

# VALIDATION REPORT

“Small-scale Solar Electrical Programme, South Africa”


Report No. CCL0024/SAMPP/15072011

Revision No. 05

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Republic of South Africa

# VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0024/SAMPP/15072011

<b>PoA Title:</b> Small-scale solar electrical programme, South Africa		<b>Country:</b> Republic of South Africa	<b>Estimated CERs (tCO<sub>2</sub>e of the 1<sup>st</sup> CPA):</b> 15,022 (annual average)	
<b>GHG reducing measure/technology of the CPAs of the PoA:</b>		The emission reduction would happen by displacing the fossil fuel dominated grid electricity equivalent to the net electricity supplied by the SPV power plant i.e. the CPAs of the PoA to the RSA grid {measure for the CPAs utilising AMS I.D.} or due to displacement of electricity due to electricity supplied to end users from all independent activities (solar electrical systems installed) under the CPA (used for the captive purpose) which in absence of CPAs of the PoA would have been supplied by electricity from the grid {measure for the CPAs utilising AMS I.F.}. Each small scale CPA of the programme involves implementation of solar PV project/s with an installed capacity below 15 MW and supplying electricity either to the grid i.e. RSA or to specific user for captive use.		
<b>Client/CME:</b> Blue World Carbon Capital PCC		<b>Client contact:</b> Mr. Joost Van Lier Channel House, Green Street, St. Helier, Jersey Telephone: +27 (0)71 609 2276 e-mail: <a href="mailto:joost.van.lier@blueworldcarbon.com">joost.van.lier@blueworldcarbon.com</a>		
<b>Report No.:</b> CCL0024/SAMPP/15072011		<b>Revision:</b> 05	<b>Date of this report:</b> 14/11/2012	
<b>Approved by (Final Report):</b> Adam Simcock 		<b>Date of approval:</b> 15/11/2012		
<b>Technical Reviewer:</b> Vikash Singh		<b>Date of approval:</b> 14/11/2012		
<b>GPS coordinates of the geographical boundary of PoA:</b>		The verified /B07-5/ range of geographic coordinates of RSA: <b>Latitude:</b> 22° S to 35° S <b>Longitude:</b> 16° E to 33° E		
<b>Methodology</b>				
<b>Number:</b> AMS-I.D.	<b>Version:</b> Version 17	<b>Title:</b> Grid connected renewable electricity generation	<b>Scale:</b> Small Scale	<b>SS(s):</b> 1
<b>Number:</b> AMS-I.F.	<b>Version:</b> Version 02	<b>Title:</b> Renewable electricity generation for captive use and mini-grid	<b>Scale:</b> Small Scale	<b>TA:</b> 1.2
Carbon Check Pty Ltd., (CCL) is commissioned by Blue World Carbon Capital PCC (the CME) to perform the validation of the Program of activities "Small-scale solar electrical programme, South Africa", with regard to the relevant requirements for CDM programme of activities.				
<b>Summary of the PoA Validation and Opinion:</b>				
<input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided CCL with sufficient evidence for the determination of the PoA's fulfillment of all stated criteria. In our opinion, the PoA meets all relevant UNFCCC requirements for the CDM. Therefore, CCL recommends the PoA for registration by the CDM Executive Board.				
<input type="checkbox"/> The reviews of the project design documentation and the subsequent follow-up interviews have not provided CCL with sufficient evidence for the determination of the PoA's fulfillment of all stated criteria. Therefore, CCL will not recommend the PoA for registration by the CDM Executive Board and will inform the project participants and the CDM Executive Board of this decision.				

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Validation Team		Role						
Full Name	Appointed for Sectoral scopes (Technical Areas)	Team Leader	Auditor	Local Expert	Team Member (Auditor)	Technical Expert	Co-Technical Reviewer	Technical Reviewer
Ravi Shankar	1.2, 2.1, 2.2, 3.1, 13.1	X				X		
Amit Anand	1.2		X					
Vikash Kumar Singh	1.2, 3.1, 13.1							X

Validation Phase	Validation Status
<input checked="" type="checkbox"/> Desk Review	<input type="checkbox"/> Corrective Actions / Clarifications requested
<input checked="" type="checkbox"/> Follow up interviews	<input checked="" type="checkbox"/> Full approval and submission for registration
<input checked="" type="checkbox"/> Resolution of outstanding issues	<input type="checkbox"/> Rejected

## Executive Summary – Validation Opinion

The validation team of Carbon Check (Pty) Ltd., performed the validation of the PoA titled “Small-scale solar electrical programme, South Africa.

Standard auditing techniques have been used for the validation of the PoA. An analysis, as provided by the applied methodology, demonstrates that the proposed PoA is not a likely baseline scenario. Emission reductions attributable to the PoA (eligible CPAs of the PoA) are additional to any that would occur in the absence of the proposed eligible CPAs. Given that the PoA is implemented as designed, the CPAs are likely to achieve the emission reductions.

The validation is based on the information made available to Carbon Check (Pty) Ltd., as well as the engagement conditions detailed in this report. The validation has been performed following the VVM requirements.

The validation was executed in the following steps so far:

- Receipt of PoA-DD (version 2.0, dated 15/12/2011) CPA DD (generic) and real case CPA DD (version 2.0, dated 07/12/2011) for global stakeholder comments.
- Global stakeholder comment process (23/12/2011 to 21/01/2012)
- On-site visit with stakeholder interviews (05/03/2012)
- Issue of checklist with corrective action requests (CARs) and clarification requests (CLs) and the draft validation report and protocol
- Desk review of revised DDs applying AMS-I.D. (version 17) and AMS-I.F. (version 02)
- Review of responses for CARs/CLs
- Issue of the final validation report and protocol

The single purpose of this report is its use during the registration process as part of the CDM project cycle. In the opinion of Carbon Check (Pty) Ltd., the PoA meets all relevant UNFCCC requirements for the CDM if the underlying assumptions do not change. Carbon Check (Pty) Ltd. thus recommends the PoA to be registered with the UNFCCC.

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## Abbreviations

BE	Baseline Emissions
BWCC	Blue World Carbon Capital
CAR	Corrective Action Request
CC	Cross Check
CCL	Carbon Check (Pty) Ltd
CDM	Clean Development Mechanism
M&P	Modalities and Procedures CDM
CER(s)	Certified Emission Reduction(s)
CL	Clarification Request
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
CME	Coordinating/managing entity and participants of PoA
CPA	CDM Programme Activity
CPA-DD	CDM Programme Activity design document
DR	Document Review
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EIA	Environmental Impact assessment
ER	Emission Reductions
FAR	Forward Action Request
GHG(s)	Greenhouse gas(es)
GWP	Global Warming Potential
I	Interview or any follow up action
IPCC	Intergovernmental Panel on Climate Change
LoA	Letter of Approval
MoV	Means of Validation/Verification
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-governmental Organization
ODA	Official Development Assistance
PE	Project Emission
PoA	Programme of Activities
PoA-DD	Programme of Activities design document
PP(s)	Project Participant(s)
Ref.	Document Reference
RSA	Republic of South Africa
SD	Sustainable Development
SS(s)	Sectoral Scope(s)
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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## 1 INTRODUCTION

Blue World Carbon Capital PCC (BWCC) (hereafter referred as "CME") has commissioned the DOE Carbon Check (Pty) Ltd to perform validation of the proposed CDM Programme of Activities (PoA) " Small-scale solar electrical programme, South Africa" in Republic of South Africa (hereafter called "the PoA"). This report summarizes the findings of the validation of the PoA identified in the PoA Design Document (PoA-DD); the CDM Programme Activity Design Document (g-CPA-DD) template with generic information relevant to all CDM Program Activities (CPAs) to be included in the PoA, and the associated real case CPA-DD. The validation was performed on the basis of UNFCCC criteria for the PoAs under the CDM, as well as criteria given to provide for consistent programme operations, monitoring and reporting. The term "UNFCCC criteria" refers to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project activities, the procedures for registration of a programme of activities and the subsequent decisions by the COP/MOP and CDM Executive Board. In addition to these criteria, host country criteria are also taken into account.

### 1.1 Objective

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

### 1.2 Scope

The validation scope is defined as an independent and objective review of the PoA-DD, CPA-DD template and the real case CPA-DD. The PoA-DD, CPA-DD template and the real case CPA-DD were reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project activities, the procedures for registration of a programme of activities as a single CDM project activity and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology AMS-I.D. (Version 17) and AMS-I.F. (version 02).

The validation team has, based on the requirements contained in the Validation and Verification Manual and the procedures for registration of a programme of activities as a single CDM project activity employed a rules-based approach, focusing on the identification of significant risks for programme implementation and the generation of CERs.

The validation is not meant to provide any consulting towards the PoA Managing Entity, CPA Implementer(s) and/or project participant(s) (PP). However, stated requests for clarifications, corrective actions, and/or forward actions may provide input for improvement of the programme design.

## 2 METHODOLOGY

The validation consists of the following four phases:

- I. Publication of the programme design documents (PoA-DD, CPA-DD template and completed CPA-DD) in UNFCCC for global stakeholder consultation;
- II. A desk review of the PoA-DD, CPA-DD template and the associated real case CPA-DD;
- III. On-site visit and follow-up interviews with programme stakeholders; and
- IV. The resolution of outstanding issues and the issuance of the final validation report and opinion.

The following sections outline each step in more detail.

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## 2.1 Document Review

The following table lists the documentation that was reviewed during the validation.

Reference No.	Documents
/01/	POA-DD (webhosted version), for "Small-scale solar electrical programme in South Africa", Version 2.0, Date - 15/12/2011
/02/	CPA-DD template (webhosted version)
/03/	POA-DD for "Small-scale solar electrical programme in South Africa", Version 08, Date – 12/11/2012
/04/	Final CPA-DD template
/05/	<ol style="list-style-type: none"> <li>1. Letter of Approval from the DNA of Republic of South Africa (dated 08/05/2012), authorizing Blue World Carbon Capital PCC as the project proponent and the coordinating and managing entity (CME) to participate in the CDM project.</li> <li>2. E-mail from DNA of Republic of South Africa (dated 18/09/2012) confirming the validity of LoA.</li> </ol>
/06/	Modalities of communication dated, 11/10/2012
/07/	The Management System for the South African Small-Scale Solar Electrical Programme Version 02 (dated 18/10/2012).
/08/	<p>Declaration from the CME (dated 07/08/2012) on:</p> <ol style="list-style-type: none"> <li>1. PoA is a voluntary action by CME and is not mandated by any law or regulations of republic of South Africa.</li> <li>2. CPA implementers/operators are aware and agree for participation in PoA voluntarily.</li> <li>3. No ODA involved/diverted as a result of the PoA.</li> </ol>
/09/	Power of Attorney from BWCC PCC authorizing Blue world Carbon Asset Management (Pty) Ltd., authorizing them to act on their behalf for the CDM registration, dated 05/07/2011.
/10/	Letter from BWCC PCC for withdrawal of " <a href="#">Microscale solar electrical programme, South Africa</a> " dated 25/10/2012
/11/	PoA database (version 01) dated 24/10/2012
/12/	Certification of Incorporation of Blue World Carbon Capital PCC (Registered Number 108374), under "Companies (Jersey) Law 1991" dated 16/06/2011
/13/	Certification of Incorporation of Blue World Carbon Asset Management (Pty) Ltd. (Registration No.: 2009/002466/07, dated 09/02/2009; Certificate issued by Registrar of Companies & close corporations.
/14/	<p>Department of Environmental Affairs; National Environmental Management Act, 1998 (Act No. 107 OF 1998)</p> <ol style="list-style-type: none"> <li>1. Environmental Impact Assessment Regulations (No. R. 543), dated 18/06/2010</li> <li>2. Listing Notice 1: List of Activities and Competent Authorities Identified in Terms of Sections 24(2) and 24D (No. R. 544), dated 18/06/2010</li> <li>3. Listing Notice 2: List of Activities and Competent Authorities Identified in Terms of Sections 24(2) and 24D (No. R. 545), dated 18/06/2010</li> </ol>
/15/	Grid Emission Factor (GEF) calculation spread sheet
/16/	The Electricity Regulation Act, 2006 (Act No. 4 of 2006) ( <a href="http://www.energy.gov.za/files/policies/NationalEnergyRegulatorAmendmentBill.pdf">http://www.energy.gov.za/files/policies/NationalEnergyRegulatorAmendmentBill.pdf</a> )
/17/	Integrated resource plan for electricity 2010-2030 ( <a href="http://www.energy.gov.za/IRP/2010/IRP_2010.pdf">http://www.energy.gov.za/IRP/2010/IRP_2010.pdf</a> )
/18/	<p>Relevant proof of LSC:</p> <ol style="list-style-type: none"> <li>1. Stakeholder meeting invitation letter/Advertisement</li> <li>2. Stakeholder attendance list</li> <li>3. Stakeholder minute of meeting/list of stakeholders who raise question</li> </ol>
/19/	Contract between the CME and DOE for the validation.
/20/	Emission Reduction Purchase Agreement between BWCC (CME) and Elaticol (Pty) Ltd. (seller of solar electrical systems), dated 17/10/2011

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Background documents/websites:

/B01/	CDM Validation and Verification Manual, version 01.2, EB 55 (Annex 1)
/B02/	<ol style="list-style-type: none"> <li>1. AMS-I.D. Grid connected renewable electricity generation (version 17)</li> <li>2. AMS-I.F. Renewable electricity generation for captive use and mini-grid (version 02).</li> </ol>
/B03/	Tool to calculate the emission factor for an electricity system, version 02.2.1, EB 63 (Annex 19)
/B04/	<p>PoA Specific guidelines / standards published by UNFCCC:</p> <ol style="list-style-type: none"> <li>1. CDM programme of activities design document form (CDM-PoA-DD) Version 01, EB 33</li> <li>2. CDM programme activity design document form (CDM-CPA-DD) Version 01, EB 33</li> <li>3. Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission Reductions for a programme of activities, Version 04.1, EB 55 (Annex 38)</li> <li>4. Procedures for review of erroneous inclusion of a CPA, version 03, EB 61 (Annex 22)</li> <li>5. Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 01, EB 65 (Annex 03)</li> <li>6. Clarifications regarding the “Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities”, version 01, EB 60 (Annex 26)</li> <li>7. Standard for sampling and surveys for CDM project activities and programme of activities, version 02.0, EB 65 (Annex 2)</li> <li>8. Best practices examples focusing on sample size and reliability calculations version 01.0, EB 67 (Annex 6)</li> <li>9. Standard for sampling and surveys for CDM PAs and PoAs, version 03.0, EB 69 (Annex 4)</li> <li>10. Guidelines for sampling and surveys for CDM project activities and programme of activities, version 02.0 EB 69 (Annex 5)</li> <li>11. Guidelines on assessment of de-bundling for SSC project activities, Version 03, EB 54 (Annex 13)</li> <li>12. Guidelines for the consideration of interactive effects for the application of multiple CDM methodologies for a programme of activities, version 01.0, EB 68 (Annex 3)</li> <li>13. Guidelines on the demonstration of additionality of small-scale project activities, version 09.0, EB 68 (Annex 27)</li> </ol>
/B05/	General Guidelines for SSC CDM methodologies, version 19.0, EB 69 (Annex 27)
/B06/	Glossary of CDM terms, version 06, EB 66 (Annex 6)
/B07/	<p>Websites:</p> <ol style="list-style-type: none"> <li>1. <a href="http://www.unfccc.int">www.unfccc.int</a></li> <li>2. <a href="http://www.blueworldcarbon.com/">http://www.blueworldcarbon.com/</a></li> <li>3. <a href="http://www.cdmpipeline.org/">http://www.cdmpipeline.org/</a></li> <li>4. <a href="http://www.unepiso.org/default.aspx">http://www.unepiso.org/default.aspx</a></li> <li>5. <a href="http://en.wikipedia.org/wiki/Geography_of_South_Africa">http://en.wikipedia.org/wiki/Geography_of_South_Africa</a></li> </ol>
/B08/	<p>Website used for the validation of Grid Emission Factor:</p> <ol style="list-style-type: none"> <li>1. <a href="http://www.eskom.co.za/live/click.php?u=%2Fcontent%2FCEF_CalculatorFINAL2010-2011%7E2.xls&amp;o=Item%2B236&amp;v=62a438">http://www.eskom.co.za/live/click.php?u=%2Fcontent%2FCEF_CalculatorFINAL2010-2011%7E2.xls&amp;o=Item%2B236&amp;v=62a438</a></li> <li>2. <a href="http://financialresults.co.za/2011/eskom_ar2011/profile_key_facts02.php">http://financialresults.co.za/2011/eskom_ar2011/profile_key_facts02.php</a></li> <li>3. <a href="http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf">http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf</a> {table 1.2 and 1.4 (other kerosene and other bituminous)}</li> <li>4. <a href="http://www.eskom.co.za/live/click.php?u=%2Fcontent%2FFuelConsumptionElctricityGen.xls&amp;o=Item%2B236&amp;v=977d99">http://www.eskom.co.za/live/click.php?u=%2Fcontent%2FFuelConsumptionElctricityGen.xls&amp;o=Item%2B236&amp;v=977d99</a></li> <li>5. <a href="http://financialresults.co.za/2010/eskom_ar2010/downloads/eskom_ar2010.pdf">http://financialresults.co.za/2010/eskom_ar2010/downloads/eskom_ar2010.pdf</a></li> <li>6. <a href="http://financialresults.co.za/2011/eskom_ar2011/downloads/eskom-ar2011.pdf">http://financialresults.co.za/2011/eskom_ar2011/downloads/eskom-ar2011.pdf</a> (page 324)</li> </ol>

The changes between the PoA-DD version 2.0 published for the 30 days stakeholder commenting period /01/ and the final version submitted for registration /03/ are addressed in the table 3 and 4 of the validation protocol as a part of this report.



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The main changes between the PoA-DD, version 2.0 /01/ published for the 30 days stakeholder commenting period and the final version /03/ submitted for registration are presented in the below table as follows:

Topic	PoA-DD – GSC/01/	Final PoA-DD/03/	Assessment
PoA title	“Small-scale solar electrical programme, South Africa”	“Small-scale solar electrical programme, South Africa”	No Change
Parties	Republic of South Africa (Host)	Republic of South Africa (Host)	No Change
Scope	1: Energy Industries (renewable / non-renewable sources)	1: Energy Industries (renewable / non-renewable sources)	No change
Methodology / Activity	AMS-I.D. (version 17) AMS-I.F. (version 02). / Small-scale	AMS-I.D. (version 17) AMS-I.F. (version 02). / Small-scale	No change
Amount of emission reductions (tCO <sub>2</sub> )	Quantification of ERs at PoA level is not required as per the PoA DD template.	Quantification of ERs at PoA level is not required as per the PoA DD template.	No change
PoA starting date	23/09/2011 (the date of publishing of the PoA for global stakeholder consultation)	01/01/2013	Starting date has been changed to 01/01/2013 (please refer to closure of CL 10 in table 2 of protocol).
Real case CPA starting date	23/09/2011 (the date of publishing of the PoA for global stakeholder consultation)	01/08/2012 (date of signing of solar PV system purchase order).	Starting date has been changed to 01/08/2012 (please refer to closure of CAR 4 in table 2 of protocol for real case CPA).
PoA Location	Republic of South Africa	Republic of South Africa	No change

## 2.2 Follow-up actions

In order to reach to a Validation Opinion a site visit along with an interview was planned for 05/03/2012. Prior to the interview salient points to be discussed were planned. Date of interview, interviewee and points discussed are given in the following table.

