 1	CPA GL	OK	
A.7.	<b>Geographic reference or other means of identification</b>			
A.7	Confirm that the geographic reference is indicated for the CPA <u>(within one page)</u> . (e.g. map, registration number of GPS devices)	CPA GL	Tbv OK	CL-19, CL-20a-c
A.8.	<b>Duration of the CPA</b>			
A.8.1.	<b>Start date of the CPA</b>			
A.8.1	Confirm the start date is described in DD/MM/YYYY how the start date was determined..	CPA GL	Tbv OK	CL-21
A.8.2.	<b>Expected operational lifetime of the CPA</b>			
A.8.2	Confirm that the expected operational lifetime of the CPA is described in years and months.	CPA GL	OK	
A.9.	<b>Choice of the crediting period and related information</b>			
A.9	Confirm that the type of crediting period is chosen in fixed or renewable.	CPA GL	OK	
A.9.1.	<b>Start date of the crediting period</b>			
A.9.1	Confirm that the expected start date of the crediting period of the CPA is described in DD/MM/YYYY.	CPA GL	OK	
A.9.2.	<b>Length of the crediting period</b>			
A.9.2.1	Confirm that the length of the crediting period is described.	CPA GL	OK	
A.9.2.2	Confirm that the CPA is limited to the end date of the CPA.	CPA GL	OK	
A.10.	<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>	CPA GL	OK	
A.10.2	Confirm that the start date and end date of crediting period are consistent with those dates in Section	CPA GL	OK	

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**Table-2 Requirements Checklist (PoA) for CPA-DD-Specific**

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.8.1.			
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.	CPA GL	OK	
A.11.	<b>Public funding of the CPA</b>			
A.11.1	Confirm the description on no public funding from Parties for CPA.	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	CPA GL	NA	
A.12.	<b>Debundling of small-scale component project activities</b>			
A.13.	<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.	CPA GL	Tbv OK	CL-22
Section B.	<b>Environmental analysis</b>			
B.1.	<b>Analysis of the environmental impacts</b>			
B.1.1	Confirm whether the analysis of the environmental impacts is undertaken or not.	CPA GL	OK	
B.1.2	If yes, Confirm the description on the analysis for the CPA.	CPA GL	OK	
B.2.	<b>Environmental impact assessment</b>			
B.2.1	Confirm if the EIA is required or not. If EIA required, Confirm the conclusions of EIA is provided.	CPA GL CPA GL	OK OK	
B.2.2	Confirm that the EIA is required by the host Party, in accordance with the host Party’s procedures.	Para. 135	OK	
B.2.3	Confirm that the requirement for the EIA is confirmed by means of a document review and/or using local official sources and expertise.	Para. 136	OK	
Section C.	<b>Local stakeholder comments</b>			
C.1.	<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.	CPA GL	OK	
C.1.2	Confirm that the PP has completed a local stakeholder consultation process.	Para. 138	OK	
C.1.3	Confirm that the due steps were taken to engage stakeholders and solicit comments for the PA.	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.	Para. 139	OK	
C.2	<b>Summary of comments received</b>			
C.2.1	Confirm that the summary is provided on stakeholders comments.	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.
C.2.2	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.	Para. 139	OK	
C.3.	<b>Report on consideration of comments received</b>			
C.3.1	Confirm that the consideration is provided for all comments received.	CPA GL	OK	
Section D.	<b>Eligibility of CPA and estimation of emissions reductions</b>			
D.1.	<b>Title and reference of the approved baseline and monitoring methodology(ies) selected</b>			
D.1.1	Confirm that the following reference of the <b>methodology</b> is exact. (i) reference number of the methodology. (ii) title of the methodology. (iii) version number of the methodology	CPA GL CPA GL CPA GL CPA GL	OK - - -	
D.1.2	Confirm that the following reference of the <b>Tool</b> is exact. (i) title of the Tool (ii) version number of the Tool	CPA GL CPA GL CPA GL	OK - -	
D.2.	<b>Application of methodology(ies)</b>			
D.2	Confirm that the description is provided on demonstration of compliance for applicability conditions of methodology.	CPA GL	OK	
D.3.	<b>Sources and GHGs</b>			
D.3	Confirm that the description is provided in the table on the sources and GHGs in generic CPA boundary.	CPA GL	OK	
D.4.	<b>Description of the baseline scenario</b>			
D.4	Confirm that the description is provided on how the baseline scenario is identified for the CPA.	CPA GL	OK	
D.5.	<b>Demonstration of eligibility for a CPA</b>			
D.5	Confirm that the description is provided on how specific CPA meets the eligibility criteria of the CPA.	CPA GL	Tbv OK	CL-23a-j, CL-24, CL-25
D.6.	<b>Estimation of emission reductions</b>			
D.6.1.	<b>Explanation of methodological choices</b>			
D.6.1	Confirm that the description is provided on how the methodological steps, in the selected methodology, are applied to specific CPA.	CPA GL	OK	
D.6.2.	<b>Data and parameters that are to be reported ex-ante</b>			
D.6.2	Confirm that the description is provided on the data and parameters not for monitoring in the Tables.	CPA GL	Tbv OK	CL-26

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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.
D.6.3.	<b>Ex-ante calculation of emission reductions</b>			
D.6.3	Confirm that the ex-ante calculation is provided on emission reductions.	CPA GL	Tbv OK	CL-27a-c
D.6.4.	<b>Summary of the ex-ante estimates of emission reductions</b>			
D.7.	<b>Application of the monitoring methodology and description of the monitoring plan</b>			
D.7.1.	<b>Data and parameters to be monitored</b>			
D.7.1	Confirm that the description is provided on the data and parameters for monitoring in the Tables.	CPA GL	OK	
D.7.2.	<b>Description of the monitoring plan</b>			
D.7.2	Confirm that the description is provided on the monitoring plan for a specific CPA.	CPA GL	Tbv OK	CL-28a-C, FAR-1
Section E.	<b>Approval and authorization</b>			
E.1	Confirm whether the LoA is available at the time of submitting the CPA-DD to the DOE.  If yes, Confirm that the LOA is provided with following information. (a) approval of the:Party(ies) (b) authorization for CME from each Party.	CPA GL  CPA GL	Tbv OK  Tbv OK	CAR-1
<b>Appendix 1</b>	<b>Contact information on entity/individual responsible for the CPA</b>			
AP.1	Confirm that the following mandatory fields are filled in the table. <ul style="list-style-type: none"> <li>♦ Organization</li> <li>♦ Street/P.O. Box</li> <li>♦ City, Postcode</li> <li>♦ Country, Telephone</li> <li>♦ Fax,</li> <li>♦ e-mail</li> <li>♦ Name of contact person</li> </ul>	CPA GL	OK	
			-	
			-	
			-	
			-	
			-	
			-	
			-	
	Confirm the consistency between the organization listed in above table and that in section A.4.	CPA GL	-	
<b>Appendix 2</b>	<b>Affirmation regarding public funding</b>			
AP.2	Confirm the description on no public funding from Parties for CPA. 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	CPA GL  CPA GL	OK  OK	
Appendix 3	Applicability of the selected methodology(ies)		NA	