Sr. No.	Date	Name and Role	Organization	Topic
/a/	05/03/2012	Joost Van Lier, CME	Blue World Carbon Capital PCC	<ul style="list-style-type: none"> <li>• CME coordinating CDM functions and responsibilities.</li> <li>• Discussion on eligibility criteria and inclusion of a typical CPAs in the PoA including the real case CPA.</li> <li>• Discussion on Additionality justification on PoA level and on typical CPA level including the real case CPA.</li> <li>• Discussion on record keeping, monitoring plan</li> </ul>

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				<p>and manual.</p> <ul style="list-style-type: none"> <li>• Discussion on double counting</li> <li>• Discussion on financing pattern (means of finance) of the CPAs(including real case) and involvement of public funding</li> </ul>
/b/	05/03/2012	Roth Watson, Country Manager	Solar Total	<ul style="list-style-type: none"> <li>• Decision to undertake the project as CDM project.</li> <li>• Discussion on stated goal and policy of the PoA.</li> <li>• Discussion on the operational and management arrangements of the PoA.</li> <li>• Discussion on LSC (both on PoA level and real case CPA) and statutory clearances required for the implementation of the CPA.</li> </ul>
/c/	05/03/2012	Deepak John	Local stakeholder	Discussion on Local stakeholder consultation
/d/	05/03/2012	David Masureik	Local stakeholder	Discussion on Local stakeholder consultation

Validation Team considered the views obtained in these interviews while arriving at Validation Opinion.

## 2.3 Resolution of outstanding issues

The objective of this phase of the validation is to resolve any outstanding issues, which need be clarified prior to Carbon Check's conclusion on the PoA design. In order to ensure transparency a validation protocol is customised for the programme. The protocol shows in transparent manner criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM PoA is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

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

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

- The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- The CDM requirements have not been met;
- There is a risk that emission reductions cannot be monitored or calculated.

A request for clarification (CL) may be raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

A forward action request (FAR) may be raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity.

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Figure 1 Validation protocol tables

Validation Protocol, Table 1 - Requirement checklist					
Checklist Question	Ref.	MoV	Comments	Draft Conclusion	Final Conclusion
The various requirements in Table 1 are linked to checklist questions the project should meet. The checklist is organized in seven different sections.	Makes reference to documents where the answer to the checklist question or item is found.	Explain how conformance with the checklist question is investigated. Examples are document review (DR), interview or any other follow-up actions (I), cross checking (CC) with available information relating to projects, (N/A) means not applicable.	The discussion on how the conclusion is arrived at and the conclusion on the compliance with checklist question so far.	OK is used if the information and evidence provided is adequate to demonstrate compliance with CDM requirements. For CAR, CL and FAR see the definitions above.	OK is used if the information and evidence provided is adequate to demonstrate compliance with CDM requirements.

Validation Protocol, Table 2 - Resolution of Corrective Action Requests and Clarification			
Corrective action requests and/or clarification requests	Reference to Table 2	Response by project participants	Validation Conclusion
The CAR and/or CLs raised in table 2 are repeated here.	Reference to the checklist question number in Table 2 where the CAR or CL is explained.	The responses given by the project participants to address the CARs and/or CLs.	The validation team's assessment and final conclusion of the CARs and/or CLs.

Validation Protocol, Table 3 - Forward Action Requests		
Forward action request	Reference to Table 2	Response by project participants Validation Conclusion
The FAR raised in table 2 is repeated here.	Reference to the checklist question number in Table 2 where the FAR is explained.	Response by the project participants on how forward action request will be addressed prior to first verification.

## 2.4 Internal quality control

Before the assessment begins, members of the team covering the technical area(s), sectoral scope(s) and relevant host country experience for evaluating the CDM PoA/CPA are appointed. The validation report including the validation findings underwent a technical review. A technical reviewer qualified in accordance with Carbon Check's qualification scheme for CDM validation and verification performed the technical review.

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## 2.5 Validation team and the technical reviewer(s)

The validation team and the technical reviewers consist of the following personnel:

Validation Team		Type of Involvement						
Full Name	Appointed for Sectoral scopes (Technical Areas)	Supervision of work	Desk review	Site visit & Interview	Report & writing protocol	Technical Expert Input	Reporting support	Technical Reviewer
Ravi Shankar	1.2,2.1, 2.2, 3.1, 13.1	X		X		X		
Amit Anand	1.2		X		X	X	X	
Vikash Kumar Singh	1.2, 3.1,13.1							X

## 3 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 programme design as documented and described in the PoA-DD /01/ and g-CPA-DD /02/.

### 3.1 Approval and Participation

The below table summarizes the project participant and party involved. The validation team received letter of approval for Host party from the CME of the PoA /05-1/. The DNA of Republic of South Africa through an email dated 18/09/2012 /05-2/ confirmed the validity of the LoA /05-1/. This LoA is therefore regarded as valid and meeting the CDM requirements.

The Validation Team can confirm that issued LoA from host party refers to the precise proposed PoA title as in the PoA-DD /01/ and g-CPA-DD /02/. The Validation Team can confirm that the project participant i.e. the CME is listed in tabular form in section A.3 of the PoA-DD /03/ and this information is consistent with the contact details provided in Annex 1 of the PoA-DD /03/. The letter of approval was also found to be unconditional with respect to paragraph 45 (a) to (d) of VVM, version 01.2 /B01/. And hence these letter(s) are in accordance with paragraphs 45 - 48 of VVM version 01.2. The LoA, was checked and found in compliance of CDM requirements including requirements of PoA vide § 8, 9 and 10 of annex 38, EB 55 /B04-3/.

The below table summarizes the project participants and parties involved:

<b>Project Participant/CME</b>	Blue World Carbon Capital PCC
<b>Party Involved</b>	Republic of South Africa
<b>Approval</b>	
LoA Received	Yes
Date of LoA	08/05/2012
LoA received from	DNA of Republic of South Africa: Department of Energy
Approval Number	N/A
Validation of Authenticity	The LoA was received from the project participant. The DNA of Republic of South Africa via an email dated 18/09/2012 as required in § 48 VVM /B01/, confirmed the validity of the LoA
Validity of LoA	Valid
<b>Participation</b>	
Party is party to the Kyoto Protocol	Yes
Voluntary participation	Yes
Diversion of Official Development Assistance	No

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(ODA) towards host country	
Project contribution to Sustainable Development	Yes

## Validation of ODA

The validation did not reveal any evidence that this PoA can be seen as a diversion of ODA. It is also confirmed by the interview with Mr. Joost Van Lier /a/, and through declaration provided by CME /08/ about no ODA diversion from Annex-I party in the development of the PoA.

## Confirmation of Modalities of Communication (MoC)

The project Modalities of Communication (MoC) /06/ signed on 11/10/2012, was received from the CME. As required in Procedures for Modalities of Communication between Project Participants and the Executive Board, the Validation Team has verified the names of authorised signatories for future communication related to the corresponding scope of authority with UNFCCC from the Host country project participant. The Validation Team can confirm that the signatory and contact details on the MoC are authorized and credible. The MoC has been directly received from the CME.

## 3.2 Programme of Activities Design Document

The PoA-DD /03/ and the CPA-DD template /04/ are in compliance with relevant form /B04-1,2/ and guidance /B04/ as provided by UNFCCC. The most recent version of the forms is used. Validation team confirms that the guidelines for the completion of the PoA documents (as contained in the DD form itself) in their most recent version have been followed. The Managing entity and/or project participants have provided relevant information in the applicable PoA sections.

## 3.3 Programme Description

The “Small-scale solar electrical programme, South Africa” (here in after referred as the “PoA”) is promoted by the Coordinating and Managing Entity (CME) “Blue World Carbon Capital PCC (BWCC).”

Review of PoA-DD /03/ reveals that the objective of this programme is to promote the use of renewable energy by domestic consumers and private companies of the RSA. Activities included into this programme envisage:

- **Option 1:** Installation of solar photovoltaic electrical systems at the site where there was no solar electrical system operating prior to the implementation of the activity; or
- **Option 2:** Capacity addition<sup>1</sup>.

A typical CPA under this PoA is either:

- **CPA Type 1:** A group of the independent activities with size of each individual unit is not larger than 0.15 MW and total installed capacity of the group will be limited up to 15 MW in a pre-determined province of RSA. Activities will be added ex post during the crediting period of the corresponding CPA (actual independent activities may not be known before the registration of the CPA under the PoA); or
- **CPA Type 2:** The identified independent activity or a group of identified independent activities of any capacity which taken together or individually do not exceed 15 MW. The activities will

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<sup>1</sup> A capacity addition envisages an increase in the installed power generation capacity of an existing solar electrical system through: the installation of a new solar electrical system beside the existing solar electrical system; or the installation of new solar electrical system, additional to the existing solar electrical system. The existing solar electrical system continues to operate after the implementation of the activity, furthermore the addition of the new capacity does not significantly affect the electricity generation by the existing solar electrical system and the electricity produced by the added solar electrical system could be directly and separately measured.

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be included in the corresponding CPA ex ante (actual independent activities will be known before the registration of the CPA under the PoA).

Electricity which will be produced by activities under the CPA is supplied either to:

- **Scenario (a):** An identified consumer (end user) or the group of consumers, which would have been supplied with electricity from the national grid of the RSA in the absence of the activity. Furthermore, excess electricity may be supplied to the grid; or
- **Scenario (b):** The national grid of the RSA.

Currently in RSA most electricity generation is based on fossil fuel fired power plants. The state-owned company Eskom manages the energy system of the country. It is in charge of generation, transmission and distribution of power to end-users. The emission reduction would happen by displacing the fossil fuel dominated grid electricity equivalent to the net electricity supplied by the SPV power plant i.e. the CPAs of the PoA to the RSA grid {measure for the CPAs utilising AMS-I.D.} or due to displacement of electricity due to electricity supplied to end users from all independent activities (solar electrical systems installed) under the CPA (used for the captive purpose) which in absence of CPAs of the PoA would have been supplied by electricity from the grid {measure for the CPAs utilising AMS-I.F.}. Each small scale CPA of the programme involves implementation of solar PV project/s with an installed capacity below 15 MW and supplying electricity either to the grid i.e. RSA or to specific user for captive use.

The CPAs of the PoA shall use either small-scale methodology AMS-I.D. (version 17) or AMS-I.F. (version 02) or combination of both the methodologies. The details of specific technology/measure including the type of services by the future CPAs under this PoA in accordance with either of the applied methodology or their combination is summarized below:

	AMS-I.D	AMS-I.F.	AMS-I.D. + AMS-I.F.
<b>Technology</b>	Solar PV	Solar PV	Solar PV
<b>Measures</b>	Due to supply of electricity to the grid.	Due to displacement of electricity, which would have been generated in grid and consumed by the user in absence of Solar PV technology. As per CPA of this PoA excess electricity under this methodology would also be supplied to the grid.	GHG emission reduction due to displacement of grid electricity.
<b>Services</b>	Electricity Generation	Electricity Generation	Electricity Generation

The combination of methodology is allowed as per § 29 (c) of “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities” /B04-05/.

Hence, in opinion of DoE the measure would primarily remain same in case of both the methodologies and usage of the combination of above-mentioned methodologies in the same CPA under the PoA shall not result in any cross-effects.

The CPAs of the PoA shall use small-scale methodology AMS- I.D. (version 17) /B02-1/ or AMS-I.F. (version 02) /B02-2/ or combination of both these methodologies. Neither of the methodologies provides the provision for project emission for Solar PV projects. The applied methodology/ies do not indicate any emission source for solar PV power projects. Moreover there is no project emission associated with usage (import) of grid electricity as the emission reductions are calculated based on net electricity (which is calculated by deducting import from the export) supplied to the grid or the user. As per the PoA-DD, there is no fossil fuel consumption by the CPAs of the PoA and their project site and hence there is no project emission.

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From the OSV and review of PoA-DD, it is confirmed that CPAs of the PoA shall utilize brand new equipment; hence leakage is not applicable as per the applied methodology. Review of PoA-DD /02/ confirms that technology is not transferred from any other site and is also one of the eligibility criteria, hence based on this validation team confirms that no leakage shall be applicable of the CPAs of the PoA.

GHG emissions from the electricity generation for the solar electrical systems amount to zero. The reduction of GHG emissions as a result of the implementation of the independent activities will be achieved due to reduction of CO<sub>2</sub> emissions from combustion of fossil fuel at the existing grid-connected power plants and plants which would likely be built in the absence of the independent activities. The CDM programme activities (CPAs) under the PoA will be implemented within the geographical boundary of Republic of South Africa. Thus, the PoA aims to support RSA's efforts to move to a low carbon future, considering the contribution to sustainable development through environmental, social and economic benefits.

During site visit interview with CME is was revealed that the PoA would be implemented in the following two different manners:

- **Case (a):** Companies, which sell the solar electrical systems and BWCC, shall sign the Emissions Reduction Purchase Agreement (ERPA). BWCC will purchase rights to claim CERs generated as a result of the implementation of independent activities from sellers under the PoA
- **Case (b):** Owners of independent activities retain rights to dispose issued CERs; therefore they may sign ERPA with a buyer other than BWCC. BWCC and the owner of the independent activity shall sign a service agreement, which appoints BWCC to act as a carbon consultant and facilitates the inclusion of their CPA in the PoA.

The Operating and implementing framework of the PoA has been clearly described and illustrated with the help of flowchart in section A.2 of the PoA-DD /03/, checked and found appropriate to the validation team.

According to the description provided under PoA-DD /03/ and based on interview with the CME, a signed declaration by CME /08/ and relevant stakeholders, validation team confirms that this PoA is a voluntary co-ordinated action by the CME. The same is also substantiated through the letter of approval (dated 08/05/2012) issued by the DNA of the host country /05-1/.

As per the PoA-DD /03/ and on-site interviews it was confirmed that there are no existing laws or policy in Republic of South Africa that mandates or promotes the use of renewable sources (and solar power which is the case for the subject PoA) of electricity generation.

From the site visit interviews /a/ and desk review of PoA-DD /03/ it is revealed that this programme does not involve any ODA funding. Thus, the validation team considers that no ODA funding from any Annex 1 country has been involved under this programme. This is further confirmed by the undertaking provided by the CME /08/.

The starting date of the PoA in the PoA-DD /03/ is 01/01/2013. The length of the PoA is taken as 28 years. The starting date of the validation of the PoA is 23/12/2011 i.e. the date the PoA was published for GSC. In the PoA-DD /03/ and generic CPA-DD /04/, it has been confirmed that no CPA shall be applicable for the inclusion in the PoA if the start date is before the start of validation. This is in conformity with the § 7(d) of annex 38 of EB 55 /B04-3/.

## 3.4 Eligibility Criteria for CPA Inclusion

Review of PoA-DD /03/, CPA-DD template /04/ and on-site interview with representatives of CME reveals that the CME of the PoA employs clear and unambiguous criteria for the inclusion of the CPAs. The eligibility criteria have been stated and validation team confirms the eligibility criteria are in line with requirement of § 14, annex 3 of EB 65 /B04-5/. Additionality and applicability of the applied methodology are the eligibility criteria as per the PoA DD /03/, which is deemed appropriate and

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acceptable to the validation team. The eligibility criteria can be checked at the CPA level by the CME and shall be confirmed by the DOE before inclusion of the CPAs in the PoA.

Sl. No.	Eligibility criteria description in PoA-DD/03/ and g-CPA-DD	Information/document required as listed in the PoA-DD/03/ and g-CPA-DD	Assessment by the validation team
1.	The CPA (type 1 and type 2) shall be located within the geographical boundaries of the RSA.	<p><b>For CPA Type 1:</b> the signed form from the owner of activity to be included into the CPA providing the following information: Name, address, GPS coordinates (Management system, Table 6) and Power Purchase Agreement (if applicable)</p> <p><b>For CPA Type 2:</b> the signed form from the owner of activity to be included into the CPA providing the following information: Name, address, GPS coordinates (Management system, Table 6) and Environmental Authorisation (EA) from the relevant Competent Authority (CA) of the RSA<sup>2</sup> (if applicable) and Power Purchase Agreement (if applicable)</p>	At the time of inclusion request of any proposed CPA, CME shall submit the mentioned documents to the DOE who will be performing validation for the consistency and integrity check.
2.	<p><b>For CPA Type 1:</b> the seller of solar electrical system for each activity shall provide the signed Table 6 of the Management System of the PoA and agreement with the owner of activity where he shall contractually agree and sign the following before inclusion into the CPA:</p> <ul style="list-style-type: none"> <li>a) The activity has neither been and will not be registered as a CDM project activity nor as a CPA under another PoA; and</li> <li>b) The owner is aware that the activity will be subscribed to the present PoA.</li> </ul> <p><b>For CPA Type 2:</b> the owner of each activity shall provide the signed Table 6 of the Management System of the PoA and agreement with CME where he shall contractually agree and sign the following</p>	<p><b>For CPA Type 1:</b> the signed form from the owner of activity to be included into the CPA as per Table 6 of the Management system and agreement with the seller.</p> <p><b>For CPA Type 2:</b> the signed form from the owner of activity to be included into the CPA as per Table 6 of the Management system and agreement with the CME and declaration from BWC.</p>	<p>At the time of inclusion request of any proposed CPA, CME shall submit the mentioned documents to the DOE who will be performing validation for the consistency and integrity check.</p> <p>The valid signed forms (Table 6); agreements and declarations will ensure voluntary participation in PoA and avoid double counting.</p>