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	JCI CDM Center	Appendix A	CDM (PoA) Validation Protocol for East Africa Renewable Energy Programme (EA-REP)	JCI-CDM-VAL-11/124
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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.
Appendix 4	Further background information on ex ante calculation of emission reductions		NA	
Appendix 5	Further background information on monitoring plan		NA	
Appendix 6	Further information on the Kenyan Baseline		<del>Tbv</del> OK	CL-17 CL-26

**TABLE-3 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-1	Summary of project owner response	Validation team Conclusion
<b>CAR Corrective Action Requests</b>				
<b>PoA-DD (Part I and II)</b>				
<b>CAR-1</b>	Letters of approval by the DNAs of all of host countries and annex I country.	G.1	<p>The Host Countries' DNA offices require a number of documents before issuing out a LoA. We expect to start the process to obtain the LoAs in the coming weeks.</p> <p>A1: Rwanda LoA has issued and provided to JCI on 08/09/2012.</p> <p>A2: Kenya LoA is provided to the validator. The annex I LoA will be provided to the EB before to be received CERs.</p>	<p>Q1: To be provided.</p> <p>Rwanda LoA is OK.</p> <p>Q2: Kenya LoA and annex I LoA should be provided.</p> <p>A2 OK. Kenya LoA is provided and the description is fully sufficient. Annex I LoA is transferred to FAR-4 and CAR-1 is closed.</p>
<b>CAR-2</b>	<u>B.1</u> Additionality demonstration is to be clearly described in the CPA-DD referring to the relevant part of the PoA-DD.	B.9.2	Additionality has been further described in the CPA-DD and a reference to section B.1 of the PoA-DD has been included. Additionality argument is based on Option B.2, access-to-capital barrier.	OK. The additionality is well demonstrated. And appropriate. CAR-2 is closed.
<b>CPA-DD (CPA-01)</b>				
<b>CAR-3</b>	<u>A.5</u> Technical description of the equipments employed in the project is to be described in the Tables.	A.5	<p>TS of the equipment employed in the project has been further described in section A.2 (VVM, A.5 VVS) of the CPA-DD in tables 1 to 7.</p> <ul style="list-style-type: none"> <li>- Table 1. Head Works</li> <li>- Table 2. Details of Intake Gates</li> <li>- Table 3. Water Conductor System specifications</li> <li>- Table 4. Penstock specifications</li> <li>- Table 5. Power House</li> <li>- Table 6. Tail Race Channel</li> <li>- Table 7. Electrical and Mechanical Equipment</li> </ul>	OK. The major spec. is well tabulated and reported in the CPA-DD. CAR-3 is closed.

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			Specifications	
CAR-4	B.7.3 Sampling plan <u>Sampling plan for geothermal project should be reported in Generic CPA-DD (Part I of PoA-DD)</u>	B.7.3	As indicated in section B.7.2 part II of the PoA-DD for geothermal projects, for geothermal project activity, sampling of the parameters $W_{steam,CO2,y}$ and $W_{steam,CH4,y}$ will be carried out in line with paragraph 4 of the Standard for sampling and surveys for CDM project activities and Programme of Activities (version 02.0, EB 65, Annex 2) whereby the requirements from the applicable methodology will have precedence. Therefore following the methodology ACM 0002 version 13.0.0, ASTM Standard Practice E1675 for Sampling 2-Phase Geothermal Fluid for Purposes of Chemical Analysis) will be used to sample these parameters. The sampling plan for any geothermal project to be included in this programme will be provided at the time of inclusion of the geothermal CPA.	OK. The sampling plan for geothermal project will be reported in Generic CPA-DD (Part I of PoA-DD). CAR-4 is closed.
<b>CL Clarification Requests</b>				
<b>PART I of PoA-DD</b>				
CL-1	A.2 : 1. General description Supporting documents for the description are all to be provided, for example, barriers by lack of finance, inadequate tariff, high cost of capital, and so on.	A.1 to A.4	Supporting evidences are provided in section A.2 and references have been shared as footnotes references for both the PoA-DD and the specific CPA-DD.  A1: The CPA-DD foot notes have been shared with the validator. References can be found in the folder named 'CPA reference' - Kenya Vision 2030/6-01/ - ERC Schedule of Tariffs/6-13/ - Kenya Power Annual Report 2010-2011/6-07/  A2: The appropriate page numbers have been included in revised CPA-DD and the specific sections highlighted in the documents that have been shared with the validator.	Q1: Although the PoA-DD's footnotes are already provided, CPA-DD's footnotes are not provided yet.  Q2: Although the documents are provided, the page number should be pointed on the document, because it is difficult to find out the applying page of the documents which is over 60 pages.  A2 is OK. The description is confirmed and it is appropriate. CL-1 is closed.
CL-2	<u>A.5: Physical/ Geographical boundary</u> It is requested to provide more explicit map for	A.5	The map of the PoA boundary submitted including the host countries, Kenya and	OK. The Map of PoA boundary

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	the clarification of project site location.		Rwanda, was explained during the on-site visit and we understood that there is no further need for change.	is well reported. CL-2 is closed.
CL-3	<p>B.1 : Electricity imports/exports</p> <p>It is requested to clarify whether electricity grid in each country is in connection to each other. (same as CL-15 of Generic CPA-DD)</p>	B.1.1	<p>Based on KPLC Annual Reports /6-07/ shared with the DOE, the Kenyan electricity grid is connected to the Ugandan electricity grid. However imports/exports are not significant.</p> <p>A1: Page 58 of the document /6-07/ shows the exports/imports to Uganda and Tanzania</p> <p>A2: The correct page in the document /6-07/ that describes the imports to the Kenyan grid is 115. According to table 1 on that page, Kenya imported 30 GWh and 0.9 GWh from the Ugandan Electricity Transmission Company Limited (UETCL) and the Tanzanian Electric Supply Company (TANESCO) in 2010/2011. This represents 0.41% and 0.012% of the total electricity supplied to the Kenyan grid in that year respectively.</p> <p>Thus it may be concluded that imports/ exports to the Kenyan grid are not significant.</p>	<p>Q1: It should be pointed out the page of /6-07/, because it is difficult to find out the description.</p> <p>Q2: Which description shows the exports/ imports to Uganda and Tanzania? It should be furthermore explained the relationship between Kenya and Tanzania concretely. Does the page 58 means "Taarifa ya Maongozi ya Kampuri"?</p> <p>A2 OK. The description is corrected. CL-3 is closed.</p>
CL-4	<p>B.2: criteria (a) through (l)</p> <p>It should be clarified whether eligibility criteria in PoA-DD and CPA-DD are complied with the requirements of Std PoA to the para 16 because the criteria number is not matched with Para.16. Para.16. The eligibility criteria are:</p> <p>(a) The geographical boundary of the CPA,</p> <p>(b) Avoid double counting</p> <p>(c) Technology/measure,</p> <p>(d) Start date of the CPA,</p> <p>(e) Ensure compliance with methodologies</p> <p>(f) Demonstration of additionality,</p> <p>(g) PoA-specific requirements</p> <p>(h) Funding from Annex I parties,</p> <p>(i) Target group,</p> <p>(j) Related to sampling requirements,</p>	<p>B2.2</p> <p>B.2.3</p> <p>B.2.4.</p> <p>B.2.5</p> <p>B.2.6</p> <p>B.2.7</p>	<p>The eligibility criteria have been set following the minimum criteria described in para. 16. The eligibility criteria is matched as follows:</p> <p>(a) is referred in eligibility criteria 1.</p> <p>(b) is referred in eligibility criteria 2.</p> <p>(c) is referred in eligibility criteria 3.</p> <p>(d) is referred in eligibility criteria 5.</p> <p>(e) is referred in eligibility criteria 4, 6 and 13.</p> <p>(f) is referred in eligibility criteria 7.</p> <p>(g) is referred in eligibility criteria 8 and 9.</p> <p>(h) is referred in eligibility criteria 12.</p> <p>(i) is non applicable.</p> <p>(j) is non applicable.</p> <p>(k) is referred in eligibility criteria 10. Extra information was added for microscale</p>	<p>Q1: The criteria should be re-arranged the order according to the minimum requirement of</p>

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	(k) Scale threshold criteria, (l) Scale categories.		project activities (l) is referred in eligibility criteria 11.  A1: The eligibility criteria have been rearranged in version 3 of the PoA-DD so that they appear as they do in Std PoA for easy comprehension. The same changes are reflected in revised CPA-DD. Eligibility criteria (i) and (j) are also included in the table in revised PoA-DD.	(a) through (l). Because it is not verifiable for EB (also DOE).  A1 OK. The description is well re-arranged. CL-4 is closed.
CL-5	<u>B.2: criteria (i) and (j)</u> It should be clearly demonstrated the reason why the criteria (i) and (j) of Std PoA are rejected in PoA-DD.	B2.2 B.2.3 B.2.4. B.2.5 B.2.6 B.2.7	Criterion (i) has been used to form an eligibility criterion that is similar to one that had previously been made following criterion (e) that ensures compliance with the methodology.  Criterion (j) related to sampling requirements is not applicable to this PoA since no sampling will be used in the verification of the CPAs. These changes are reflected in version 3 of the PoA-DD.	OK. The Criterion (i) and (l) are well demonstrated the reason of rejection. CL-5 is closed.
CL-6	<u>B.2: Key criteria for additionality</u> It is requested to make it more simplified, if possible.	B2.2 B.2.3 B.2.4. B.2.5 B.2.6 B.2.7	Further description has been added on the selection of option one (1), and logical connectors between rows in the tables added.	OK. The criteria and the means of verification are clarified. CL-6 is closed.
CL-7	<u>B.2D: Additionality-related eligibility criteria</u> Criteria for Option A "Microscale additionality" should be more accurately reflect the relevant guidelines.	B2.2 B.2.3 B.2.4. B.2.5 B.2.6 B.2.7	Criteria for Option A and how the Guidelines were addressed has been added to section B.2 of the PoA-DD	OK. Furthermore discussion is implemented on the CL-23g. CL-7 is closed.
CL-8	<u>B.2: Additionality-related eligibility criteria</u> It is requested to make it more clarified the Criteria, means of verification and Rationale of the Option B.2 "Access to capital Barrier".	B2.2 B.2.3 B.2.4. B.2.5 B.2.6	We added the description of "Annual financial reports or any published documents showing the structure of the company and any subsidiaries" in the PoA-DD (Part I).	OK. The description is well demonstrated and is applicable. CL-8 is closed.