<sup>2</sup> The Department of Environmental Affairs



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	<p>before inclusion into the CPA:</p> <p>a) The activity has neither been and will not be registered as a CDM project activity nor as a CPA under another PoA; and</p> <p>b) The owner is aware that the activity will be subscribed to the present PoA.</p> <p>Moreover for CPA Type 2, BWC shall check the UNFCCC CDM project database to verify that each activity to be included in the proposed CPA, has not been previously submitted to the UNFCCC, before inclusion into the CPA, as well as provide a declaration for the same.</p>		
3.	<p><b>Technology:</b> Each activity to be included into the CPA (type 1 and type 2) shall only use solar PV systems.</p> <p>For CPA type 1: the installed capacity of each activity shall be equal or less than 0.15 MW.</p> <p>For CPA type 2: the installed capacity of the CPA shall be equal or less than 15 MW.</p> <p><b>Services:</b> For both CPA (type1 and type 2): Electricity generation.</p> <p><b>Measure for AMS-I.D. or AMS-I.F. or combination of both:</b> GHG emission reduction due to displacement of grid electricity.</p> <p>Each activity under the CPA (type 1 and type 2) shall be connected to either:</p> <p>(i) An identified consumer (end user) or group of</p>	<p><b>Technology:</b> For both CPA types: Technical specification from the seller of the electrical system/ technology supplier.</p> <p><b>Services:</b> for grid-connected systems (both CPA types): PPA with the relevant authority as per the host country;</p> <p><b>For captive users:</b> signed Table 6 of the Management system of the PoA from the owner of the activity.</p> <p><b>For identified consumer:</b> signed Table 6 of the Management system of the PoA/contract (between seller and end user) from the owner of the activity.</p> <p><b>For identified consumer using AMS-I.F.:</b> Electricity bill or proof of pre-paid electricity from the owner.</p> <p><b>Measure:</b></p> <p><b>For AMS-I.D.:</b> GHG emission reduction due to the supply of electricity to the grid.</p> <p><b>For AMS-I.F.:</b> GHG emission reduction due to the displacement of electricity which would have been generated in the grid and consumed by the user in absence of the Solar PV technology, as per a CPA of this PoA; excess electricity under this methodology would also be supplied to the grid.</p> <p>Hence, the measure would primarily remain the same in case of both the</p>	<p>At the time of inclusion request of any proposed CPA, CME shall submit the mentioned documents to the DOE who will be performing validation for the consistency and integrity check.</p> <p>This is required to assess the methodology applicable to the CPAs.</p> <p>Hence this eligibility criterion will ensure accurate quantification of emission reduction from the CPAs.</p>

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	<p>consumers, which would have been supplied with electricity from the national grid<sup>3</sup> of the RSA in the absence of the activity (where excess electricity may be supplied to the grid) or;</p> <p>(ii) to the national grid of the RSA</p> <p>Furthermore the owner of each activity under the CPA connected to (i) and using methodology AMS-I.F. shall be connected to the grid before the activity implementation.</p>	<p>methodologies and usage of the combination of the above-mentioned methodologies in the same CPA under this PoA shall not result in any cross-effects. This combination is also allowed as explained in section E.2 of this PoA.</p>	
4.	<p>The start date of the activity under CPA (type 1 and type 2) shall be after the date of start of global stakeholder process for the PoA (23/12/2011).</p>	<p><b>For both CPA types:</b> Signed equipment purchase contract with a seller of the solar electrical system or technology provider</p>	<p>At the time of inclusion request of any proposed CPA, CME shall submit any of the mentioned documents to the DOE who will be performing validation for the consistency and integrity check. This eligibility criteria will ensure CPA start date of should not be before start date of validation as required by §7(d) of annex 38, EB 55.</p>
5.	<p>Both CPA type 1 and type 2 shall meet the applicability conditions and other requirements either AMS-I.D. (version 17) or AMS-I.F. (version 02) or combination of both methodologies.</p>	<p><b>For both CPA types:</b> Technical specification from the seller of the electrical system/technology supplier and PPA with the relevant authority as per the host country (if applicable) and signed Table 6 of the Management system of the PoA from the owner of the activity.</p> <p><b>For identified consumer:</b> signed Table 6 of the Management system of the PoA/contract (between seller and end user) from the owner of the activity.</p> <p><b>For identified consumer using AMS-I.F.:</b> Electricity bill or proof of pre-paid electricity from the owner.</p>	<p>At the time of inclusion request of any proposed CPA, CME shall submit any of the mentioned documents to the DOE who will be performing validation for the consistency and integrity check. This eligibility criterion will ensure applicability of the applied methodology at the time of CPA inclusion.</p>
6.	<p>Both CPA types shall demonstrate additionality as per Annex 27 of EB 68</p>	<p><b>Technology/measure:</b> For both CPA types: Technical specification from the seller of the electrical system/ technology supplier.</p>	<p>The DOE at the time of inclusion of the CPA shall confirm that the additionality argument</p>

<sup>3</sup> The national grid of the RSA includes the national transmission, distribution or reticulation lines ('Eskom grid' at the time of drafting of the PoA-DD) and a municipal electricity network that is connected to the national transmission, distribution or reticulation lines.

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	<p>(Version 09.0)</p> <p>Each and every CPA to be included into this PoA has to employ the solar technologies as per eligibility criteria 3. This criterion also states that “Each activity under the CPA (type 1 and type 2) shall be connected to either:</p> <p>i) An identified consumer (end user) or group of consumers, which would have been supplied with electricity from the national grid of the RSA in the absence of the activity (where excess electricity may be supplied to the grid) or;</p> <p>ii) to the national grid of the RSA”</p>	<p><b>Services:</b> for grid-connected systems (both CPA types): PPA with the relevant authority as per the host country;  <b>For captive users:</b> signed Table 6 of the Management system of the PoA from the owner of the activity and Electricity bill or proof of pre-paid electricity from the owner.  <b>For identified consumer:</b> signed Table 6 of the Management system of the PoA/contract (between seller and end user) from the owner of the activity or Electricity bill or proof of pre-paid electricity from the owner.</p> <p>Moreover additionality is proved at PoA Level</p>	<p>put forth in the PoA-DD for the typical CPAs of the PoA is valid and applicable for the subject CPA under consideration.</p>
7.	<p>For CPA (type 1 and type 2) environmental impact assessment shall be carried out in line with NEMA<sup>4</sup> regulation<sup>5</sup></p>	<p><b>For both CPA types:</b> EIA or basic assessment along with environmental authorisation (if applicable).</p>	<p>As per the provisions in PoA-DD environmental analysis will be done at the CPA.          At the time of inclusion request of any proposed CPA, CME shall submit the mentioned document to the DOE who will be performing validation for the consistency and integrity check.</p>
8.	<p>No official Development Aid shall be involved or diverted as a result of activities under the CPA (type 1 and type 2).</p>	<p><b>For CPA type 1:</b> The declaration from the seller of the solar electrical system.  <b>For CPA type 2:</b> The declaration from the owner of the activity</p>	<p>At the time of inclusion request of any proposed CPA, CME shall submit the mentioned document to the DOE who will be performing validation for the consistency and integrity check. This eligibility criterion will ensure non-diversion of ODA during inclusion validation.</p>
9.	<p>For Both CPA types Where applicable, target group (e.g. domestic/</p>	<p>This requirement has particularly been reflected in eligibility criterion</p>	<p>As this requirement is addressed through evidences provided</p>

<sup>4</sup> NEMA: National Environmental Management Act. Also see section C.3.

<sup>5</sup> Related to the capacity, size or other characteristics of the plant

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	commercial/industrial, rural /urban, grid-connected/ off-grid) and distribution mechanisms (e.g. direct installation) shall be identified in accordance with applied methodology or methodologies i.e., either AMS-I.D. (version 17) or AMS-I.F. (version 02) or combination of both methodologies.	(3).	against eligibility criterion (3) above in the table.  At the time of inclusion request of any proposed CPA, CME shall submit the mentioned documents to the DOE who will be performing validation for the consistency and integrity check.
10.	For CPA (type 1 and type 2) sampling requirements shall be assessed and carried out in line with requirements of Annex 4 & 5 of EB 69.	This PoA and CPA do not use the sampling method for monitoring and verification.	Not applicable. Hence no supplementary evidence required during the inclusion validation.
11.	For both CPA types Where applicable, the conditions that ensure that CPA in aggregate meets the small-scale or micro-scale threshold criteria and remains within those thresholds throughout the crediting period of the CPA shall be assessed in accordance with either Annex 26 of EB 68 (version 04.0) for micro-scale threshold or CMP.2, § 28 for small-scale thresholds.	This requirement has already been reflected in the eligibility criterion (3)	As this requirement is addressed through evidences provided against eligibility criterion (3) above in the table.  At the time of inclusion request of any proposed CPA, CME shall submit the mentioned documents to the DOE who will be performing validation for the consistency and integrity check.  This eligibility criterion will ensure applicability of the applied methodology at the time of CPA inclusion.
12.	For CPA (type 1 and type 2) de-bundling checks shall be performed in line with EB 54 Annex 13.	<b>For both CPA types:</b> confirmation in CPA-DD that the SSC-CPA is not a de-bundled component of a large scale CPA or CDM project activity. <b>For CPA type 2:</b> the declaration from the owner of the activity and BWC.	At the time of inclusion request of any proposed CPA, CME shall submit the mentioned documents to the DOE who will be performing validation for the consistency and integrity check. This eligibility criterion will ensure de-bundling check during inclusion validation.
13.	For both CPA types leakage shall be assessed and carried out in accordance with	<b>For both CPA types:</b> Signed equipment purchase contract with a seller of the solar electrical system or technology provider and signed Table 6 of the	At the time of inclusion request of any proposed CPA, CME shall submit the

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	applied methodology or methodologies i.e., either AMS-I.D. (version 17) or AMS-I.F. (version 02) or combination of both methodologies, as shown in Table E.2-1 and E.2-2 in the PoA-DD.	Management system of the PoA from the owner of the activity.	mentioned documents to the DOE who will be performing validation for the consistency and integrity check. This eligibility criterion will ensure no leakage emissions from the project activity during inclusion validation.
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Validation team has checked the Management System /07/ of CME and based on these documents and on-site interview with personnel involved at the CME end, the validation team confirms that the CME has competencies to check the features of potential CPAs of PoA and also have competency to check that each CPA meets all requirements and eligibility criteria before submission to the DOE for the inclusion. Based on above validation team confirms the compliance of § 14 -15 of annex 3 of EB 65 /B04-5/.

## 3.5 Operation and Management Plan

Validation team based on the review of PoA-DD /03/ and CME Management System /07/ confirms that clear and transparent description of the operational and management arrangement has been established by the CME for the PoA. The same has also been confirmed during the on-site interview with representative of CME /a/. All the details of individual CPAs including the documents shall be controlled at CME end. Furthermore the records of individual CPAs shall be maintained by the CME at their office in electronic (excel sheet) format /11/.

Individual CPA implementer shall sign agreements included in management system /07/ with the CME and agrees to comply with all terms and conditions of the PoA including those related to the monitoring and data control. The same has been confirmed from the review of agreement between the CPA implementers and the CME /20/. This agreement is also one of the eligibility criteria. Hence any CPA, which would be included in the PoA, shall follow the operation and management plan of the PoA as stated in the PoA-DD, signed agreement /20/ and as specified in the management system /07/.

The system to avoid double counting and technical review of the potential CPAs of the PoA has been clearly indicated in the CME Management System /07/ specifically developed for the PoA. By reviewing this the validation team confirms that the CME have the competencies to check the features of potential CPAs and can ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA. Based on above, the validation team confirms the compliance of following, in the management system of CME (in line with the requirement of §17 annex 3 of EB 65 /B04-5/):

- 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;

This CME Management System/07/ shall in due course as a part of continual improvement address any other relevant elements if required. This shall be checked again by the DOEs at the time of inclusion of any CPAs in the PoA in line with the requirement of §17 of annex 3 of EB 65 /B04-5/.

Based on above it can be confirmed that the CME would able to ensure that no double counting occurs. Also, since as each CPA is uniquely identified in the format of Small-scale solar electrical programme, South Africa – CPA-‘###’, the CME can check whether a CPA under the PoA is already a registered CDM project or CPA in another PoA from the UNFCCC website. In this regard CME at the time of inclusion will provide the following documents:

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- **For CPA Type 1:** the signed form from the owner of activity to be included into the CPA as per Table 6 of the Management system /07/ and agreement with the seller /07/.
- **For CPA Type 2:** the signed form from the owner of activity to be included into the CPA as per Table 6 of the Management system /07/ and agreement with the CME /07/ and declaration from BWC /07/.

## 3.6 Monitoring Plan

There is no sampling approach for the verification of the CPAs of the PoA. As per PoA-DD /03/, CME of the PoA opts for verification of the each CPA. Furthermore for the monitoring parameters to be opted by CPAs of the PoA, 100% data shall be monitored and no parameters shall be monitored on sampling approach. The same has been verified from the PoA-DD /03/.

The monitoring plan provides a transparent system to ensure that no double accounting occurs and that the status of verification can be determined any time for each CPA. The system to avoid double counting has been indicated in the PoA-DD /03/. This would be done by BWC through review of information provided by seller of solar electrical systems (CPA implementer). Also, as each CPA will have a unique title and the solar electrical systems will have unique serial number thus double counting can be avoided.

The description provided in the PoA-DD on the operational and management arrangements were confirmed based on review of CME Management System/07/ and on-site interviews /a/b/.

## 3.7 Baseline and monitoring methodology

### 3.7.1 Applicability of selected methodology

The compliance of the applied baseline and monitoring methodology /B02-1/ and /B02-2/ is a part of eligibility criteria as mentioned in the PoA-DD /03/ and g-CPA-DD /04/. The DOE shall check the same during inclusion of the CPA in the PoA. The assessment of the validation team (for the requirement to be checked during inclusion) is summarised below:

#### Applicability of AMS-I.D. (version 17)

Criteria of Methodology	Justification in PoA-DD/03/ and g-CPA-DD	Assessment by the validation team
1. This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass: a) Supplying electricity to a national or a regional grid; or b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.	<b>Applicable.</b>  Each CPA comprises renewable electricity generation, by means of solar electrical systems, which will supply electricity to the national electricity grid of RSA.	It shall be checked during inclusion of the CPA that specific CPA comprises renewable electricity generation, by means of solar electrical systems and supplies electricity to a national or regional grid.
2. Illustration of respective situations under which each of the methodology (i.e. AMS-I.D, AMS-I.F and AMS-I.A) applies is included in Table 2.	<b>Applicable.</b>  Each activity either under CPA Type 1 or Type 2, which envisages supply of power to	It shall be checked during inclusion of each CPA that CPA supplies electricity to a national or regional grid.

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	the national grid, is applicable under methodology AMS-I.D. since it supplies electricity to the national grid.	
3. This methodology is applicable for project 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); (b) Involve a capacity addition, (c) Involve a retrofit of (an) existing plant(s); or (d) Involve a replacement of (an) existing plant(s).	<b>Applicable.</b>  Each independent activity under the PoA envisages either: (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; or (b) Involve a capacity addition.	It shall be checked during inclusion of the CPA that CPA either involves:  (a) Installation of a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity; or (b) Involve a capacity addition..
4. Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:  <ul style="list-style-type: none"> <li>• The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</li> <li>• The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>;</li> <li>• The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>.</li> </ul>	<b>Not applicable.</b>  Any CPA under this PoA does not involve installation of a hydro power plant, so it does not need to satisfy this applicability condition	Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.
5. If the unit added has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the unit added co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.	<b>Not applicable.</b>  Any CPA does not have non-renewable components, so it does not need to satisfy this applicability condition.	Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.
6. Combined heat and power (co-generation) systems are not eligible under this category.	<b>Not applicable.</b>  Any CPA under the PoA does not involve installation of co-generation systems.	Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.
7. In the case of project activities that involve the	<b>Applicable.</b>	It shall be checked during inclusion of the CPA that in case

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<p>capacity addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</p>	<p>In case the independent activity involves the capacity addition, the added capacity will be lower than 15 MW and be physically distinct from the existing units.</p>	<p>the specific CPA involves capacity addition the total capacity shall be lower than 15 MW and the units shall be physically distinct units.</p>
<p>8. In the case of retrofit or replacement, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</p>	<p><b>Not applicable.</b>  Any CPA under the PoA does not involve retrofit or replacement of an existing power generation facility.</p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>
<p><b>Specific Conditions for use of this methodology in a project activity under a programme of activities:</b></p>		
<p>In the specific case of biomass project activities the applicability of the methodology is limited to either project activities that use biomass residues only or biomass from dedicated plantations complying with the applicability conditions of AM0042.</p>	<p><b>Not applicable.</b>  Any CPA under this PoA does not involve installation of biomass project activities.</p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>
<p>In the specific case of biomass project activities the applicability of the methodology is limited to either project activities that use biomass residues only or biomass from dedicated plantations complying with the applicability conditions of AM0042.</p>	<p><b>Not applicable.</b>  Any CPA under this PoA does not involve installation of biomass project activities.</p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>
<p>In case the project activity involves the replacement of equipment, and the leakage from the use of the replaced equipment in another activity is neglected because the replaced equipment is scrapped, an independent monitoring of scrapping of replaced equipment needs to be implemented. The monitoring should include a check if the number of project activity equipment distributed by the project and the number of scrapped equipment correspond with each other. For this purpose scrapped equipment should be stored until such correspondence has been checked. The scrapping of replaced equipment should be documented and independently verified.</p>	<p><b>Not Applicable.</b>  Any CPA under the PoA does not involve replacement or scrapping of any equipment.</p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>



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## Applicability of AMS-I.F. (version 02)

Criteria of Methodology	Justification in PoA-DD/03/ and g-CPA-DD	Assessment by the validation team
<p>1. This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass that supply electricity to user(s). The project activity will displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit i.e. in the absence of the project activity, the users would have been supplied electricity from one or more sources listed below:</p> <ul style="list-style-type: none"> <li>a) A national or a regional grid (grid hereafter);</li> <li>b) Fossil fuel fired captive power plant;</li> <li>c) A carbon intensive mini-grid.</li> </ul>	<p><b>Applicable.</b></p> <p>Each CPA comprises renewable electricity generation, by means of solar electrical systems. Furthermore the CPA will displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit i.e. in the absence of the project activity, the users would have been supplied electricity from national grid of the RSA.</p>	<p>It shall be checked during inclusion of the CPA that specific CPA comprises renewable electricity generation, by means of solar electrical systems and displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit i.e. in the absence of the project activity, the users would have been supplied electricity from national grid of the RSA.</p>
<p>2. For the purpose of this methodology, a mini-grid is defined as small-scale power system with a total capacity not exceeding 15 MW (i.e. the sum of installed capacities of all generators connected to the mini-grid is equal to or less than 15 MW), which is not connected to a national or a regional grid.</p>	<p><b>Not applicable.</b></p> <p>Any CPA under this PoA will not supply electricity to users, which would have been supplied electricity from a carbon intensive mini-grid.</p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>
<p>3. Illustration of respective situations under which each of the methodology (i.e. AMS-I.D, AMS-I.F and AMS-I.A) applies is included in Table 2.</p>	<p><b>Applicable.</b></p> <p>The CPA will displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit i.e. in the absence of the project activity, the users would have been supplied electricity from national grid of the RSA.</p>	<p>It shall be checked during inclusion of the CPA that specific CPA displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit i.e. in the absence of the project activity, the users would have been supplied electricity from national grid of the RSA.</p>
<p>4. Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</p> <ul style="list-style-type: none"> <li>• The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</li> <li>• The project activity is implemented in an existing reservoir, where the volume</li> </ul>	<p><b>Not applicable.</b></p> <p>Any CPA under this PoA does not involve the installation of a hydro power plant, so it does not need to satisfy this applicability condition</p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>