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		B.2.7		
CL-9	<p><u>C : Management system</u> It is requested to clarify the definition of the <b>SB Lead</b> and <b>SB staff</b>.</p>	C.1 to C.5	<p>SB Lead and SB staff will be a person appointed by the CME, in this case Standard Bank Plc, The Programme Officer or the IMS staff (who will be part of the CPA IMS Operator - the in-house (Standard Bank) or outsourced resources that are operating the inclusion management system) will be responsible of maintaining the database and managing the logistics of the PoA. The responsibilities of the programme officer have been described in section Sec.C of the PoA-DD.</p>	<p>OK. The responsibility of the Programme Officer , SB Lead and SB staff are well reported and demonstrated on Sec. C in the PoA-DD. CL-9 is closed.</p>
CL-10	<p><u>C : Management system</u> It is required to clarify the total feature of the <b>electronic database</b>.</p>	C.1 to C.5	<p>The electronic database is further described in the monitoring section of the PoA-DD, and the final electronic database will be created once the PoA registered, following the indications in the PoA-DD.</p> <p>A1: The electronic database will be addressed in the next round of comments.</p> <p>A2: The validator is requested to change the request to provide the electronic database to a Forward Action Request (FAR) since the final electronic database will be created once the PoA has been registered.</p>	<p>Q1: It should be provided some template of electronic databases, such as operation records, training records and monitoring reports.</p> <p>Q2: It may be provided.</p> <p>A2 is OK. CL-10 is transferred to FAR-1 and closed.</p>
CL-11	<p><u>C : Record keeping system for each CPA under the PoA</u> Please provide all supporting evidences for eligibility criteria.</p>	C.1 to C.5	<p>The required supporting evidences mentioned in Sec. C are described in section. B.2 of the PoA-DD under “Means of Verification”. Evidences for the first CPA, EAREP – Njega 5 MW Small Hydro Project, are provided as references according to section D.5 of the Specific CPA-DD. An extra column was added to refer to the exact supporting evidence. Besides, the spreadsheet “2012 03 27 EAREP Validation Reference List.xls” shared with the DOE also describes which references provided are referring to each eligibility criteria.</p>	<p>OK. Furthermore discussion is implemented on the CL-23a - 23j. CL-11 is closed.</p>
<b>PART II of PoA-DD (Generic CPA-DD)</b>				

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CL-12	<p><u>B.5: First-of-its-kind</u> It is requested to refer to the relevant UNFCCC guidelines for First-of-its-kind for the Criteria of Option C.</p>	B.5.1	The First-of-its-kind is deleted from the proposed PoA and "Automatic additionality" is added instead of the "First-of-its-kind"..	OK. The "First-of-its-kind" is deleted and Option C is transferred to the "Automatic additionality" is appropriately. CL-12 is closed.
CL-13	<p>B.6.1, Demonstration of additionality of PoA It is requested to clarify the case of usage of fossil fuels.</p>	B.5.1	According to the methodology, project activities based on geothermal technologies may have Project Emissions from the combustion of fossil fuels for electricity generation. The methodological choices have been described in section B.6.1 of the PoA-DD and the equations applied provided.	OK, The demonstration is appropriate. CL-13 is closed.
CL-14	<p><u>B.6.2: EF<sub>CO2,grid,y</sub></u> Please clarify the applicability of specific parameters of EF<sub>CO2,grid,y</sub>.</p>	B.4.1	<p>In line with EB 70, Annex 02 Clean Development Mechanism Project Standard version 02.1, paragraph 237, the CME may request changes to the registered CDM PoA to under the conditions specified by the Project Cycle Procedure. According to the Clean Development Mechanism project cycle procedure version 03.0 (EB 70, Annex 04), paragraph 131 (a), "for CDM PoAs [...] the following changes shall be allowed: Changes to programme boundary to expand geographical coverage or to include additional host Parties. Therefore, additional host Parties may be included in the future following the appropriate procedures.</p> <p>As the first CPA is located in Kenya, the grid emission factor has been first calculated for this country. This is indicated in Appendix 4 of the PoA-DD. Other CPAs located in Kenya will apply the same grid emission factor as it has been fixed at PoA level. For other CPAs located in different host countries other than Kenya, the grid emission factor calculations will be described at the specific CPA-DDs.</p> <p>The specific parameters applied in the calculation of the Kenyan grid emission factor</p>	OK. JCI confirms the judges the description of the each specific parameters of grid emission factor (Kenya and Rwanda) in section B.6.2 of Generic CPA-DD is reported appropriately. CL-14 is closed.

			had not been included in the earlier versions of the PoA –DD but had been included in the CPA –DD. The latest version of the PoA- DD has been revised so that these parameters have been included in section B.6.2 of each Generic CPA-DDs "Specific parameters for calculation of grid emission factor" since the grid emission factor will be fixed on the PoA level. These parameters will therefore require no monitoring.	
CL-15	<u>B.11 : Electricity imports/exports</u> It is requested to clarify whether electricity grid in each country is in connection to each other. (same as CL-3 of PoA-DD)	B. 4.1	<p>Based on KPLC Annual Reports /6-07/ shared with the DOE, the Kenyan electricity grid is connected to the Ugandan electricity grid. However imports/exports are not significant.</p> <p>A1: Page 58 of the document /6-07/ shows the exports/imports to Uganda and Tanzania</p> <p>A2: The correct page in the document /6-07/ that describes the imports to the Kenyan grid is 115. According to table 1 on that page, Kenya imported 30 GWh and 0.9 GWh from the Ugandan Electricity Transmission Company Limited (UETCL) and the Tanzanian Electric Supply Company (TANESCO) in 2010/2011. This represents 0.41% and 0.012% of the total electricity supplied to the Kenyan grid in that year respectively.</p> <p>Thus it may be concluded that imports/ exports to the Kenyan grid are not significant.</p>	<p>Q1: It should be pointed out the page of /6-07/, because it is difficult to find out the description.</p> <p>Q2: Which description shows the exports/imports to Uganda and Tanzania? It should be furthermore explained the relationship between Kenya and Tanzania concretely. Does the page 58 means "Taarifa ya Maongozi ya Kampuri"?</p> <p>A2 OK. the description is corrected. CL-15 is closed.</p>
CL-16	<u>Appendix 6: baseline information</u> It is required to clarify the baseline information in Appendix 6.	B.4.1Appendix 6	<p>The baseline information may not be considered as essential for the description of the baseline scenario. However it may result helpful in understanding the different regulatory bodies and regulations affecting the baseline scenario. Therefore we considered that providing that information as an appendix is appropriate. Evidences have been added and shared as footnote references.</p>	<p>OK. The baseline information of Kenya and Uganda are well reported in the Appendix 6. CL-16 is closed.</p>
CL-17	<u>B.6.3: ER calculation</u>	B.6.1.6	The active spread sheet of the EF grid has been	The ER sheet is provided and