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<p>of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>;</p> <ul style="list-style-type: none"> <li>The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>.</li> </ul>		
<p>5. For biomass power plants, no other biomass other than renewable biomass is to be used in the project plant.</p>	<p><b>Not applicable.</b></p> <p>Any CPA under this PoA does not involve the installation of a biomass power plant.</p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>
<p>6. This methodology is applicable for project 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); (b) Involve a capacity addition, (c) Involve a retrofit of (an) existing plant(s); or (d) Involve a replacement of (an) existing plant(s).</p>	<p><b>Applicable.</b></p> <p>Each independent activity under the PoA envisages either: (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; or (b) Involve a capacity addition.</p>	<p>It shall be checked during inclusion of the CPA that CPA either involves:</p> <p>(a) Installation of a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity; or (b) Involve a capacity addition.</p>
<p>7. In the case of project activities that involve the capacity addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.</p>	<p><b>Applicable.</b></p> <p>In case the independent activity involves the capacity addition, the added capacity will be lower than 15 MW and be physically distinct from the existing units.</p>	<p>It shall be checked during inclusion of the CPA that in case the specific CPA involves capacity addition the total capacity shall be lower than 15 MW and the units shall be physically distinct units.</p>
<p>8. In the case of retrofit or replacement, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</p>	<p><b>Not applicable.</b></p> <p>Any CPA under the PoA does not involve retrofit or replacement of an existing power generation facility.</p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>
<p>9. If the unit added has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the unit added co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.</p>	<p><b>Not applicable.</b></p> <p>Any CPA does not have non-renewable components, so it does not need to satisfy this applicability condition.</p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>
<p>10. Combined heat and power (co-generation) systems are not</p>	<p><b>Not applicable.</b></p>	<p>Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.</p>

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eligible under this category.	Any CPA under the PoA does not involve installation of co-generation systems.	
11. If electricity and/or steam/heat produced by the project activity is delivered to a third party i.e. another facility or facilities within the project boundary, a contract between the supplier and consumer(s) of the energy will have to be entered that ensures that there is no double counting of emission reductions.	<b>Applicable.</b>  In case electricity produced by the independent activity under the CPA is delivered to a third party a contract between the supplier and consumer(s) of the energy will be signed.	It shall be checked during inclusion of the CPA that in case the specific CPA delivers electricity and/or steam/heat produced by the project activity to a third party a contract between the supplier and consumer(s) of the energy will be signed.
<b>Conditions apply for use of this methodology in a project activity under a programme of activities:</b>		
In the specific case of biomass project activities the applicability of the methodology is limited to either project activities that use biomass residues only or biomass from dedicated plantations complying with the applicability conditions of AM0042.	<b>Not applicable.</b>  Any CPA under this PoA does not involve installation of biomass project activities.	Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.
In the specific case of biomass project activities the applicability of the methodology is limited to either project activities that use biomass residues only or biomass from dedicated plantations complying with the applicability conditions of AM0042.	<b>Not applicable.</b>  Any CPA under this PoA does not involve installation of biomass project activities.	Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.
In case the project activity involves the replacement of equipment, and the leakage from the use of the replaced equipment in another activity is neglected because the replaced equipment is scrapped, an independent monitoring of scrapping of replaced equipment needs to be implemented. The monitoring should include a check if the number of project activity equipment distributed by the project and the number of scrapped equipment correspond with each other. For this purpose scrapped equipment should be stored until such correspondence has been checked. The scrapping of replaced equipment should be documented and independently verified.	<b>Not Applicable.</b>  Any CPA under the PoA does not involve replacement or scrapping of any equipment.	Not applicable as per the PoA-DD /03/ and g-CPA-DD /04/.

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## 3.7.2 PoA and CPA boundary

The geographic boundary of the PoA is confined to within RSA, checked and confirmed by reviewing the PoA-DD /03/.

The boundary of the potential/future CPAs of the PoA has been assessed by considering information gathered from the site visit, interviews.

Validation team confirms that the identified boundary, the selected sources, and gases as documented in the PoA-DD /03/ are justified for the CPA; hence all sources and GHGs required by the methodology have been included within the project boundary.

Thus the spatial extent of the CPA boundary includes each independent activity, each end user of electricity as well as all power plants connected physically to RSA's grid. All CPAs boundaries relevant with "The small-scale solar electrical programme in South Africa" will be implemented within the geographical boundary of Republic of South Africa.

There is only one GHGs involved in the project activity i.e., CO<sub>2</sub> (baseline emissions) from power plants connected to the electricity grid of Republic of South Africa.

Validation team confirms that the identified boundary, the selected gases and sources as documented in the PoA-DD /03/ are justified for the future CPAs of the PoA and fully in line with the requirements set by the applied methodologies AMS-I.D. (version17) /B02-1/ and AMS-I.F. (version 02) /B02-2/.

## 3.7.3 Baseline identification

In accordance with the applied methodology AMS-I.D. (version17) /B02-1/ and AMS-I.F. (version 02) /B02-2/, the baseline scenario is listed below.

	AMS-I.D. (version17)	AMS-I.F. (version 02)
<b>Baseline Scenario</b>	a) The electricity delivered to the grid by the CPA would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid (§ 10 of the applied methodology).	a) The baseline scenario is that the electricity delivered to the end users by the CPA would have otherwise been generated by the operation of grid-connected power plants (§ 14 of the applied methodology).
	b) If the CPA is the capacity addition of solar power plant, the baseline scenario is the continuation of the existing plant (§ 15 of the applied methodology).	b) If the CPA is the capacity addition of solar power plant, the baseline scenario is the continuation of the existing plant (§ 17 of the applied methodology).

The continued use of existing fossil fuel based plant or existing renewable plant have been identified as the likely baseline scenario. From above analysis, validation team confirms that the baseline determination is transparent and deemed reasonable.

- All the assumptions and data used by the project participants are listed in the PoA-DD /03/;
- Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CDM project activity.

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## 3.8 Additionality

### 3.8.1 Prior consideration of CDM

As per § 3 of annex 26, EB 60 /B04-6/, “Guidelines for the demonstration and assessment of prior consideration of the CDM” do not apply to PoAs, as at present it is expected that no component of the programme will commence prior to the start date of validation of the PoA i.e., 23/12/2011

### 3.8.2 Additionality of PoA

The description under the PoA DD /03/ demonstrates the compliance of § 6(e) of annex 38 of EB 55 /B04-3/. The stepwise validation of the same is summarized below:

Relevant text of § 6(e) of Annex 38 of EB 55	Assessment of the compliance
<p>The proposed PoA is a voluntary coordinated action;</p>	<p>It has been stated in the PoA-DD/03/ that there is no mandatory legal requirement in RSA to generate electricity by installing solar power plants and also states that the national policy clearly favours fossil fuel based power generation. The same was verified through the following documents:</p> <ul style="list-style-type: none"> <li>• The Electricity Regulation Act, 2006 (Act No. 4 of 2006)/16/</li> <li>• Integrated resource plan for electricity 2010-2030/17/</li> <li>• Declaration from the CME/8/</li> </ul>
<p>If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA;</p>	<p>As assessed above the PoA is implementing a voluntary coordinated action.</p> <p>Additionality has been done at PoA level and criterion has been established to determine additionality at each CPA level. This approach has been verified to be in line with § 4 (a) of Annex 3 of EB 65/B04-5/.</p> <p>As per the section A.4.3 of the PoA-DD /03/, each and every potential CPAs to be included into this PoA shall employ the solar electrical technologies, as per eligibility criteria 3in section A.4.2.2 of PoA-DD /03/ This criterion also states that “<i>Each activity under the CPA (type 1 and type 2) shall be connected to either:</i></p> <ol style="list-style-type: none"> <li>i. <i>An identified consumer (end user) or group of consumers, which would have been supplied with electricity from the national grid of the RSA in the absence of the activity (where excess electricity may be supplied to the grid) or;</i></li> <li>ii. <i>to the national grid of the RSA”</i></li> </ol> <p>Furthermore the identified consumer or group of consumers which will be supplied electricity from the activities under the CPA shall be connected to the grid before the activity implementation in line with the requirements of § 1 of AMS-I.F. (Version 02).</p> <p>Validation team referred to “Attachment A to</p>

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	<p>Appendix B of the simplified modalities and procedures for small scale CDM project activities” (para 2, annex 24, EB 63) and confirms that the CPAs of the PoA shall come under positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.</p> <p>Hence, the claim of the CME, that none of the CPAs under the PoA would occur in absence of CDM is justified. This demonstration is in compliance with § 6 of annex 38 of EB 55.</p>
If the PoA is implementing a mandatory policy/regulation, this would/is not enforced;	Not Applicable for this PoA
If mandatory a policy/regulation is enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation.	Not Applicable for this PoA

The additionality of the PoA has been demonstrated at PoA level and presented in section A.4.3 of the PoA-DD /03/. As the PoA applies the small-scale methodologies, therefore the additionality has been demonstrated using “Guidelines on the demonstration of additionality of small-scale project activities (version 09.0), Annex 27 of EB68” /B04-13/, which is in line with requirements of § 10 of Annex 3 of EB 65 /B04-5/.

### 3.8.3 Approach for demonstrating CPA Additionality

The additionality of the PoA has been demonstrated at PoA level and presented in section A.4.3 of the PoA-DD/03/. As the PoA applies the small-scale methodologies, therefore the additionality has been demonstrated using “Guidelines on the demonstration of additionality of small-scale project activities (version 09.0), Annex 27 of EB68”/B04-13/.

- All the future CPAs to be included under the PoA to:
  - Use solar electrical technologies to produce electricity; and
  - Either be a new installation or a capacity addition
- Total installed capacity of each future CPA will be smaller or equal to 15 MW installed capacity
- Each future CPA under PoA will be connected to either:
  - An identified consumer (end user) or group of consumers, which would have been supplied with electricity from the national grid of the RSA in the absence of the activity (where excess electricity may be supplied to the grid) or;
  - to the national grid of the RSA

Furthermore the identified consumer or group of consumers which will be supplied electricity from the activities under the CPA shall be connected to the grid before the activity implementation in line with the requirements of § 1 of AMS-I.F. (Version 02).

Hence, all the future CPAs up to 15MW that employ grid connected photovoltaic system are additional without further documentation. The CPAs that meet the eligibility criteria for inclusion in the PoA would therefore be deemed additional.

### 3.9 Emission reduction from a typical CPA of the PoA

CCL conducted assessment of baseline emissions, project emissions, leakage, and emission reductions. The parameters and equations presented in the PoA-DD, as well as other applicable documents, have been compared with the information and equipment stipulated in the methodology and respective tools. The assumptions and data used to determine the emission reductions are described in the PoA-DD /03/ and all the sources have been checked and confirmed by validation

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team. Based on the reviewed information, it can be confirmed that the sources used are correctly quoted and interpreted in the PoA-DD /03/. The values in the PoA-DD /03/ are considered to be reasonable based on the documentation and references reviewed, as well as, the result of the interviews. The baseline methodology has been correctly applied according to the requirements.

As per the description provided in section E.6.2 of the PoA-DD /03/, A typical CPA under this PoA is either:

- **CPA Type 1:** A group of the independent activities with size of each individual unit is not larger than 0.15 MW and total installed capacity of the group will be limited up to 15 MW in a predetermined province of RSA. Activities will be added ex post during the crediting period of the corresponding CPA (actual independent activities may not be known before the registration of the CPA under the PoA); or
- **CPA Type 2:** The identified independent activity or a group of identified independent activities of any capacity which taken together or individually do not exceed 15 MW. The activities will be included in the corresponding CPA ex ante (actual independent activities will be known before the registration of the CPA under the PoA).

Electricity which will be produced by activities under the CPA is supplied either to:

- **Scenario (a):** An identified consumer (end user) or the group of consumers, which would have been supplied with electricity from the national grid of the RSA in the absence of the activity. Furthermore, excess electricity may be supplied to the grid; or
- **Scenario (b):** The national grid of the RSA.

## a) Baseline Emissions

As per the methodology AMS-I.D. (version 17) /B02-1/, for both CPA types which will supply electricity to national grid of RSA (scenario (b) described above) baseline emissions are calculated as follows:

$$BE_y = EG_{BL,y} \cdot EF_{CO_2,grid,y} \quad (1)$$

Where:

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

As per the methodology AMS-I.F. (version 02) /B02-2/, for both CPA types which will supply electricity to an identified consumer (end user) or the group of consumers, which would have been supplied with electricity from the national grid of the RSA in the absence of the activity and furthermore, excess electricity may be supplied to the grid (scenario (a) described above) baseline emissions are calculated as follows:

$$BE_y = EG_{BL,y} \cdot EF_{CO_2,y} \quad (2)$$

Where:

- $BE_y$  = Baseline emissions in year  $y$  (tCO<sub>2</sub>)
- $EG_{BL,y}$  = Quantity of net electricity displaced as a result of the implementation of the CDM project activity in year  $y$  (MWh)
- $EF_{CO_2,y}$  = Emission factor (tCO<sub>2</sub>/MWh)

In accordance with the methodology AMS-I.F. (version 02) /B02-2/,  $EF_{CO_2,y}$  (Emission factor of a grid) is calculated as per the procedures provided in AMS-I.D. (version 17) /B02-1/ and same with  $EF_{CO_2,grid,y}$ .

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## Calculation of $EG_{BL,y}$

Each independent activity under the PoA envisages either:

- **Option 1:** Installation of solar photovoltaic electrical systems at the site where there was no solar electrical system operating prior to the implementation of the activity; or
- **Option 2:** Capacity addition<sup>6</sup>.

For combination of **Option 1 and Scenario (b)**  $EG_{BL,y}$  is calculated as follows:

$$EG_{BL,y} = EG_{Solar\ systems,y}^b \quad (3)$$

Where:

$EG_{BL,y}$  = Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year  $y$  (MWh)  
 $EG_{Solar\ systems,y}^b$  = Net quantity of electricity supplied to the national grid of the RSA from all independent activities (solar electrical systems installed) under the CPA in year  $y$  (MWh)

$$EG_{Solar\ systems,y}^b = P_{Solar\ systems,y}^b \cdot LF_{Solar\ systems} \cdot Hours_y \cdot EF_{grid,CM} \quad (4)$$

Where:

$P_{Solar\ systems,y}^b$  = Total capacity of all independent activities which supply electricity to the national grid of the RSA under the CPA in year  $y$  (MW)  
 $LF_{Solar\ systems}$  = Load factor of solar electrical systems,  
 $Hours_y$  = Amount of hours in the year  $y$

For combination of **Option 2 and Scenario (b)**  $EG_{BL,y}$  is calculated as follows:

According to § 15 of AMS-I.D. (version 17) /B02-1/: “*In the case of wind, solar, wave or tidal power plants, it is assumed that the addition of new capacity or retrofitting of existing unit to increase capacity does not significantly affect the electricity generated by existing plant(s) or unit(s). In this case, the electricity produced by the added power plant(s) or unit(s) could be directly metered and used to determine  $EG_{BL,y}$  provided that the electricity produced by the added power plant(s) or unit(s) addition is separately and directly metered*”.

Since the electricity produced by the added solar electrical systems will be separately and directly metered,  $EG_{BL,y}$  for combination of **Option 2 and Scenario (b)** is also calculated using **equation 3** provided above.

For combination of **Option 1 and Scenario (a)**  $EG_{BL,y}$  is calculated as follows:

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<sup>6</sup> A capacity addition envisages an increase in the installed power generation capacity of an existing solar electrical system through: the installation of a new solar electrical system beside the existing solar electrical system; or the installation of new solar electrical system, additional to the existing solar electrical system. The existing solar electrical system continues to operate after the implementation of the activity, furthermore the addition of the new capacity does not significantly affect the electricity generation by the existing solar electrical system and the electricity produced by the added solar electrical system could be directly and separately measured.



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$$EG_{BL,y} = EG_{Solar\ systems,y}^a \quad (5)$$

Where:

- $EG_{BL,y}$  = Quantity of net electricity displaced as a result of the implementation of the CDM project activity in year  $y$  (MWh)
- $EG_{Solar\ systems,y}^a$  = Net quantity of electricity supplied to end users from all independent activities (solar electrical systems installed) under the CPA in year  $y$  (MWh)

$$EG_{Solar\ systems,y}^a = P_{Solar\ systems,y}^a \cdot LF_{Solar\ systems} \cdot Hours_y \cdot EF_{grid,CM} \quad (6)$$

Where:

- $P_{Solar\ systems,y}^a$  = Total capacity of all independent activities which supply electricity to end users under the CPA in year  $y$  (MW)
- $LF_{Solar\ systems}$  = Load factor of solar electrical systems,
- $Hours_y$  = Amount of hours in the year  $y$

For combination of **Option 1 and Scenario (b)**  $EG_{BL,y}$  is calculated as follows:

According to paragraph 17 of AMS-I.F. (version 02) /B02-2/  $EG_{BL,y}$  "shall be calculated following the applicable procedures prescribed in AMS-I.D."

Since the electricity produced by the added solar electrical systems will be separately and directly metered,  $EG_{BL,y}$  for combination of **Option 1 and Scenario (b)** is also calculated using **equation 5** provided above.

## Calculation of Grid Emission Factor ( $EF_{CO_2, grid,y}$ )

CO2 emission factor of the grid ( $EF_{CO_2, grid,y}$ ) was calculated according to Tool to calculate the emission factor for an electricity system, version 02.2.1 /B03/, and by using data obtained from state-owned company Eskom which is the only company in the South Africa in charge of generation, transmission and distribution of power to end-users. The combined margin emission factor (CM) of the electricity system consists of the combination of operating margin (OM) and build margin (BM).

The table below describes how the validation team cross-checked the calculation of emission the factor of the grid ( $EF_{CO_2, grid,y}$ ):

Step	Description	Determination and Assessment	Justified
1	Identify the relevant electricity systems.	The project electricity system includes all power plants attached to the Republic of South Africa national grid. The electricity system in South Africa is a single system, i.e. South African national grid as confirmed by Eskom Integrated report /R08/. The DNA of South Africa has not published the delineation of the project electricity system and connected electricity systems, however the national utility, Eskom, has published it /B08/.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	Choose whether to include off-grid power plants in the project electricity system (optional).	Option I (Only grid power plants are included in the calculation) is selected. Off-grid power plants play a	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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		very minor role in South Africa's power generation.	
3	Select a method to determine the operating margin (OM).	<p>Simple OM (out of the four methods provided in the tool /B03/) is applied for the calculation of the operating margin, since the low-cost/must-run resources constitute less than 50% of total South African grid generation. The average values of the five most recent years shows that coal-fired power plants constitute approximately 92.84% of the South African generation capacity, whereas hydro and nuclear, both classified as low-cost and must-run power plants, constitute almost 7.03% of the national grid. /B08/</p> <p>The validation team confirms that data applied is consistent with the report published by Eskom. Thus the selection of OM calculation method is justified.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4	Calculate the operating margin emission factor ( $EF_{grid,OM,y}$ ) according to the selected method.	<p>In the PoA DD, Option A, is selected to calculate the operating margin emission factor.</p> <p>The validation team confirms that data of quantity of electricity generated, types of fuel used and consumption of each fuel type are the latest 3 years data, most recent data available at the time of submission of the CDM-DDs to the DOE for validation and they are sourced from available data published by the Eskom and IPCC/B08/ which is the default value. PP has considered /03/, the Option A (A for coal-fired power plants/units, as data on fuel consumption and electricity generation for each coal-fired power unit m is available and option B for gas turbine power plants as for gas turbine power plants data on fuel consumption are not available and only data on electricity generation is presented in the public domain for the calculation of simple OM, which is in line with the requirement of tool /B03/. All the data base explained in Section B.6.2 &amp; Annex 3 of the PoA DD /03/ which are sourced from Eskom website.</p> <p>Therefore, the calculated <b>OM = 1.011 tCO<sub>2</sub>/MWh</b> is correct and inline with the requirements of tool.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	Calculate the build margin (BM) emission factor.	Option 1) is chosen in which the BM is calculated ex-ante for the first crediting period of the PoA based on	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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		<p>the most recent available data at the time of submission of the CDM-DDs to the DOE for validation i.e., for the year 2010.</p> <p>Validation team based on document review/B08/ confirms that the annual electricity generation of the set of five power units (SET5-units) is larger than the annual electricity generation of the set of power capacity additions in the electricity system that comprise 20% of the system generation and that have been built most recently (AEG&gt;20%) and the power units in SET<sub>sample</sub> started to supply electricity to the grid less than 10 years. Also they do not include registered CDM projects.</p> <p>The validation team confirms that the BM calculation is correctly applied complying with the Tool.</p> <p>Therefore, <b>BM = 0.92 tCO<sub>2</sub>/MWh</b> is justified.</p>	
6	Calculate the combined margin (CM) emissions factor.	<p>According to the “<i>Tool to calculate the emission factor for an electricity system</i>” (Version 02.2.1) /B03/, the default weights applicable for solar projects are wOM = 0.75 and wBM = 0.25. The CM has been calculated for the first crediting period and fixed ex-ante.</p> <p>The weighting of OM emission factor and BM emission factor for calculate CM emission factor is categorized by type of CDM project. The calculation of <b>CM = 0.988 tCO<sub>2</sub>/MWh</b> is justified.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

As per the PoA DD /03/, the CM is fixed or the first crediting period of the PoA for all CPAs to be included during the first crediting period of PoA.

Validation team further compared the arrived value of OM and BM with other CDM registered renewable energy project (though it for different data vintage, hydro project – UNFCCC ref no 2692) and found that the OM and BM values are comparable with this project.

## b) Project Emissions

There is no fossil fuel consumption within the project boundary. Therefore, the project emission for the CPAs of the PoA is zero. (PE<sub>y</sub> = 0).

The CPAs of the PoA shall use small-scale methodology AMS- I.D. (version 17) /B02-1/ or AMS-I.F. (version 02) /B02-2/ or combination of both these methodologies. As per the PoA-DD, there is no fossil fuel consumption by the CPAs of the PoA and their project site and hence there is no project emission.

Moreover, Project emissions (as per AMS-I.D. (Version 17) /B02-1/ and AMS-I.F. (Version 02) /B02-2/:

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"For most renewable energy project activities,  $PE_y = 0$ . However, for the following categories of project activities, project emissions have to be considered following the procedure described in the most recent version of ACM0002<sup>7</sup>

- Emissions related to the operation of geothermal power plants (e.g. non- condensable gases, electricity/fossil fuel consumption);
- Emissions from water reservoirs of hydro power plants.
- $CO_2$  emissions from on-site consumption of fossil fuels due to the project activity shall be calculated using the latest version of the Tool to calculate project or leakage  $CO_2$  emissions from fossil fuel combustion."

The applied methodology/ies do not indicate any emission source for solar PV power projects.

Moreover there is no project emission associated with usage (import) of grid electricity as the emission reductions are calculated based on net electricity (which is calculated by deducting import from the export) supplied to the grid or the user.

## c) Leakage

As confirmed (through eligibility criteria of the PoA-DD/03/) energy generation equipment used in the future CPAs shall not be transferred from other site, hence no leakage is considered according to applied methodology AMS-I.D (version17) /B02-1/, AMS-I.F. (version 02) /B02-2/.

## d) Emission Reduction

Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y - LE_y \quad (7)$$

Where:

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

Considering formulas (1), (2), (3), (4), (5) and (6) emission reductions for both CPA types will be calculated as follows:

$$ER_y = (EG_{Solar\ systems,y}^a + EG_{Solar\ systems,y}^b) \cdot EF_{grid,CM} \quad (8)$$

Where:

- $ER_y$  = Emission reductions in year  $y$  (tCO<sub>2</sub>e/y)  
 $EG_{Solar\ systems,y}^a$  = Net quantity of electricity supplied to end users from all independent activities (solar electrical systems installed) under the CPA in year  $y$  (MWh)  
 $EG_{Solar\ systems,y}^b$  = Net quantity of electricity supplied to the national grid of the RSA from all independent activities (solar electrical systems installed) under the CPA in year  $y$  (MWh)  
 $EF_{grid,CM}$  = Combined margin  $CO_2$  emission factor for grid connected power generation calculated ex ante (tCO<sub>2</sub>/MWh)

<sup>7</sup> ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources

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In summary, the calculation of emission reductions was correctly demonstrated by the PP according to the methodology AMS-I.D (version17) /B02-1/, AMS-I.F. (version 02) /B02-2/ and its tool "Tool to calculate the emission factor for an electricity system (version 02.2.1) /B02/".

Validation team based on the review of PoA-DD /03/ confirms that the formulae are correctly presented for the determination of emission reductions at CPA level. The parameters and equations presented in the PoA-DD /03/, as well as other applicable documents, have been compared with the information and requirements presented in the methodology. An equation comparison has also been made to ensure consistency between all the formulae presented in the PoA-DD /03/ and calculation files (for the real case CPA DD), methodology AMS-I. F. (Version 02).

## 3.10 Monitoring Plan of a typical CPA

The monitoring plan presented in the PoA-DD /03/ and g-CPA-DD /04/ complies with the requirements of the applicable methodology. The validation team has checked all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found.

The validation team through document review and interviews with the relevant personnel has reviewed the procedures. The information provided has allowed the validation team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME of the PoA and the CPA implementer.

The management system document /07/ of the CME provide sufficient information, which forms the basis of confirmation by the validation team on the issues related but not limited to the monitoring methodology, data management, and the quality assurance and quality control procedures to be implemented in the context of the programme. Therefore, the CME and/or CPA implementer(s) will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.

### 3.10.1 Parameters determined ex-ante

Following are the parameters as per the PoA DD /03/, fixed either ex-ante at the PoA level or shall be fixed ex-ante at the time of inclusion of the CPA:

- Net quantity of electricity generated and delivered to the grid by power unit  $m$  in year  $y$  ( $EG_{m,y}$ )
- Amount of fossil fuel type  $i$  consumed by power unit  $m$  in year  $y$  ( $FC_{i,m,y}$ )
- Net calorific value of Other Bituminous Coal ( $NCV_{Coal,y}$ )
- CO<sub>2</sub> emission factor of Other Bituminous Coal ( $EF_{CO_2,Coal,y}$ )
- CO<sub>2</sub> emission factor of Natural Gas ( $EF_{CO_2,NG,y}$ )
- Average net energy conversion efficiency of open cycle gas turbine power plant ( $\eta_{OCGT}$ )
- Average net energy conversion efficiency of coal-fired power plant that has operated for more than 10 years ( $\eta_{m,y}$ )
- Net quantity of electricity generated and delivered to the grid by power unit  $n$  in year  $y$  ( $EG_{n,y}$ )
- Amount of fossil fuel type  $i$  consumed by power unit  $n$  in year  $y$  ( $FC_{i,n,y}$ )
- Combined margin CO<sub>2</sub> emission factor for grid connected power generation calculated ex ante ( $EF_{CO_2,CM,y}$ )
- Load factor of the solar systems ( $LF_{solar\ systems}$ )

### 3.10.2 Parameters determined ex-post

Following are the parameters as per the PoA-DD /03/, shall be monitored (based on the type of CPA) ex-post by the CPAs of the PoA:

- Total capacity of all independent activities, which supply electricity to end users under the CPA in year  $y$  ( $P^a_{solar\ system,y}$ )
- Total capacity of all independent activities which supply electricity to the national grid of the RSA under the CPA in year  $y$  ( $P^b_{solar\ system,y}$ )
- Net quantity of electricity supplied to end users from all independent activities (solar electrical systems installed) under the CPA in year  $y$  (MWh) ( $EG^a_{solar\ system,y}$ )
- Net quantity of electricity supplied to the national grid of the RSA from all independent activities (solar electrical systems installed) under the CPA in year  $y$  (MWh) ( $EG^b_{solar\ system,y}$ )

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## 3.10.3 Monitoring and reporting system and quality assurance

The operational and management structure of the CME in context of the PoA has been clearly described in the PoA-DD /03/ and checked from the review of CME Management System document /07/ provided by the CME. The responsibilities and institutional arrangements for data collection and archiving has been clearly provided in the same document /07/.

Monitoring structure for the project activity is comprehensively detailed in the PoA-DD /03/ including description of the responsibility, procedure reference, equipment details, calibration frequency, and maintenance and archiving of the records is indicated. By reviewing the monitoring procedure and requirements provided in CME Management System /07/ for the PoA and interview with the PPs, validation team confirms that the monitoring arrangements described in the monitoring plan are feasible within the PoA-DD/03/, and the means of implementation of the monitoring plan is sufficient to ensure the emission reductions achieved by the PoA can be reported ex post and verified.

## 3.11 Environmental Impacts

It has been indicated in the PoA-DD /03/, that the environmental analysis shall be done at the individual CPA level. This is deemed appropriate in the context of the CPAs of the PoA.

## 3.12 Local stakeholders consultation

It has been indicated in the PoA-DD, that the local stakeholder consultation shall be done at the PoA level. This is deemed appropriate in the context of the PoA as the geographical boundary of the PoA is the country and the PoA is coordinated on a national level by CME, it is considered appropriate to carry out the local stakeholder consultation at PoA level

For the PoA level local stakeholders consultation, validation team based on reviewing the related documents submitted by the CME/18/ confirms that it has been done before the GSC period. The relevant local stakeholders have been invited through newspaper advertisements/18-1/. The summary of this stakeholder meeting is provided to the validation team. The validation team has reviewed the documentation in order to validate the inclusion of relevant stakeholders. Validation team based on its local expertise has confirmed that the communication method used to invite the stakeholders is appropriate.

The summary of comments presented in the PoA-DD /03/ has been verified with the documentation of the stakeholder consultation /18-2//18-3/ and has been found to be complete.

## 4. COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

The PoA-DD /01/ (dated 15/12/2011), g-CPA-DD /02/ and real-case CPA-DD (dated 07/12/2011), were made publicly available on UNFCCC's website (<http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/1GOKB2OVPQBZNE60GS0VQTQRW2RI/EC/view.htm>) and parties, stakeholders and NGOs were through the CDM website invited to provide comments during a 30 days period from 23/12/2011 to 21/01/2012, where no comment was received.

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## APPENDIX A

### VALIDATION PROTOCOL FOR PROGRAMME OF ACTIVITIES SMALL-SCALE SOLAR ELECTRICAL PROGRAMME, SOUTH AFRICA REPORT No. CCL0024/SAMPP/15072011

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**Table 1: Conformity of CDM Programme of Activities**

CHECKLIST TOPIC / QUESTION	Ref.	Validation Team Comments	Draft concl.	Final concl.
<b>A. GENERAL DESCRIPTION OF CDM PROGRAMME OF ACTIVITIES (POA)</b>				
<b>A.1. Title of the CDM programme of activities (PoA)</b>				
A.1.1. <b>Does the title of the PoA clearly enable to identify the unique CDM programme of activities?</b>	/01/	The title “Small-scale solar electrical programme, South Africa”, as stated in Section A.1 of the PoA-DD, clearly enables to identify the unique CDM programme of activities. The same was verified from the UNFCCC-website. However the Host Parties have not confirmed it. Hence, a CAR has been raised.  CAR 1: Letters of Approval from the DNA of Republic of South Africa (Host Country) as mentioned in Section A.4.1.1. of the PoA-DD has not been submitted to DOE for validation.	CAR+	OK
A.1.2. <b>Are current version number and the date of document completion given in section A.1 of the PoA-DD?</b>	/01/	Yes, as stated in Section A.1 of the PoA-DD, the version number is 2.0 and the date is 15 December 2011. However the date-format as presented is not in the standard format DD/MM/YYYY. Hence, a CAR has been raised.  CAR 2: In Section A.1 of the PoA-DD, the date has not been presented according to the standard format, i.e. DD/MM/YY.	CAR-2	OK
A.1.3. <b>Is this consistent with the time line of the programme’s history?</b>	/01/	Yes, the date of document completion as stated in Section A.1 of the PoA-DD is in line with the time-line of the PoA’s history.	OK	OK
<b>A.2. Description of the programme of activities</b>				
A.2.1. <b>Is the description delivering a transparent overview of the general operating and implementing framework of the PoA?</b>	/01/	Yes, the PoA-DD in section A.2, clearly describes the operating and implementing framework in clear and transparent manner.	OK	OK



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<p>A.2.2. <b>Is the policy/measure or stated goal of the PoA clearly and unambiguously presented?</b></p>	<p>/01/</p>	<p>Yes, in Section A.2 of the PoA-DD, the PoA's policy/measure or goal is clearly and unambiguously stated as:</p> <ul style="list-style-type: none"> <li>• Development of renewable energy projects in RSA to contribute towards achievement of host countries plan of having at least 10,000 GWh of electricity generated from renewables from 2013</li> <li>• Contribute towards GHG mitigation target of reducing the current emission baseline of 34% by year 2020.</li> <li>• Creation of jobs</li> <li>• Mitigation of negative environmental impacts caused due to combustion of fossil fuel.</li> </ul>	<p>OK</p>	<p>OK</p>
<p>A.2.3. <b>Is there a valid confirmation that the proposed PoA is a voluntary action by the coordinating/managing entity?</b></p>	<p>/01/</p>	<p>In Section A.2. and A.4.3. of the PoA-DD, the CME confirms that this PoA is a voluntary action. However evidence to substantiate this statement has not been submitted to the DOE for validation. Hence a CAR has been raised.</p> <p>CAR 3: Evidence to substantiate the fact that the PoA is a voluntary action has not been submitted to the DOE for validation.</p>	<p>CAR-3</p>	<p>OK</p>
<p>A.2.4. <b>Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance?</b></p>	<p>/01/</p>	<p>Yes, the PoA-DD in section A.4.2 clearly provides a description on the type of technologies that can be used under the PoA but it does not provide sufficient and transparent input for evaluating its impact on the greenhouse gas balance. Hence a CAR has been raised.</p> <p>CAR 4: In Section A.4.2 of the PoA-DD does not provide information on the following:</p> <ul style="list-style-type: none"> <li>• How the programme will lead to reduction of greenhouse gas emission?</li> <li>• Whether the technology to be used is environmentally safe and sound?</li> <li>• Whether the project involves technology transfer?</li> </ul>	<p>CAR-4</p>	<p>OK</p>
<p>A.2.5. <b>Is the brief explanation how the programme will reduce greenhouse gas emission transparent and suitable?</b></p>	<p>/01/</p>	<p>Depends on the closure of CAR 4 in section A.2.4 above.</p>	<p>Refer CAR-4</p>	<p>OK</p>
<p><b>A.3. Coordinating/managing entity and participants of CDM-PoA</b></p>				

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<p>A.3.1. <b>Is the form required for the indication of project participants correctly applied?</b></p>	<p>/01/</p>	<p>In Section A.3 of the PoA-DD, the form required for the indication of project participants has not been correctly applied. Hence CAR is raised.</p> <p>CAR 5: Section A.3 of the PoA-DD lacks in the following:</p> <ul style="list-style-type: none"> <li>• Form required for the indication of project participants has not been correctly applied.</li> <li>• Information on the party, which communicates with the EB, has not been provided.</li> </ul>	<p>CAR-5</p>	<p>OK</p>
<p>A.3.2. <b>Is the participation of the listed entities or Parties in the PoA confirmed by each one of them?</b></p>	<p>/01/</p>	<p>The section A.3 of the PoA-DD states that BWCC is the Coordinating and managing entity of PoA and also the implementer of the CPA001.</p>	<p>OK</p>	<p>OK</p>
<p>A.3.3. <b>Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?</b></p>	<p>/01/</p>	<p>Depends on the closure of CAR 5 in section A.3.1 above.</p>	<p>Refer CAR-5</p>	<p>OK</p>
<p>A.3.4. <b>Is it evident that the coordinating or managing entity of the PoA is the entity which communicates with the Executive Board (EB)?</b></p>	<p>/01/</p>	<p>Depends on the closure of CAR 5 in section A.3.1 above.</p>	<p>Refer CAR-5</p>	<p>OK</p>
<p><b>A.4. Technical description of the CDM programme of activities</b></p>				
<p><b>A.4.1. Location of the programme of activities</b></p>				
<p><b>A.4.1.1. Does the information provided on the location of the programme allow for a clear definition identification of the boundary for the PoA in terms of a geographical area, within which all CPAs included in this PoA will be implemented?</b></p>	<p>/01/</p>	<p>As stated in Section A.4.1.2 of the PoA-DD, the PoA's boundary has been defined as the internationally recognised borders of the Republic of South Africa.</p>	<p>OK</p>	<p>OK</p>
<p><b>A.4.1.2. Is the consideration of all</b></p>	<p>/01/</p>	<p>It has not been described whether all applicable national and/or sectoral</p>	<p>CAR-6</p>	<p>OK</p>