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	It should be provided active spread sheet of EFgrid.		provided as Emission Reduction calculation sheet/1-06/	the calculation is correct CL-17 is closed.
<b>Specific CPA-DD (CPA-01)</b>				
<b>CL-18</b>	<u>A.3.: "net plant load factor"</u> It should be clarified the description of "net plant load factor of 73.54%". Maybe it is meant "Plant Load Factor on net electricity supplied to the grid".	A.5	Confirmed, the net plant load factor is the plant load factor based on the net electricity supplied to the grid.  A1: The amount of gross electricity and net electricity have been reported in section A.3 of the CPA-DD.	Q1: DOE has to validate the appropriateness of PLF. It should be clearly reported the amount of "Gross electricity generation" and "Net electricity supplied to grid" in PDD.  A1 OK. The description is well reported. CL-18 is closed.
<b>CL-19</b>	<u>A.5.: run-of-river plant</u> It is required to provide the definition of "run-of-river project."	A.7	Run-of-river projects are a type of hydroelectric generation whereby little or no water is stored, and the normal course of the river is not materially altered. Run-of-river hydroelectric generation type is a common type of project, and it is recognized by the EB in methodology ACM0002 v13.0.0. The CPA-001 is complied with the definition of ACM0002 v13.0.0	OK. the definition is clarified and appropriate. CL-19 is closed.
<b>CL-20a</b>	<u>A.7: geo- coordinates</u> It is requested to clarify what the Table 1 does mean.	A.7	Table 1 has been deleted from the specific CPA-DD as those coordinates were only temporary measurements, therefore not relevant for the project information.	OK. Table 1 is deleted appropriately. CL-20a is closed.
<b>CL-20b</b>	<u>A.7: geo- coordinates</u> The location of DPR (Fig 1.1, page 5) is not inconsistent with CPA-DD (Fig.1 page 6). Which is the exact geographical location? According to the Google map, 00°32'51"S, 37°20'11"E is just Kirinyaga County, not the location of DPR is pointed Eldoret County (00°32'N, 35°20'E). Why the top page of DPR has been provided separately?	A.7	The exact geographical location is the one indicated in the CPA-DD. The figure (1.1, page 5) in the DPR does not show the correct location of the project. This is an error from the DPR authors.  The project area is however clearly described in the DPR on page 7 (table 1.5) in which the report mentions that the project is in Kirinyaga. The DPR was received from the project owners in that format. The front page has been shared with the validators/1-03B/.	OK. JCI judges the location point of DPR is miss pointing. The geo-coordinate of CPA-DD and DPR is matched with Kiringaya County and the location is correct. CL-20b is closed.
<b>CL-20c</b>	<u>A.5 project location map</u> It is requested to make more clear Figure 1.	A.7	Figure 1 has been modified to allow a clearer picture of the exact location of the project site.	Q1: It should be exchange again the map. The modified one is not cleared.

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			<p>A1: The figure has been modified in version 3 of the CPA-DD to make it clearer.</p> <p>A2: Following recommendations by the Validator, the figure has been modified in version 4 of the CPA-DD.</p> <p>The maps presented together with their coordinates give clear indication of the project location. The third map was deleted as it information is already reflected in the other two remaining maps.</p>	<p>Q2: The revised maps are not clarified yet. Almost of characters are not readable.</p> <p>OK. The location map is readable. CL-20c is closed.</p>
CL-21	<p><u>A.8.1: start date</u></p> <p>It is required to clarify the foundation of expectation of the starting date as 01/07/2012.</p>	A.8.1	<p>Start date has been updated to 01/09/2013. This date is the expected date to sign with the equipment supplier contract after the finalization of the PPA and financial agreements. The crediting period was updated to 01/09/2015 based on estimation of 2 years of construction.</p>	<p>OK. The date is appropriately. CL-21 is closed.</p>
CL-22	<p><u>A.12: de-bundling</u></p> <p>It is requested to make more clearly with regard to the chart for demonstration for not de-bundling.</p>	A.13.1	<p>The debundling chart has been reformatted to a better resolution.</p> <p>1) A1: The project owner confirms that there are no similar CDM activities being developed within one kilometre radius of the project area. This can be confirmed through the CDM project activity and PoA activity registry. No river development scheme/location map currently exists.</p> <p>2) A1: There are no neighbouring stations as described above.</p>	<p>1) Q1: It should be provided some evidences the project is not de-bundling, such as river development scheme or location map of neighbourhood hydro power station of the project.</p> <p>2) Q1: It should be provided some information of the neighbourhood station such as, title of entity, name of owner...</p> <p>OK. JCI judges the project is complied with the de-bundling guidelines. CL-22 is closed.</p>
CL-23a	<p><u>D.5 : Eligibility criteria 1 (criteria (a) of Std PoA)</u></p> <p>Is the "Detailed Project Design?" in the supporting evidence means DPR? Which page is referred? It should be clarify the description for understanding not only DOE but also EB.</p>	D.5	<p>"Detailed Project Design" referred to in section B.2 of the CPA-DD (VVM) refers to the DPR (Detailed Project Report)/1-03/. This has been corrected in version 3 of the CPA-DD.</p> <p>For eligibility criterion 1, justification is found on</p>	<p>OK. JCI confirms the Eligibility criteria 1 (Geographical boundary) and 3 (Technology/measure) are matched with DPR/1-03/ and are also</p>

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	The Eligibility criteria 3 (criteria (c)) and 13 (criteria (e)) are the same requests.		<p>page 7 table 1.5 of the DPR. This has been included in revised CPA-DD.</p> <p>Eligibility criterion 3 is based on requirement (c) from paragraph 16 of Std PoA while eligibilitycriteria 15 is based on requirement (e) of the same document. These criteria, although justified using the same document, i.e. the DPR seek to address various requirements following the guidelines in Std PoA</p> <p>A1: The document requirement for this criterion has been changed to “Offer for equipment supply”. The document clearly shows that the equipment that will be used for the power plant will be newly obtained and not from another activity. The change has been reflected in section B.2 in revised CPA-DD, eligibility criterion 7. This remains in-line with the requirements of the PoA-DD since the document required for this criterion is the “<i>Feasibility Study report or any other relevant project documentation</i>” (See section A.4.2.2 of revised PoA-DD (VVM)). The document has been provided to the validator as reference 40. Due to the need to arrange the eligibility criteria in clear way and in a way the is easily verifiable as requested by the validator, (see CL 6(a) above), the specific eligibility criteria referred to in A. 1is now numbered 7 in the CPA –DD as well as the PoA-DD. As already described above, the document requirement for this criterion was met by the “Offer for equipment supply” that shows that the CPA does not use equipment transferred from another activity but that will be newly obtained. This reference was shared by the validator as described above.</p>	<p>matched with the criteria (a), (c) and (e) of the guidelines in Std PoA respectively.</p> <p>Q1: It should be clarified the referred page of DPR for the Criteria 13 (generating equipment which is transferred from another activity.</p> <p>A1 OK. The Eligibility criteria 1 (Geographical boundary) and 3 (Technology/ measure) are matched with DPR/1-03/. CL-23a is closed.</p>	
CL-23b	D.5: Eligibility criteria 2 (criteria (b) of Std PoA) Supporting evidence of “Emission Reduction Purchase Agreement (ERPA)”should be more	D.5	The ERPA will be provided to the validator. The copy that had been made available was not the one for this particular project activity.	1) Q1: It should be clearly reported which page of ERPA	