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<p><b>applicable national and/or sectoral policies and regulations of each host country within the boundary evident and substantiated?</b></p>		<p>policies and regulation within the PoA's boundary have been taken into consideration when defining the PoA's boundary in Section A.4.1.2. of the PoA-DD. Hence a CAR has been raised.</p> <p>CAR 6: The PP needs to substantiate with evidences that all applicable national and/or sectoral policies and regulations of host country within the PoA's boundary have been taken into consideration.</p>		
<p><b>A.4.1.3. Is/are the Host Party(ies) stated?</b></p>	<p>/01/</p>	<p>Yes, Republic of South Africa has been stated as the Host Party,</p> <p>However this has not been confirmed as the letter of approval from the DNA of the host Country.</p> <p>Depends on the closure of CAR 1 in section A.1.1 above.</p>	<p>Refer CAR 1</p>	<p>OK</p>
<p><b>A.4.2. Description of a typical CDM programme activity (CPA)</b></p>				
<p><b>A.4.2.1. Is it unambiguously stated which technology or measures are to be employed by the CPA?</b></p>	<p>/01/</p>	<p>Yes, the PoA-DD in section A.4.2 clearly states “ Each SSC-CPA uses solar electrical technologies which enable to convert solar radiation into electrical energy, taking advantage of the photovoltaic (PV) effect. Such technologies may include, but are not limited to: wafers (cells) made from single crystal silicon, polycrystalline silicon and ribbon silicon as well as advanced thin film technologies.”</p>	<p>OK</p>	<p>OK</p>
<p><b>A.4.2.2. Is the type and category of project activities correctly identified and indicated?</b></p>	<p>/01/</p>	<p>The PoA-DD does not clearly describe the type and category of the CPAs that fall under the PoA. Hence a CAR has been raised.</p> <p>CAR 7: In Section A.4.2.1 of the PoA-DD, the applicable type and category of the proposed PoA has not been mentioned.</p>	<p>CAR 7</p>	<p>OK</p>
<p><b>A.4.2.3. Does the technical design of the project activity reflect current good practices?</b></p>	<p>/01/</p>	<p>The PoA envisages using renewable energy technologies to generate electricity. Production of electricity by renewable energy technologies in the region is a good practice.</p>	<p>Refer CAR 5</p>	<p>OK</p>
<p><b>A.4.2.4. Does the implementation of the project activity require any technology transfer from Annex-I-countries to the host country(ies)?</b></p>	<p>/01/</p>	<p>Depends on the closure of CAR 4 in section A.2.4 above.</p>	<p>Refer CAR 4</p>	<p>OK</p>
<p><b>A.4.2.5. Is the technology</b></p>	<p>/01/</p>	<p>Depends on the closure of CAR 4 in section A.2.4 above.</p>	<p>Refer</p>	<p>OK</p>

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implemented by the project activity environmentally safe?			CAR-4	
<b>A.4.2.6. Is the information provided in compliance with actual situation or planning?</b>	/01/	Yes, the information provided is in compliance with actual situation or planning.	OK	OK
<b>A.4.2.7. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?</b>	/01/	Depends on the closure of CAR 4 in section A.2.4 above.	Refer CAR-4	OK
<b>A.4.2.8. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?</b>	/01/	There is no information provided on training and maintenance efforts required to carry out the project as per schedule. Hence a CL is raised.  CL 1: The project participant is requested to clearly specify in the PoA-DD what the training and maintenance efforts will be required in order to carry out the project as per schedule during the project period.	CL-1	OK
<b>A.4.2.9. Is information available on the demand and requirements for training and maintenance?</b>	/01/	Depends on the closure of CL 1 in section A.4.2.8 above.	Refer CL-1	OK
<b>A.4.2.10. Does the PoA-DD provide clearly and unambiguously eligibility criteria for the inclusion of a CPA into the PoA? (Annex 3 of EB 65 §14)</b>	/01/ /	In section A.4.2.2 of the PoA-DD, the eligibility criteria for inclusion of SSC-CPA in the PoA has been developed in line with the requirements of §14 EB 65, Annex 3. But few of the requirements of the above mentioned tool has not been considered for development of eligibility criteria. Hence CL is raised.  CL 2: PP needs to clarify why no eligibility criteria for inclusion of CPAs was developed against the following two requirements of Annex 3 of EB 65 §14: <ul style="list-style-type: none"><li>• Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance</li></ul>	CL-2	OK

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		<ul style="list-style-type: none"> <li>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</li> </ul>		
<b>A.4.3. Description of how the anthropogenic emissions of GHG by sources are reduced by a CPA below those that would have occurred in the absence of the registered PoA (assessment and demonstration of additionality of the PoA as a whole)</b>				
<b>A.4.3.1. Is it evident and clearly documented that the proposed PoA is a voluntary coordinated action?</b>	/01/	Depends on the closure of CAR 3 in section A.2.3 above.	Refer CAR 3	OK
<b>A.4.3.2. Is it evident and substantiated that this voluntary coordinated action would not be implemented in the absence of the PoA?</b>	/01/	<p>The PP has very clearly stated the following as inclusion criteria for a CPA in the PoA:</p> <ul style="list-style-type: none"> <li>Each activity to be included into the CPA shall use solar electrical technologies which enable to convert solar radiation into electrical energy</li> <li>The CPA size shall be smaller or equal to 15 MW installed capacity</li> </ul> <p>As the size of each CPA to be included in the PoA will be under or equal to the threshold limit of Type I project activities and hence additionality of the PoA has been demonstrated using Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities (Version 08; EB 63 Annex 24).</p> <p>Paragraph 2 of the above-mentioned document include solar technologies (photovoltaic and solar thermal electricity generation) in the positive list of grid connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.</p> <p>Thus the PoA is additional as a whole.</p>	OK	OK
<b>A.4.3.3. Is it evident and substantiated that in case the PoA implements a mandatory policy or regulation this would not be enforced otherwise?</b>	/01/	No, the PoA is not implementing any mandatory policy/regulation. No such policy/regulation is in place in the host country.	OK	OK
<b>A.4.3.4. Is it evident and</b>	/01/	No, the PoA is not implementing any mandatory policy/regulation. No such policy/regulation is in place in the host country.	OK	OK

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<p>substantiated that in case the PoA implements a mandatory policy or regulation that is enforced the PoA will lead to a greater level of enforcement?</p>				
<p><b>A.4.4. Operational, management and monitoring plan for the programme of activities (PoA)</b></p>				
<p><b>A.4.4.1. Is there a clear and transparent description of the operational and management arrangements established by the coordinating/managing entity?</b></p>	<p>/01/</p>	<p>Section A.4.4.1 of the webhosted PoA-DD provides an operational and management plan but the same is not in line with the requirements laid down under Annex 3 of EB 65 § 17. Hence CAR is raised.</p> <p>CAR 8: The section A.4.4.1 lacks in the following:</p> <ol style="list-style-type: none"> <li>1. Clear definition of roles and responsibilities of personnel involved in the process of inclusion of the CPA including the provision to review their competencies.</li> <li>2. Measures for continuous improvement of PoA management system.</li> <li>3. Records of arrangements for training and capacity development for personnel.</li> <li>4. Documentation control process for each CPA under the PoA</li> <li>5. Procedures for technical review of inclusion of CPAs</li> </ol>	<p><del>CAR-8</del></p>	<p>OK</p>
<p><b>A.4.4.2. Is there a record keeping system for each CPA under the PoA?</b></p>	<p>/01/</p>	<p>Section A.4.4.1 of the PoA-DD provides information on record keeping system for each CPA under the PoA. The record keeping system would be an electronic database set up by the CME which will include the following information:</p> <ul style="list-style-type: none"> <li>• Site details: street address, house number and GPS coordinates;</li> <li>• Installation details: installation date, capacity of the solar electrical system installed;</li> <li>• Seller company details: company name and contact person details (if applicable);</li> <li>• Owner details: company/person name, contact details;</li> <li>• Electricity recipient details: the end user or the national grid. In case the recipient is the end user: company/person name, contact details, evidences on existence of a connection to the national grid;</li> <li>• Agreements (depending on the chosen scheme of participation</li> </ul>	<p><del>CL-3</del></p>	<p>OK</p>

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		<p>in the programme (see Section A.2 for details)</p> <ul style="list-style-type: none"> <li>• Identification number of the solar electrical system installed in following format: CPA-[indicate number of the CPA]-[record number of the activity in the electronic database].</li> </ul> <p>However no evidence has been provided to substantiate the same. Hence CL is raised.</p> <p>CL 3: The PP needs to provide evidences to the DoE to validate that a record keeping system for each CPA under the PoA, exists and is holistic and complete.</p>		
<b>A.4.4.3. Is there a system or procedure to avoid double accounting, i.e. to avoid that an included CPA under this PoA already is a registered CDM project or CPA in another PoA?</b>	/01/	<p>Yes, a provision to avoid double accounting has been provided in section A.4.4.1 of the PoA-DD. But no evidence has been provided to substantiate the same. Hence CL is raised.</p> <p>CL 4: The PP needs to provide evidences to the DoE to validate that a system to avoid double accounting i.e. to avoid that an included CPA under this PoA is not already registered as a CDM project or CPA in another PoA, exists and is holistic and complete.</p>	CL-4	OK
<b>A.4.4.4. Is there a system or procedure to detect whether a CPA to be included in the PoA is not a de-bundled component of another CPA or CDM project?</b>	/01/	<p>Yes, in section A.4.4.1 of the PoA-DD states that for SSC-CPA (type 1) the de-bundling check would be based on assessment that each independent activity under the CPA (type 1) will not be larger than 1% of the small-scale thresholds defined by the methodology applied. However it is not clearly stated how the de-bundling check for SSC-CPA (type 2) will be performed. Hence a CL is raised.</p> <p>CL 5: The PP is request to clearly describe a system or procedure to detect whether a CPA to be included in the PoA is not a de-bundled component of another CPA or CDM project for SSC-CPA (type 2).</p>	CL-5	OK
<b>A.4.4.5. Are provisions in place to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA?</b>	/01/	<p>Yes, in section A.4.4.1 of the PoA-DD a provision is in place to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA through signing of contractual agreements. But no evidence has been provided to substantiate the same. Hence CL is raised.</p> <p>CL 6:</p>	CL-6	OK

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		The PP needs to provide evidences to the DoE to validate that a system is in place to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA.		
<b>A.4.4.6. Is there a monitoring plan for the PoA, including a description of the proposed statistically sound sampling methods or procedures to be used by the DOE for the verification (please consider sampling among CPAs and within CPAs)?</b>	/01/	Section A.4.4.2 of the PoA-DD does not states whether the monitoring will be carried out at CPA or PoA level. Hence CAR is raised. CL 7: The PP states that monitoring plan is designed to calculate GHG emission reductions at CPA level. But as per the discussion with PP the SSC-CPS (Type 1) involve installation of several small scale CPAs with capacity below 0.15 MW and proper sampling approach and procedure needs to be provided in accordance with "STANDARD FOR SAMPLING AND SURVEYS FOR CDM PROJECT ACTIVITIES AND PROGRAMME OF ACTIVITIES".	CL-7	OK
<b>A.4.4.7. In case the coordinating/managing entity opts for a verification method that does not use sampling but verifies each CPA, does the monitoring plan provide a transparent system to ensure that no double accounting occurs and that the status of verification can be determined any time for each CPA?</b>	/01/	Depends on the closure of CL 7 in section A.4.4.6 above.	Refer CL-7	OK
<b>A.4.5. Public funding of the project activity</b>				
<b>A.4.5.1. Is the information provided on public funding in compliance with the actual situation or planning as available by the project participants?</b>	/01/	Section A.4.5 of the PoA-DD states that no public funding has been used in the development of this PoA. However a CL is raised. CL 8: Project participants needs to substantiate with evidences that such funding does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those parties.	CL-8	OK
<b>A.4.5.2. Is all information provided consistent with the details given in remaining chapters</b>	/01/	Depends on the closure of CL 8 in section A.4.5.1 above.	Refer CL-8	OK



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of the PoA-DD (in particular annex 2)?				
<b>B. DURATION OF THE PROGRAMME OF ACTIVITIES</b>				
<b>B.1. Starting date of the programme of activities</b>				
B.1.1. Is the programme's starting date clearly defined and reasonable?	/01/	As stated in section B.1 of the PoA-DD, the project activity start date is 23/09/2011, which is before the date of first publishing for global stakeholder consultation. Hence a CL is raised.  CL 9: The starting date of PoA should be at least 4 week later from the date of request for registration. The PP is required to change the start date considering the same.	CL-9	OK
<b>B.2. Length of the programme of activities (PoA)</b>				
B.2.1. Is the assumed length of the PoA clearly defined by the coordinating/ managing entity and reasonable (max 28 years)?	/01/	Yes, as stated in section B.2., the length of the PoA is 28 years and 0 months, which is in accordance with the requirements of EB 55 Annex 38.	OK	OK
<b>C. ENVIRONMENTAL ANALYSIS</b>				
<b>C.1. Definition of the level at which environmental analysis as per requirements of the CDM modalities and procedures is undertaken:</b>				
C.1.1. Is it defined whether the environmental analysis takes place at PoA or CPA level?	/01/	As per Section C.1 of the PoA-DD, the environmental analysis is done at SSC-PoA level.	OK	OK
C.1.2. Is the choice whether the environmental analysis takes place at PoA or CPA level justified?	/01/	The choice for environmental analysis at PoA level is not justified. Hence a CAR is raised.  CAR 9: The PP should clearly specify why it has chosen to conduct the environmental analysis at PoA level.	CAR-9	OK
<b>C.2. Documentation on the analysis of the environmental impacts of the PoA, including transboundary impacts:</b>				
C.2.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	/01/	The National Environmental Management Act 107 of 1998, amended in June 2010, governs Environmental Impact Assessment (EIA) and requires a scoping assessment and EIA or Basic Assessment (BA) depending on the nature of the activity.	OK	OK

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		As per the same act the SSC-CPA (type 2) to be included in the PoA require a Basic Assessment to be carried out. The SSC-CPA (type 1) is not required to carry out an EIA or Basic Assessment.		
C.2.2. <b>Has the analysis of the environmental impacts of the project activity been sufficiently described?</b>	/01/	Yes, analysis of the environmental impacts of the project activity was sufficiently described.	OK	OK
C.2.3. <b>Will the project create any adverse environmental effects?</b>	/01/	No, the project does not create any adverse environmental effects.	OK	OK
C.2.4. <b>Were trans-boundary environmental impacts identified in the analysis?</b>	/01/	Not Applicable	OK	OK
<b>C.3. Please state whether in accordance with the host Party laws/regulations, an environmental impact assessment is required for a typical CPA of the PoA:</b>				
C.3.1. <b>Have the identified environmental impacts been addressed in the project design sufficiently?</b>	/01/	Since, the Environmental Analysis is done at PoA level, hence, this checklist question is not applicable.	OK	OK
C.3.2. <b>Does the project comply with environmental legislation in the host country?</b>	/01/	Yes, the project complies with the relevant environmental legislation in the host country.	OK	OK
C.3.3. <b>Is, per host country laws/regulations, an environmental impact assessment necessary for a typical CPA?</b>	/01/	The National Environmental Management Act 107 of 1998, amended in June 2010, governs Environmental Impact Assessment (EIA) and requires a scoping assessment and EIA or Basic Assessment (BA) depending on the nature of the activity.  As per the same act the SSC-CPA (type 2) to be included in the PoA require a Basic Assessment to be carried out. The SSC-CPA (type 1) is not required to carry out an EIA or Basic Assessment.	OK	OK
<b>D. STAKEHOLDERS' COMMENTS</b>				
<b>D.1. Please indicate the level at which local stakeholder comments are invited. Justify the choice:</b>				
D.1.1. <b>Is there a clear statement whether the stakeholder comments will be invited at PoA or CPA level?</b>	/01/	Yes, stakeholder comments will be invited at PoA level.	OK	OK

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D.1.2. <b>Is the choice justified in a clear and reasonable manner?</b>	/01/	No, the choice has not been justified in a clear and reasonable manner.  CAR 10: The choice, why would a stakeholder meeting be conducted at PoA level has not been transparently justified in section D.1 of PoA-DD?	CAR 10	OK
D.1.3. <b>If the stakeholder comments will be invited at PoA level, is there sufficient information provided, on how comments by local stakeholders were invited?</b>	/01/	Comments from local stakeholders were invited via an advertisement in Sunday times (local newspaper). The adverts were placed on 27/11/2011 inviting people to a public participation meeting, and to submit comments and queries via phone and email. Comments were invited until 15/12/ 2011.  The public participation meeting was held on December 12 in BWC Office in the V&A Marina (Suite 102, 7 West Quay Rd, Cape Town), and it included presentation of the programme and discussion around it.	OK	OK
D.1.4. <b>If the stakeholder comments will be invited at PoA level, is there a summary of the contents?</b>	/01/	Section D.3 of PoA-DD states that all stakeholders' comments and concerns were recorded. The stakeholders raised no negative comments. But it doesn't provide the summary of comments received. Hence CAR is raised.  CAR 11: The summary of comments received during stakeholder consultation process and how the comments were addressed is not provided in the PoA-DD.	CAR 11	OK
D.1.5. <b>If the stakeholder comments will be invited at PoA level, is there sufficient information provided, on how due account was taken of any comments received?</b>	/01/	Depends on closure of CAR 11 in section D.1.4 above.	Refer CAR 11	OK
<b>D.2. Brief description how comments by local stakeholders have been invited and compiled</b>				
D.2.1. <b>Have relevant stakeholders been consulted?</b>	/01/	An advertisement was put on 27/11/2011 in Sunday Times (local newspaper) to reach out to all the relevant stakeholders with an intention of getting their opinion and feedback.	OK	OK
D.2.2. <b>Have appropriate media been used to invite comments by local stakeholders?</b>	/01/	Yes, appropriate media was used to invite comments by all interested stakeholders.	OK	OK
D.2.3. <b>If a stakeholder consultation</b>	/01/	No, a stakeholder consultation process is not required by	OK	OK

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<b>process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?</b>		regulations/laws in the host country		
<b>D.2.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?</b>	/01/	Yes, the undertaken stakeholder process was carried out and is described in a complete and transparent manner in the PoA-DD.	OK	OK
<b>D.3. Summary of the comments received</b>				
<b>D.3.1. Is a summary of the received stakeholder comments provided?</b>	/01/	Depends on closure of CAR 11 in section D.1.4 above.	Refer CAR 11	OK
<b>D.4. Report on how due account was taken of any comments received</b>				
<b>D.4.1. Has due account been taken of any stakeholder comments received?</b>	/01/	Depends on closure of CAR 11 in section D.1.4 above.	Refer CAR 11	OK
<b>E. APPLICATION OF A BASELINE AND MONITORING METHODOLOGY TO A TYPICAL CPA</b>				
<b>E.1. Title and reference of the approved baseline and monitoring methodology applied to CPA included in the PoA</b>				
<b>E.1.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?</b>	/01/	Yes, section E.1. of the PoA-DD clearly indicates the reference number, version number and title of the applied monitoring methodologies, i.e.: AMS-I.D. - Grid connected renewable electricity generation (version 17; EB 61), AMS-I.F. - Renewable electricity generation for captive use and mini-grid (Version 02, EB 61)  The most recent versions of both the methodologies available at the time of developing the PoA-DD have been used.	OK	OK
<b>E.1.1.2. Is the applied version the most recent one and / or is this version still applicable?</b>	/01/	Yes, the applied version is the most recent one and still applicable.	OK	OK
<b>E.1.1.3. Is the applied methodology and applicable tool therein is applied and approved by the board, for use in PoA?</b>	/01/	Yes, the applied methodology and the applicable tools therein have been approved by the board for use in a PoA.	OK	OK