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	demonstrated. It is difficult to understand the role of “Young Power Limited” and the relationship with Uni-Power. It may be pointed out the page of ERPA.		<p>1) A1: Clause 13.1 (k)) on page 14 of the ERPA provided shows that the CPA developer is required to warrant that “<i>it has not developed and will not seek to develop the contracted CPA as another CPA or part of another CDM Program of Activities other than the PoA</i>” The specific page number has been included in version 4 of the CPA-DD.</p> <p>2)A1: As mentioned above, the ERPA/3-02/ provided was not for this specific project activity and hence Young Power Limited are not related in this project. The correct document will be shared with the validator.</p>	<p>has been applied to the criteria 2. Because it is difficult to find out the description in the 40 pages of ERPA.</p> <p>1) a1 OK. The description is confirmed and well reported. 2) Q1: It should be provided the “correct ERPA”.</p> <p>Q2: The "correct ERPA " /3-02/ has been provided and well reported.</p> <p>CL-23b is closed.</p>
CL-23c	<u>D.5: Eligibility criteria 5 (criteria (e) of Std PoA)</u> Although JCI received draft Power Purchase Agreement (PPA)/3-01/, it is difficult to find out the participation of Uni-Power. It may be pointed out the related page.	D.5	<p>The PPA is still under discussion. The document provided/3-01/ is a template issued by KPLC to project developers in the first round of discussions.</p> <p>A1: PPA/3-01/ provided shows that Unipower was in contact with KPLC and the draft PPA provided to the Validator was indeed provided to the project owners by KPLC. Discussions with KPLC are still underway and therefore the final agreement in not ready at the moment.</p>	<p>Q1: It should be provided evidence for the participation of Uni-Power.</p> <p>A1 OK. The "draft PPA is a template issued by KPLC to project developers in the first round of discussions and altered with PPA". CL-23c is closed.</p>
CL-23d	<u>D.5: Eligibility criteria 8 (criteria (f) of Std PoA)</u> It is requested to provide introduction of the PO's company.	D.5	<p>The company's profile (“AA-Electel-Hydel profile”)/4-01A/ is submitted to JCI.</p> <p>A1: Unipower profile has been provided. /4-01B/.</p> <p>A2-1: The eligibility criterion to demonstrate that the project is additional is based on “Access to capital barrier” as described in section B.2 of the PoA-DD. The project is therefore to prove that it</p>	<p>Q1: Although PP provided /4-01A/, it is not company's profile of Uni-Power. It is the profile of “Hydel”.</p> <p>A1 OK. /4-01B/ is profile of UPL.</p> <p>Q2-1: Although Uni-Power is identified it is one of the family</p>

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			<p>is not subsidiary of a multinational group and, that a company that also purchases CERs provided funding for the project.</p> <p>The CFC mandate letter on page 20 provides the term sheet for the agreement.</p> <p>The project that will benefit from the facility will be 3 hydro projects (including Njega 5 MW project) that will be located in Kirinyaga and on Thiba River.</p> <p>The mandate letter also indicates that the borrower will be an SPV, a special purpose vehicle. The Incorporation documents show that Uni-Power is a registered Company in Kenya and will carry out the project implementation as a separate entity apart from Hydel.</p> <p>Page 23 of the CFC mandate letter/3-11/ (under the section "Carbon credits" shows that the condition for the facility is that the borrower must enter into an ERPA with Standard Bank Plc. Without the carbon credits there would be no such agreement and therefore no finance to carry out the project. In this way the document provided shows that the project is additional.</p> <p>A2-2: Those documents have not yet been submitted to CFC Stanbic. Uni-Power is still in the process of obtaining them and will provide CFC Stanbic with them as a condition to the facility.</p> <p>The documents above requested by the validators are estimated to be obtained in 2013 based on the estimated start date of the project (see CL-21 above).</p>	<p>companies of Hydel, applicability for the Eligibility criteria (f) has not been identified yet. It should be summarized the Mandate Agreement between CfC Stanbic (CFC) and Hydel/3-11/ and pointed out the page number.</p> <p>Q2-2: According to the Mandate Agreement /3-11/, following document have been submitted (See page 3). It may be provided.</p> <ul style="list-style-type: none"> <li>- Generation Licence</li> <li>- PPA</li> <li>- EPC contract</li> </ul> <p>OK. JCI judges provided document is shown the additionality.</p>
CL-23e	D.5: Eligibility criteria 9 (criteria (g) of Std PoA) Evidence of Environmental impact assessment and the regulation should be provided.	D.5	<p>EIA/1-04/ and its approval/2-04/ will be made available as soon as it is ready.</p> <p>"Environmental Management and Coordination Act of 1999"/6-04A/ and "24 The Environmental (Impact Assessment and Audit) Regulations, 2003"/6-04B/ are submitted.</p>	<p>Q1: It should be explained the relationship between /6-04A/ and /6-04B/.</p>