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<b>E.2. Justification of the choice of the methodology and why it is applicable to a CPA</b>				
<b>E.2.1.1. Is the applied methodology considered the most appropriate one?</b>	/01/	Yes, the applied methodology AMS-I.D. is considered as most appropriate methodology for grid-connected renewable energy projects and AMS-I.F is considered most appropriate for renewable electricity generation for captive use and mini-grid.	OK	OK
<b>E.2.1.2. Does the methodology account for leakage in the context of a CPA?</b>	/01/	Both the methodologies AMS-I.D. & I.F. state: "If the energy generating equipment is transferred from another activity, leakage is to be considered". But as the PoA involves installation of new technology and doesn't consider transfer of generating equipment hence, leakage emissions due to the PoA are not considered.	OK	OK
<b>E.2.1.3. Criterion 1: This methodology comprises renewable energy generation units, such as photovoltaic, tidal/wave, wind, geothermal and renewable biomass: (a) supplying electricity to a national or a regional grid; or (b) supplying electricity to an identified customer facility via national/regional grid through a contractual arrangement such as wheeling</b>	/01/	Each CPA comprises renewable electricity generation, by means of solar electrical systems supplying electricity to the national electricity grid of RSA.	OK	OK
<b>E.2.1.4. Criterion 3: This methodology is applicable to project 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); (b) Involve a capacity</b>	/01/	Each independent activity under the PoA envisages either: (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; or (b) Involve a capacity addition.	OK	OK

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<p>addition;                  (c) Involve a retrofit of (an) existing plant(s); or                  (d) Involve a replacement of (an) existing plant(s)</p>				
<p><b>E.2.1.5. Criterion 4: Criterion 4: Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</b></p> <ul style="list-style-type: none"> <li>- The project activity is implemented in an existing reservoir with no change in the volume or reservoir;</li> <li>- The project activity is implemented in an existing reservoir where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>;</li> <li>- The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>.</li> </ul>	/01/	<p>The PoA and the CPA's therein involve installation of solar electrical systems. Hence this eligibility criterion is not applicable.</p>	OK	OK
<p><b>E.2.1.6. Criterion 5: If the new unit</b></p>	/01/	<p>The PoA and the CPA's therein involve installation of solar electrical systems without any non-renewable component. Hence this eligibility</p>	OK	OK

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<p>has both renewable and non-renewable components (e.g. wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.</p>		<p>criterion is not applicable.</p>		
<p><b>E.2.1.7. Criterion 6: Combined heat and power (co-generation) systems are not eligible under this category.</b></p>	/01/	<p>The PoA and the CPA's therein don't involve installation combined heat and power (co-generation) systems. Hence this eligibility criterion is not applicable.</p>	OK	OK
<p><b>E.2.1.8. Criterion 7: 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</b></p>	/01/	<p>The section E.2 of PoA-DD states "In case the independent activity involves the capacity addition, the added capacity will be lower than 15 MW and be physically distinct from the existing units."</p>	OK	OK
<p><b>E.2.1.9. Criterion 8: 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.</b></p>	/01/	<p>The PoA and the CPA's therein involve installation of new solar electrical systems and will not involve any retrofit or replacement of existing technology. Hence this eligibility criterion is not applicable.</p>	OK	OK
<p><b>E.2.1.10. Criterion 9: This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind,</b></p>	/01/	<p>Each CPA comprises renewable electricity generation, by means of solar electrical systems. Electricity will be supplied to users which would have been supplied electricity from the national grid of the RSA.</p>	OK	OK

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<p>geothermal and renewable biomass that supply electricity to user(s). The project activity will displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit i.e. in the absence of the project activity, the users would have been supplied electricity from one or more sources listed below:</p> <p>a) A national or a regional grid (grid hereafter);  b) Fossil fuel fired captive power plant;  c) A carbon intensive mini-grid.</p> <p>(AMS-I.F.)</p>				
<p><b>E.2.1.11. Criterion 10: For the purpose of this methodology, a mini-grid is defined as small-scale power system with a total capacity not exceeding 15 MW (i.e. the sum of installed capacities of all generators connected to the mini-grid is equal to or less than 15 MW) which is not connected to a national or a regional grid.</b></p> <p>(AMS-I.F.)</p>	/01/	Section E.2 of PoA-DD states “electricity will not be supplied to users which would have been supplied electricity from a carbon intensive mini-grid”. Hence this eligibility criterion is not applicable.	OK	OK
<p><b>E.2.1.12. Criterion 11: For biomass power plants, no other biomass other than renewable biomass is to be used in the project plant.</b></p>	/01/	The PoA and the CPA’s therein involve installation of solar electrical systems. Hence this eligibility criterion is not applicable.	OK	OK



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<p><b>E.2.1.13. Criterion 12: If electricity and/or steam/heat produced by the project activity is delivered to a third party i.e. another facility or facilities within the project boundary, a contract between the supplier and consumer(s) of the energy will have to be entered that ensures that there is no double counting of emission reductions.</b> <i>(AMS-I.F.)</i></p>		<p>In case electricity produced by the independent activity under the CPA is delivered to a third party a contract between the supplier and consumer(s) of the energy will be signed.</p> <p>The same is an inclusion criterion for CPAs in the PoA.</p>	OK	OK
<p><b>E.2.1.14. Are all applicability criteria in the methodology, the applied tools or any other methodology component referred to therein fulfilled?</b></p>	/01/	<p>All the applicability criteria as per the applied methodology AMS-I.D. and AMS-I.F. have been fulfilled.</p>	OK	OK
<p><b>E.3. Description of the sources and gases included in the CPA boundary</b></p>				
<p><b>E.3.1.1. Does the CPA boundary include the physical and geographical location where the programme activities take place?</b></p>	/01/	<p>As stated in Section E.3. of the PoA-DD, the spatial extent of the project boundary includes the project power plant and all power plants physically connected to the electricity system that the CDM project power plant is connected to, which for this PoA is the South African national grid. Hence an SSC-CPA boundary occurs well within the PoAs geographical boundary.</p>	OK	OK
<p><b>E.3.1.2. Are all sources and gases within the boundary considered in a clear manner?</b></p>	/01/	<p>Yes, all sources and gases within the project boundary are considered clearly and in accordance with the applied methodology.</p> <p>According to the applied methodologies AMS-I.D. and AMS- I.F. CO<sub>2</sub> emissions have been considered.</p>	OK	OK
<p><b>E.3.1.3. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the</b></p>	/01/	<p>Yes, the spatial and technological boundaries as verified on-site comply with the discussion provided in the PoA-DD.</p>	OK	OK

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PoA-DD?				
<b>E.4. Description of how the baseline scenario is identified and description of the identified baseline scenario:</b>				
<b>E.4.1.1. Have all technically feasible baseline scenario alternatives to the PoA been identified and discussed by the PoA-DD? Why can this list be considered as being complete?</b>	/01/	<p>As stated in Section A.4.2. and in Section E.2. of the PoA-DD, CPAs falling under the ambit of this PoA can either be:</p> <ul style="list-style-type: none"> <li>• Greenfield plant;</li> <li>• Capacity addition;</li> </ul> <p>The CPAs will supply the power to:</p> <ul style="list-style-type: none"> <li>• National or regional grid</li> <li>• A consumer or group of consumers who would have been using electricity from the national or regional grid.</li> </ul> <p>In accordance with the approved methodology AMS-I.D. and AMS-I.F. the baseline scenario for both the above mentioned cases are “ The baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.”</p> <p>The same has been clearly identified in the section E.4 of PoA-DD.</p>	OK	OK
<b>E.4.1.2. Does project identify correctly and exclude those options not in line with regulatory or legal requirements?</b>	/01/	<p>Yes, the project correctly identifies the baseline scenario as: the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.</p> <p>The same is in line with the applicable regulatory requirements.</p>	OK	OK
<b>E.4.1.3. Have applicable regulatory or legal requirements been identified?</b>	/01/	<p>The baseline scenario has been identified as: the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.</p> <p>The same is in line with the applicable regulatory requirements.</p>	OK	OK
<b>E.4.1.4. Does the PoA-DD identify the most likely baseline scenario in absence of the project activity?</b>	/01/	<p>Yes, the PoA-DD identifies the most likely baseline scenario in absence of the project activity.</p>	OK	OK
<b>E.4.1.5. Is this identification supported by official and/or</b>	/01/	<p>Yes, this identification is supported by official and/or verifiable documents.</p>	OK	OK

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verifiable documents (e.g. studies, web pages, certificates, etc?)				
<b>E.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of a typical CDM-CPA, included in a registered PoA (assessment and demonstration of additionality):</b>				
E.5.1. <b>Are the key criteria and data for assessing additionality of a CDM-CPA that is to be included into the PoA clearly and unambiguously stated?</b>	/01/	<p>Yes, the key criteria and data for assessing additionality of a CDM-CPA that is to be included into the PoA is clearly and unambiguously stated.</p> <p>As the size of each CPA to be included in the PoA will be under or equal to the threshold limit of Type I project activities and hence additionality of the PoA has been demonstrated using Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities (Version 08; EB 63 Annex 24).</p> <p>Paragraph 2 of the above-mentioned document include solar technologies (photovoltaic and solar thermal electricity generation) in the positive list of grid connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.</p>	OK	OK
<b>E.5.2. Key criteria and data for assessing additionality of a CDM-CPA</b>				
E.5.2.1. <b>Are the key criteria and data for assessing additionality of a CPA that is to be included into the PoA based on the additionality assessment in section E.5.1 of the PoA-DD?</b>	/01/	<p>The PP has very clearly stated the following as inclusion criteria fro a CPA in the PoA:</p> <ul style="list-style-type: none"> <li>• Each activity to be included into the CPA shall use solar electrical technologies which enable to convert solar radiation into electrical energy</li> <li>• The CPA size shall be smaller or equal to 15 MW installed capacity</li> </ul> <p>As the size of each CPA to be included in the PoA will be under or equal to the threshold limit of Type I project activities and hence additionality of the PoA has been demonstrated using Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities (Version 08; EB 63 Annex 24).</p> <p>Paragraph 2 of the above-mentioned document include solar technologies (photovoltaic and solar thermal electricity generation) in the positive list of grid connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.</p>	OK	OK

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<p><b>E.5.2.2. Is the choice of the criteria justified, based on the analysis in section E.5.1 of the PoA-DD?</b></p>	<p>/01/</p>	<p>Yes, the choice of criteria is justified.</p>	<p>OK</p>	<p>OK</p>
<p><b>E.5.2.3. Does it become evident how these criteria would be applied to assess the additionality of a typical CPA at the time of inclusion?</b></p>	<p>/01/</p>	<p>Yes, it is evident that how these criteria would be applied to assess the additionality of a typical CPA at the time of inclusion.</p>	<p>OK</p>	<p>OK</p>
<p><b>E.5.2.4. Is this information incorporated into the specific CDM-CPA-DD (“real case”)?</b></p>	<p>/01/</p>	<p>Yes, this information is incorporated into the specific CDM-CPA-DD.</p>	<p>OK</p>	<p>OK</p>
<p><b>E.5.2.5. If the starting date of the programme activity is before the date of validation, is evidence available to prove that incentive from the CDM was seriously considered in the decision to proceed with the programme activity?</b></p>	<p>/01/</p>	<p>As mentioned in section B.1 of PoA-DD the starting date is before the date of validation and PP needs to justify serious CM consideration. Hence a CAR is raised.</p> <p>CAR 12: The PP needs to substantiate with evidences to prove that incentive from the CDM was seriously considered in the decision to proceed with the programme of activity.</p>	<p><del>CAR</del> 12</p>	<p>OK</p>
<p><b>E.5.2.6. Is a complete list of barriers developed that prevents the project activity to occur?</b></p>	<p>/01/</p>	<p>The PP has very clearly stated the following as inclusion criteria for a CPA in the PoA:</p> <ul style="list-style-type: none"> <li>• Each activity to be included into the CPA shall use solar electrical technologies which enable to convert solar radiation into electrical energy</li> <li>• The CPA size shall be smaller or equal to 15 MW installed capacity</li> </ul> <p>As the size of each CPA to be included in the PoA will be under or equal to the threshold limit of Type I project activities and hence additionality of the PoA has been demonstrated using Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities (Version 08; EB 63 Annex 24).</p> <p>Paragraph 2 of the above-mentioned document include solar technologies (photovoltaic and solar thermal electricity generation) in the positive list of grid connected renewable electricity generation technologies that are automatically defined as additional, without further</p>	<p>OK</p>	<p>OK</p>

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		documentation of barriers.  Hence, documentation on barriers is not required.		
<p><b>E.5.2.7. Does this list include at least one of the following barriers?</b></p> <p>(a) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions;</p> <p>(b) Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions;</p> <p>(c) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions</p> <p>(d) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organisational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.</p>	/01/	<p>The PP has very clearly stated the following as inclusion criteria from a CPA in the PoA:</p> <ul style="list-style-type: none"> <li>• Each activity to be included into the CPA shall use solar electrical technologies which enable to convert solar radiation into electrical energy</li> <li>• The CPA size shall be smaller or equal to 15 MW installed capacity</li> </ul> <p>As the size of each CPA to be included in the PoA will be under or equal to the threshold limit of Type I project activities and hence additionality of the PoA has been demonstrated using Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities (Version 08; EB 63 Annex 24).</p> <p>Paragraph 2 of the above-mentioned document include solar technologies (photovoltaic and solar thermal electricity generation) in the positive list of grid connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.</p>	OK	OK
<p><b>E.5.2.8. Does the discussion</b></p>	/01/	EB 68 Annex 27 includes solar technologies (photovoltaic and solar thermal electricity generation) in the positive list of grid connected	OK	OK

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<p><b>sufficiently take into account relevant national and/or sectoral policies?</b></p>		<p>renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.</p> <p>Hence, discussion taking into account relevant national and/or sectoral policies is not required.</p>						
<p><b>E.5.2.9. Is transparent and documented evidence provided on the existence and significance of these barriers?</b></p>	/01/	<p>EB 68 Annex 27 includes solar technologies (photovoltaic and solar thermal electricity generation) in the positive list of grid connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.</p> <p>Hence, documentation on barriers is not required.</p>	OK	OK				
<p><b>E.5.2.10. Is it appropriately explained how the approval of the project activity will help to overcome the identified barriers?</b></p>	/01/	<p>EB 68 Annex 27 includes solar technologies (photovoltaic and solar thermal electricity generation) in the positive list of grid connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.</p> <p>Hence, documentation on barriers is not required.</p>	OK	OK				
<p><b>E.6. Estimation of Emission reductions of a CPA</b></p>								
<p><i>E.6.1. Explanation of methodological choices, provided in the approved baseline and monitoring methodology applied, selected for a typical CPA</i></p>								
<p><b>E.6.1.1. Is it explained how the procedures provided in the methodology are applied?</b></p>	/01/	<p>Yes, section E.6.1 provides very briefly about the methodological choices but does not clearly explain their application. Hence CAR is raised. It has been described which methodological choices have been made in terms of the emission factor derivation.</p> <p>CAR 13: PP should provide explanation on application of methodological choices as provided in the approved methodology and applicable tools to a typical SSC-CPA.</p>	CAR 13	OK				
<p><b>E.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?</b></p>	/01/	<p>Depends on closure of CAR 13 in section E.6.1.2 above.</p>	Refer CAR 13	OK				
<p><b>Determination of Project Emission (Comment on any line answered "No")</b></p>								
<p><b>E.6.1.3. Component 1: Emissions from the consumption of fossil fuel</b></p>	/01/	<p>NA</p> <table border="1" data-bbox="831 1305 1632 1367"> <tr> <td>Project emission checklist</td> <td>Yes / No /NA</td> </tr> <tr> <td>Component discussed in the PDD?</td> <td>NA</td> </tr> </table>	Project emission checklist	Yes / No /NA	Component discussed in the PDD?	NA	NA	OK
Project emission checklist	Yes / No /NA							
Component discussed in the PDD?	NA							

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		Formulae correctly applied?	NA		
<b>E.6.1.4. Component 2: Emissions from the consumption of electricity.</b>	/01/	NA		NA	OK
		Project emission checklist	Yes / No /NA		
		Component discussed in the PDD?	NA		
		Formulae correctly applied?	NA		
<b>E.6.1.5. Component 3: Emissions from the consumption of non-condensable gases.</b>	/01/	NA		NA	OK
		Project emission checklist	Yes / No /NA		
		Component discussed in the PDD?	NA		
		Formulae correctly applied?	NA		
<b>E.6.1.6. Component 4: Emissions from water reservoirs of hydro power plant</b>	/01/	Yes		OK	OK
		Project emission checklist	Yes / No /NA		
		Component discussed in the PDD?	Yes		
		Formulae correctly applied?	Yes		
<b>E.6.2. Equations, including fixed parametric values, to be used for calculation of emission reductions of a CDM-CPA:</b>					
<b>E.6.2.1. Are the formulae required for the determination of emission reductions correctly presented, enabling a complete identification of parameters to be used and / or monitored?</b>	/01/	Yes, the formulae required for the determination of emission reductions are correctly presented in the PoA-DD, enabling a complete identification of parameters to be used and / or monitored.		OK	OK
<b>E.6.2.2. Are the equations, including fixed parametric values, to be used for calculation of emission reductions of a CDM-CPA, completely presented?</b>	/01/	Yes, the equations, including fixed parametric values, to be used for calculation of emission reductions of a CDM-CPA, are completely presented.		OK	OK
<b>E.6.3. Data and parameters that are to be reported in CDM-CPA-DD form</b>					
<b>E.6.3.1. Is the list of parameters presented in chapter E.6.3 considered to be complete with regard to the requirements of the</b>	/01/	Yes, the list of parameters as presented in Section E.6.3. of the PoA-DD is complete and appropriate.		OK	OK