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			<p>A1: As indicated on page 28 of the project EIA Report shared with the validator/1-04/, the Environmental Management and Co-ordination Act 1999 (EMCA) i.e. document /6-04A/ is the parent Act of Parliament that provides for the establishment of appropriate legal and institutional framework for the management of the environment and for matters connected therewith and incidental thereto.</p> <p>The Environmental (Impact Assessment and Audit) Regulations, 2003 i.e. document /6-04B/ is a supplementary legislation to the EMCA. It provides guidelines for conducting Environmental Impact Assessments and Audits. It offers guidance on the fundamental aspects on which emphasis must be laid during field study and outlines the nature and structure of Environmental Impact Assessments and Audit reports.</p>	<p>A1 is OK. The evidences are applicable because the EMCA 1999/6/04A/ is a basic law and the Regulations 2003/6-04B/ is the supplementary legislation to the EMCA. CL-23e is closed.</p>
CL-23f	<p><u>D.5: Eligibility criteria 10 (criteria (g) of Std PoA)</u> Evidence of local stakeholder consultation should be provided.</p>	D.5	<p>Local Stakeholder Consultation Report/4-05A/ is submitted.</p> <p>A1: Invitation letter for Stakeholder meeting/4-03/ and Questionnaire and Responses/4-04/ is included with /4-05A/. Additionally reference "local stakeholder consultation report/4-05A/" shared with the validator contains the comments by the local stakeholders on the project.</p>	<p>Q1: More evidences should be provided such as;</p> <ul style="list-style-type: none"> <li>- Invitation letter for Stakeholder meeting /4-03/</li> <li>- Questionnaire and Responses /4-04/</li> </ul> <p>OK. JCI confirms local stakeholder consultation report/4-05A/ is include Invitation letter/4-03/ and Questionnaire/4-04/, and the description is applied with the criteria (g) of the guidelines in Std PoA. CL-23f is closed.</p>
CL-23g	<p><u>D.5: Eligibility criteria 14 (criteria (k) of Std PoA)</u> Although the installed capacity is 5 MW, it may be clearly reported whether the Kenya is applied or not to the LDCs/SIDS and the project is applied or not applied with Option A.</p>	D.5	<p>Kenya is not an LDC/SID country hence additionality option A does not apply for this project activity. This has been reported in section D.5 the CPA-DD latest version of the CPA-DD.</p>	<p>OK. CPA-DD is well revised CL-23g is closed.</p>

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CL-23h	D.5 :Eligibility criteria 11 (criteria (h) of Std PoA) Has the project not received funding from Annex I parties?	D.5	The confirmation letter from CPA entity shows that the CPA has not received funding from Annex I parties.  A1: The confirmation letter from the CPA entity has been shared with the validator. /3-08/	Q1: It should be provided the confirmation letter.  OK. JCI confirms PP has not received public funding from Annex I parties and is applied with the criteria (h) of the guidelines in Std PoA. CL-23h is closed.
CL-23i	D.5: Eligibility criteria 3 (criteria (c) of Std PoA) The location map of Thiba River should be provided included the project site such as water intake, forebay, trench, penstock and powerhouse. The map becomes evidence of no reservoir.	D.5	The engineering drawings/5-01/, especially "Njega location plan A1 size" is submitted.	OK. The engineering drawings /5-01/ is clearly reported the facilities included river basin. JCI confirms the project is run-of-river type and has no reservoir. CL-23i is closed.
CL-23j	D.5: Eligibility criteria 15, (criteria (l) of Std PoA) It should be concretely demonstrated whether the CPA is de-bundled or not de-bundled project.	D.5	The project has carried out a debundling check as shown in section A.4.6 of the CPA-DD (prepared by VVM form). A more detailed explanation has been included in the latest version of the CPA-DD.	OK. The demonstration and deviation are applicable CL-23j is closed.
CL-24	D.5: subsidiary of multinational group It is requested to provide some evidences whether the CPA is not implemented by a subsidiary of a multinational group.	D.5	"Incorporation Certificates (Uni-power Ltd)"3-11/ is submitted as evidence.  A.1: Uni-power Limited is a special purpose vehicle (SPV) incorporated in Kenya and set up by Hydel Engineering Ltd. Uni-power Ltd will develop the Njega 5MW hydro project. Initially this company was called "Quadco one hundred and fifty seven" and had its name changed to Unipower Ltd therefore there is an original incorporation certificate in that name and a change of name certificate to Uni-power limited. "Uni-power statement on ODA"/3-08/ is submitted for the evidence.	Q1: Incorporation Certificates /3-11/ is "Certificate of change of the company's title" from Quadco to Uni-Power. The relationship between Hydel and Uni-Power or Quadco is not clarified.  A1 is OK. JCI confirms Uni-Power or Quadco are task-force company of Hydel and Hydel has not a multinational group. CL-24 is closed.
CL-25	D.5: investment decision It is requested to provide some evidences for the investment decision of the CPA.	D.5	"CFC Mandate Letter between Hydel Engineering"/3-11/ is submitted as the evidence.	OK. JCI confirms the agreement letter/3-11/ is applied with the investment

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			<p>A1: As indicated in the Uni-power Ltd profile /4-01B/, Uni-power is an SPV that was set up for the development of the Njega hydro project. Both companies have the same promoters as shown in /4-01B/ and /4-01A/.</p> <p>A2: In case the company that provides financing described above is different from the one that purchases the CERs a clear relationship between the two should exist e.g. subsidies under the same holding/parent company may be considered eligible. "Standard Bank Group Annual reports and statements/4-02/" is provided for an evidence that CFC (Investor) and SB (CME) are both subsidiaries of Standard Bank Group.</p>	<p>decision. Q1: It is requested to provide some evidences for the relationship between Hydel and Uni-Power.</p> <p>Q2: It is requested to clarify the applicability of the Criteria "Investment or debt financing is done by a company that also purchases the CERs".</p> <p>A2 is OK. JCI judges the description is well demonstrated and the evidences are applicable. The CL-8 is closed. CL-25 is closed.</p>
CL-26	<p>D.6.2 Appendix 6 : Figure 4 is not clear. It is requested to explain the purpose to put up the grid system in the CPA-DD.</p>	D.6.2Appendix 6	<p>Figure 4 has been deleted as per recommendation during on-site assessment, as it was not relevant for baseline description</p>	<p>OK. The figure 4 is deleted appropriately. CL-26 is closed.</p>
CL-27a	<p>D.6.3: <math>EG_{BL,y}</math>. It is required to indicate the calculation process of <math>EG_{BL,y}</math>.</p>	D.6.3	<p><math>EG_{BL,y}</math> is an <i>ex ante</i> estimation of the net electricity supplied to the electricity grid by the project activity. Its calculation is described in section B.5.2 CPA-DD (VVM) and it is based on the Design Project Report.</p> <p>A1: Based on Table 13.9 on page 83 of the DPR, the annual generation of the project is expected to be 32.53 GWh (plant load factor of 74.27%) This plant load factor is obtained as follows <math>\{(32,530/5)/8760\}</math> Taking auxiliary losses and transformation losses both of 0.5% into account, the annual generation after the losses i.e. the net electricity supplied to the grid is expected to be 32.205 GWh <math>(32.53*99\%)</math> which is 32,205 MWh resulting in a net plant load factor of 73.54% This is described in section A.3 of the CPA-DD</p>	<p>Q1: It should be clarify the calculation for the net electricity supplied to the grid using by gross electricity generation, effective power factor, aux. consumption rate and transmission loss in the left column. JCI shall confirm the consistency of the value with DPR (page 83).</p> <p>A1 Is OK. The calculation of net electricity supplied to grid and electricity loss load is appropriate. CL-27a is closed.</p>

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			(VVS)	
CL-27b	<p><u>D.6.3 EF<sub>CO2,grid,y</sub></u> It is required to clearly describe the calculation process of EF<sub>CO2,grid,y</sub> in section D.6.3 .</p>	D.6.3	<p>Calculation of the EF<sub>CO2,grid,y</sub> of the PoA-DD has been added, specifying the calculation of the combined margin for hydro projects as per the <i>Tool to calculate the emission factor of an electricity system</i></p> <p>1) A1: Corrections to the CPA-DD have been made in order to make the equations more visible.</p> <p>2) A2: All formulas have been clearly reported referring to the tool/ methodology from which they have been derived. The equation numbers are in bold.</p>	<p>1) Q1: Although the calculation process is well reported, the formula should be clearly reported (p.23), because it is blurred.</p> <p>2) Q1: All formulas should be clearly reported and added numbers.</p> <p>OK. All formulas are well reported the numbers in CPA-DD. CL-27b is closed.</p>
CL-27c	<p><u>D.6.3, OM, BM and CM</u> Value of 18,442 tCO2 should be re-confirmed. 18,442 tCO2 is correct, if 0.57 tCO2/MW would be using to the calculation.</p>	D.6.3	<p>The value 18,442 tCO2 can be confirmed in the emission reduction spreadsheet already shared with the Validator. The grid emission factor is 0.57265 and is rounded off to 0.57. Taking (0.57265 × 32,205) gives 18,495. This when rounded off gives 18,442 tCO2.</p> <p>Based on corrections to the emission reduction calculations i.e. correction of the EF<sub>co2</sub> for off-grid plants from 0.0726 to 0.0675 (see work sheet Off-grid power plants) based on the IPCC value for gasoline/petrol, the operating margin value changed from 0.6586 to 0.65530 while the BM remained 0.49000. The CM therefore changed from 0.5743 described above to 0.57265 as indicated in the latest version of the CPA-DD. Consequently the emission reductions are now 18,442 tCO2/year (0.57265 * 32,205)</p>	<p>OK. The decimal is round down and it is conservative. CL-27c is closed.</p>
CL-28a	<p><u>D.7.2: Monitoring organization</u> To be shown Monitoring organization in B.6. (VVM) D.7.2 (VVS)</p>	D.7.2	<p>Diagram with the monitoring personnel of the first CPA and the CME has been added to section B.6 (VVM) as figure 3.</p>	<p>OK. The figure 3 is well reported and appropriate. CL-28a is closed.</p>
CL-28b	<p><u>D.7.2: Metering system</u> To be shown Diagram of project including</p>	D.7.2	<p>Diagram showing the position of the metering system from reference 21, has been included in</p>	<p>Main meter and backup meter are well reported in the figure</p>

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	measurement devices installation		<p>the CPA-DD as figure 4.</p> <p>A1: As common practice, the responsibilities for meter installation, monitoring and calibrating are stipulated in the PPA in which case the project owner is responsible for the supply and installation testing and commissioning of the metering system. Once the meters have been commissioned, the project owner will transfer ownership of the back-up meter to KPLC while it will be responsible for the main metering system and maintain and operate it. This has been included in version 3 of the CPA-DD</p>	<p>4. Q1: However, it should be clearly reported whether the meters are out of boundary of the project. Does the project have responsibility of installing, monitoring and calibrating?</p> <p>OK. The responsibility of the electricity meters are well reported in CPA-DD. CL-28b is closed.</p>
<b>CL-28c</b>	<p><u>D.7.2: Metering system</u></p> <p>Is accuracy of the main meter and backup meter applied with national regulation or industry standards?</p>	D.7.2	<p>Yes, the accuracy is complied with “Regulation Code for electricity monitoring meter”/6-06/.</p>	<p>OK. JCI confirms /6-06/ is Kenya grid Code. CL-28c is closed.</p>
<b>FAR Forward Action Requests</b>				
<b>FAR-1</b>	<p><u>D.7.2 Specific CPA-DD: CDM manuals</u></p> <p>CDM monitoring manual/4-08/ and Operation and training manual/4-09/ should be provided.</p>	D.7.2	<p>The CDM monitoring manual and the operation and training manual will be prepared after the signing of the EPC contract. Therefore we request to have it as a FAR, to be done before the commissioning of the project.</p> <p>Annex 5 as described in the CPA-DD refers to the emission reduction calculations that have been fixed in the PoA level. This is indicated in the CPA-DD</p> <p>For the VVS Appendix 4 of the PoA-DD referred to in the CPA-DD contains the emission reductions that have been fixed in the PoA level.</p>	<p>OK. /4-08/ and /4-09/ will be provided later.</p>

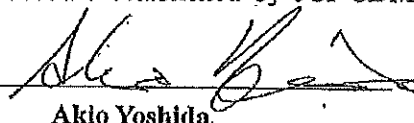
**APPENDIX B****Certificate of Appointment of Validation Team**

Project Title East Africa Renewable Energy Programme (EA-REP)  
 Applied Methodology AMS 1.D,  
 Sectoral Scope 1

Date: 27 January 2012**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: 30/01/2012**Client: Standard Bank Plc**

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) G. SINGAR(Title) DIRECTOR**Validation Team**

Validation Team	Name	Qualified Technical Areas related to the Project
Leader	Shigeo AOKI	1.2 Energy generation from renewable energy source
Member	Kenichi SUZUKI	1.2 Energy generation from renewable energy source

Technical Reviewer	Haruo SAWADA	1.2 Energy generation from renewable energy source
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