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applied methodology?				
<b>E.7. Application of the monitoring methodology and description of the monitoring plan</b>				
<b>E.7.1. Data and parameters to be monitored by each CDM-CPA</b>				
<b>E.7.1.1. Is the list of parameters presented in chapter E.7.1 considered to be complete with regard to the requirements of the applied methodology?</b>	/01/	Section E.7.1 of the PoA-DD has been provided with a complete list of monitoring parameters, in accordance with the requirements of the applied methodology.	OK	OK
<b>E.7.2. Description of the monitoring plan for a CDM-CPA</b>				
<b>E.7.2.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?</b>	/01/	The operational and management structure has not been clearly described in the PoA-DD. Hence CL has been raised.  CL 10: In section E.7.2 of the PoA-DD, clearly specify the operation and management structure along with procedure for data collection, recording, checking, data transfer and archiving system for CPA under PoA and justify how it is consistent for all CPA under this PoA.	CL 10	OK
<b>E.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?</b>	/01/	Depends on the closure of CL 10 in section E.7.2.1 above.	Refer CL 10	OK
<b>E.7.2.3. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?</b>	/01/	Depends on the closure of CL 10 in section E.7.2.1.above.	Refer CL 10	OK
<b>E.7.2.4. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?</b>	/01/	No additional background information on monitoring has been provided in Annex 4 of the PoA-DD. Instead information on options for joining the SSC-PoA is provided. Which is not in line with the SSC-CDM-PoA-DD form (version 01). Hence CAR is raised.  CAR 14: PP should only provide relevant information under the different sections of the PoA-DD in line with the requirements of SSC-CDM-PoA-DD form (version 01).	CAR 14	OK
<b>E.8. Date of completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/entity(ies)</b>				



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<b>E.8.1.1. Is there any indication of a date when the baseline was determined?</b>	/01/	Yes, as stated in the PoA-DD in Section E.8, the date of completion of the baseline study and monitoring methodology was 05/12/2011.	OK	OK
<b>E.8.1.2. Has dd/mm/yyyy format been used to indicate the date?</b>	/01/	Yes, dd/mm/yyyy format has been used to indicate the date.	OK	OK
<b>E.8.1.3. Is this consistent with the time line of the PoA-DD history?</b>	/01/	Yes, it is consistent with the time line of the PoA-DD.	OK	OK
<b>E.8.1.4. Is the information on the person(s) / entity (ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?</b>	/01/	Yes, the information on the entity responsible for the application of the baseline and monitoring methodology has been provided and is consistent with the actual situation.	OK	OK
<b>E.8.1.5. Is information provided whether this person / entity are also considered a project participant?</b>	/01/	CAR 15: In section E.8 of the PoA-DD, it has also not been clearly mentioned whether the entity responsible for determining the same are also the project participant as mentioned in Annex I of PoA-DD.	CAR 15	OK
<b>F. ANNEXES 1 – 4</b>				
<b>F.1. Annex 1: Contact Information</b>				
<b>F.1.1. Is the information provided consistent with the one given under section A.3?</b>	/01/	Depends on closure of CAR 5 in section A.3.1 above.	Refer CAR 5	OK
<b>F.1.2. Is the information on all private participants and directly involved Parties presented?</b>	/01/	Depends on closure of CAR 5 in section A.3.1 above.	Refer CAR 5	OK
<b>F.2. Annex 2: Information regarding public funding</b>				
<b>F.2.1. Is the information provided on the inclusion of public funding (if any) in consistency with the actual</b>	/01/	Depends on the closure of CL 8 in section A.4.5.1 above.	Refer CL 8	OK

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	<b>situation presented by the project participants?</b>				
F.2.2.	<b>If necessary: Is an affirmation available that any such funding from Annex-I countries does not result in a diversion of ODA?</b>	/01/	Depends on the closure of CL 8 in section A.4.5.1 above.	Refer CL 8	OK
<b>F.3. Annex 3: Baseline information</b>					
F.3.1.	<b>If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?</b>	/01/	Yes, additional information on power generation data and plants connected to the national grid of RSA and used for calculation of grid emission factor has been provided.  Yes this information is consistent with data presented in other sections of the PDD.	OK	OK
F.3.2.	<b>Is the data provided verifiable? Has sufficient evidence been provided to the validation team?</b>	/01/	Yes, the data provided is verifiable and sufficient evidence has been provided to the validation team.	OK	OK
F.3.3.	<b>Does the additional information substantiate / support statements given in other sections of the PoA-DD?</b>	/01/	Not applicable, refer section F.3.1. above.	N/A	OK
<b>F.4. Annex 4: Monitoring information</b>					
F.4.1.	<b>If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PoA-DD?</b>	/01/	Not applicable as no additional background information on monitoring has been provided in Annex 4 of the PoA-DD.	OK	OK
F.4.2.	<b>Is the information provided verifiable? Has sufficient evidence been provided to the validation team?</b>	/01/	Not applicable, refer section F.4.1. above	N/A	OK
F.4.3.	<b>Do the additional information and / or</b>	/01/	Not applicable, refer section F.4.1. above	N/A	OK

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documented procedures substantiate / support statements given in other sections of the PoA-DD?				
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**Table 2: Resolution of Clarification and Corrective Action Requests**

Requests by validation team	Ref. to table 1	Summary of programme owner response	Validation team Conclusion
<b>Clarification Request No. 1. CORRECTIVE ACTION REQUESTS</b>			
CAR 1: Letters of Approval from the DNA of Republic of South Africa (Host Country) as mentioned in Section A.4.1.1. of the PoA-DD has not been submitted to DOE for validation.	A.1.1. / A.4.1.3. /	The Letter of Approval (LoA) was received on 08/05/2012. LoA was submitted to the DOE.	The Letter of Approval (LoA) dated 08/05/2012 from DNA of republic of South Africa was submitted to DoE.  Hence CAR is closed.
CAR 2: In Section A.1 of the PoA-DD, the date has not been presented according to the standard format, i.e. DD/MM/YYYY.	A.1.2. /	Please refer to section A.1, the date has been changed to the standard format "06/08/2012"	The date of the document in section A.1 of the revised PoA-DD has been provided in DD/MM/YYYY format.  The same was found to be satisfactory.  Hence CAR is closed.
CAR 3: Evidence to substantiate the fact that the PoA is a voluntary action has not been submitted to the DOE for validation.	A.2.3. / A.4.3.1. /	The Official Declaration that the PoA is a voluntary action was received from the CME on 18/06/2012 and submitted to the DOE. Additional evidence of current policies and circumstances was also added to the end of section A.2 and in section A.4.3.	An official declaration (dated 07/08/2012) from BWCC PCC (CME) has been provided which states that PoA is a voluntary action by CME has been submitted to DoE. Furthermore a description with reference to current acts and policies in RSA is provided in

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			<p>section A.2 and A.4.3 of the revised PoA-DD, which substantiates that electricity generation from solar electrical systems is not mandatory and hence the PoA is a voluntary action by CME.</p> <p>The same was found to be satisfactory.</p> <p>Hence CAR is closed.</p>
<p>CAR 4: In Section A.4.2 of the PoA-DD does not provide information on the following:</p> <ul style="list-style-type: none"> <li>• How the programme will lead to reduction of greenhouse gas emission?</li> <li>• Whether the technology to be used is environmentally safe and sound?</li> <li>• Whether the project involves technology transfer?</li> </ul>	<p>A.2.4. / A.2.5. / A.4.2.4. / A.4.2.5. / A.4.2.7. /</p>	<p>The necessary changes were introduced to the PoA-DD, with the following paragraphs being added in section A.4.2.1:</p> <p><i>Since the procedures set for the CDM do not define 'technology transfer'<sup>8</sup>, it is generally interpreted as meaning the use of equipment and/or knowledge by the CDM project, not previously available in the host country, and therefore there is no technology transfer for this project.</i></p> <p><i>Solar electricity is clean. Unlike fossil generated electricity, clean energy does not produce CO<sub>2</sub> emissions. The solar electrical system will be connected to the grid of the RSA or to the independent consumer who is connected to the grid of the RSA. Therefore the construction of solar electrical systems displaces greenhouse gas emission intensive electricity production from fossil fired electricity plants.</i></p> <p><i>Solar power is regarded as an environmentally safe technology (see section C.3 for a detailed explanation), which will also be confirmed as part of the CPA inclusion (see Section A.4.2.2, Eligibility criteria number 10). Solar electrical systems under this PoA must comply with NEMA regulations regarding</i></p>	<p>Section A.4.2 of the revised PoA-DD has been modified and provides following information:</p> <ul style="list-style-type: none"> <li>• The CPAs of the PoA involves installation of solar electric systems, which uses renewable source of energy to generate electricity. The PoA leads to reduction of GHG emission by displacement of fossil fuel intensive grid.</li> <li>• The PoA does not involve any technology transfer from Annex 1 countries.</li> <li>• PoA employs solar electrical technologies, which are considered to be environmentally safe and sound, as these do not emit any harmful by-products or pollutants, and therefore</li> </ul>

<sup>8</sup> “The Contribution of the Clean Development Mechanism under the Kyoto Protocol to Technology Transfer” - <http://cdm.unfccc.int/Reference/Reports/TTreport/TTrep10.pdf>

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		<p><i>environmental impact assessment and proposal of mitigation measures. The main negative environmental effects of a typical solar electrical system include: aesthetic disturbance to nearby communities, and possibly disturbance of some ecosystems. Please refer to Section C.3 for the environmental assessments requirement in the RSA.”</i></p> <p>In section C.3 the following information was also added:  <i>“Solar power is a recognised form of clean renewable energy. The use of solar energy for electricity generation is a non-consumptive use of a natural resource and consumes no fuel for continuing operation. Using solar power will contribute to South Africa’s sustainable development and effectively reduce GHG emissions and the dependence on fossil fuels in the country. Solar electrical systems do not emit any harmful by-products or pollutants and is therefore not negatively associated with possible health risks to observers. In order to apply for environmental authorisation of a solar power project governmental laws and regulations should be followed.”</i></p>	<p>have no negative impact.</p> <p>The same was found to be satisfactory.</p> <p>Hence CAR is closed.</p>
<p>CAR 5: Section A.3 of the PoA-DD lacks in the following:</p> <ul style="list-style-type: none"> <li>Form required for the indication of project participants has not been correctly applied.</li> <li>Information on the party, which communicates with the EB, has not been provided.</li> </ul>	<p>A.3.1. / A.3.3. / A.3.4. / A.4.3.3. / F.1.1. / F.1.2. /</p>	<p>The necessary changes were introduced to the PoA, with the indication of the project participant form being added and the following text being added in section A.3.:</p> <p><i>“BWCC is an owner and the coordinating and managing entity of the PoA. BWCC will purchase rights to claim CERs generated as a result of the implementation of independent activities from the sellers of the solar electrical systems. BWCC may also receive a fee for their services. BWCC will be the entity responsible for communication with the EB. BWCC appoints BWC to act as a carbon consultant to develop all necessary CDM documentation, conduct procedures for PoA approval by the CDM Executive Board, direct CPA and activity inclusion and monitor all CPAs and activities under the PoA. BWC will manage the PoA</i></p>	<p>Section A.3 of the revised PoA-DD has been modified and applies correct form to provide information on the project participant.</p> <p>It also indicates that BWCC PCC (CME) will be focal point for communicating with the EB. This has been substantiated through a duly signed MoC (dated 11/10/2012).</p> <p>The same was found to be satisfactory.</p>

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		<i>according to the PoA management system.”</i>	Hence CAR is closed.
CAR 6: The PP needs to substantiate with evidences that all applicable national and/or sectoral policies and regulations of host country within the PoA's boundary have been taken into consideration.	A.4.1.2. /	<p>The necessary changes were introduced to the PoA. in section A.4.1.2:</p> <p><i>“The national and /or sectoral policies in the relevant sector i.e. Solar (PV) Power generation, are the same within the geographical boundary of RSA.”<sup>9</sup></i></p> <p>Also in section A.4.2.1, evidence was added that the NEMA regulations were considered with the following sentence.</p> <p><i>“Solar electrical systems under this PoA must comply with NEMA regulations regarding environmental impact assessment and proposal of mitigation measures.”</i></p> <p>In section C.3 the National Environmental Management Act 107 of 1998 was also considered.</p>	<p>The section A.4.1.2 of the revised PoA-DD mentions that the national and /or sectoral policies in the relevant sector i.e., Solar (PV) Power generation are same within the geographical boundary of RSA.</p> <p>The same was substantiated through review of the following:</p> <ul style="list-style-type: none"> <li>• National Environmental Management Act 107 of 1998</li> <li>• The Electricity Regulation Act, 2006 (Act No. 4 of 2006)</li> <li>• Integrated resource plan for electricity 2010-2030</li> </ul> <p>The same was found to be satisfactory.</p> <p>Hence CAR is closed.</p>
<b>Clarification Request No. 2.</b>			
CAR 7: In Section A.4.2.1 of the PoA-DD, the applicable type and category of the proposed PoA has not been mentioned.	A.4.2.2. /	<p>The applicable type and category has been mentioned in section A.4.2.1. as required:</p> <p><i>This PoA falls under sectorial scope 1: Energy industries (renewable-/ non renewable sources) Type: Renewable energy projects; and Category: I.D. Grid connected renewable electricity generation and I.F.</i></p>	<p>In section A.4.2.1 of the revised PoA-DD the applicable type and category of the proposed PoA has been clearly indicated.</p> <p>The same was found to be satisfactory.</p>

<sup>9</sup> - National Environmental Management Act 107 of 1998  
 - The Electricity Regulation Act, 2006 (Act No. 4 of 2006)  
 - Integrated resource plan for electricity 2010-2030

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		<i>Renewable electricity generation for captive use and mini-grid.</i> <sup>10</sup>	Hence CAR is closed.
<b>Clarification Request No. 3.</b>			
<p>CAR 8: The section A.4.4.1 lacks in the following:</p> <ol style="list-style-type: none"> <li>1. Clear definition of roles and responsibilities of personnel involved in the process of inclusion of the CPA including the provision to review their competencies.</li> <li>2. Measures for continuous improvement of PoA management system.</li> <li>3. Records of arrangements for training and capacity development for personnel.</li> <li>4. Documentation control process for each CPA under the PoA</li> <li>5. Procedures for technical review of inclusion of CPAs</li> </ol>	A.4.4.1. /	<p>The required information has been added to section A.4.4.1 in the form of 'The Management System for the South African Small-Scale Solar Electrical Programme'. Which was submitted to the DOE</p>	<p>Section A.4.4.1 of the revised PoA-DD has been modified and includes the following:</p> <ol style="list-style-type: none"> <li>1. Clear definition of roles and responsibilities of personnel involved in the process of inclusion of the CPA including the provision to review their competencies.</li> <li>2. Measures for continuous improvement of PoA management system.</li> <li>3. Records of arrangements for training and capacity development for personnel.</li> <li>4. Documentation control process for each CPA under the PoA</li> <li>5. Procedures for technical review of inclusion of CPAs.</li> </ol> <p>The same has also been included in "The Management System for the South African Small-Scale Solar Electrical Programme", checked by the validation team and found inline with the requirements of §17 of annex 3 of EB 65 /B04-5/ . .</p>

<sup>10</sup> CDM Methodology Booklet (page 15), May 2012, [http://cdm.unfccc.int/methodologies/documentation/meth\\_booklet.pdf](http://cdm.unfccc.int/methodologies/documentation/meth_booklet.pdf)

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			<p>The same was found to be satisfactory.</p> <p>Hence CAR is closed.</p>
<b><u>Clarification Request No. 4.</u></b>			
<p>CAR 9: The PP should clearly specify why it has chosen to conduct the environmental analysis at PoA level.</p>	C.1.2. /	<p>This choice has been reassessed and the Environmental analysis will now be performed at CPA level to assess each CPA individually.</p>	<p>In section C.3 of the revised PoA-DD it has been stated that environmental analysis will be conducted at CPA level and choice of the same has been justified.</p> <p>The same was found to be satisfactory.</p> <p>Hence CAR is closed.</p>
<p>CAR 10: The choice, why would a stakeholder meeting be conducted at PoA level has not been transparently justified in section D.1 of PoA-DD?</p>	D.1.2. /	<p>The required information has been introduced into the PoA-DD in section D.1. with the following paragraphs:</p> <p><i>“As the geographical boundary of the PoA is the country and the PoA is coordinated on a national level by BWCC, the project participants considered appropriate to carry out the local stakeholder consultation at PoA level.</i></p> <p><i>Please see section D.2 and D.3 of the SSC-PoA-DD for information on how comments by local stakeholders were invited, a summary of the comments received and how due account was taken of any comments received.”</i></p>	<p>In section D.1 of the revised PoA-DD the reasons for conducting LSC at PoA level has been justified.</p> <p>The same was found to be satisfactory.</p> <p>Hence CAR is closed.</p>
<p>CAR 11: The summary of comments received during stakeholder consultation process and how the comments were addressed is not provided in the PoA-DD.</p>	D.1.4. / D.1.5. / D.3.1. / D.4.1. /	<p>The summary of the comments received were added to the PoA-DD in section D.3, and how they were addressed is given in section D.4.</p> <p>D.3: <i>All stakeholders’ comments and concerns were recorded. No negative comments were raised by the</i></p>	<p>In section D.3 and D.4 of the revised PoA-DD the summary of comments received during stakeholder consultation process and how the comments were addressed provided.</p>



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		<p><i>stakeholders as can be seen below:</i></p> <p><i>Summary of comments received:</i></p> <ul style="list-style-type: none"> <li>• <i>How can we join your PoA?</i></li> <li>• <i>How many installations in a PoA?</i></li> <li>• <i>What type of monitoring equipment is required?</i></li> <li>• <i>Do you get carbon credits for off-grid projects?</i></li> <li>• <i>Can we include backdated Projects?</i></li> </ul> <p>D.4:</p> <p><i>All the stakeholders' comments were addressed during the meeting and concerns were taking into account in the present version of the PoA-DD. All stakeholders attended were provided with more information and explanation on how to join the programme, and how credits could be obtained.</i></p> <p><i>The number of installations in a PoA was explained as per section A.4.2 of this PoA-DD.</i></p> <p><i>Each installation will have an electricity meter as monitoring equipment.</i></p> <p><i>The interest of the stakeholders on the programme was positive.</i></p>	<p>The same was found to be satisfactory.</p> <p>Hence CAR is closed.</p>
<p>CAR 12: The PP needs to substantiate with evidences to prove that incentive from the CDM was seriously considered in the decision to proceed with the programme of activity.</p>	<p>E.5.2.5. /</p>	<p>Required evidence that CDM was considered before proceeding with the PoA has been given in section D.2. of the PoA:</p> <p><i>This meeting was held before submission of this PoA and therefore had CDM in mind before submission. Also, as previously mentioned, BWCC appointed BWC to develop the PoA under CDM. BWCC uses the incentives of CDM to encourage participation in this programme by enabling solar electrical system owners to either:</i></p> <p style="margin-left: 40px;">i) <i>Get a discount for the purchased price of</i></p>	<p>The CME conducted the LSC meeting for the PoA on 12/12/2011. A notification inviting the stakeholders for the same was published on 27/10/2011 in Sunday Times newspaper. The notification clearly states that the project will look to receive carbon revenues to reduce the cost of solar PV installations.</p>

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		<p><i>the solar electrical system or an annual rebate in exchange for cession of their rights to claim GHG emission reductions which will be achieved due to reduction in electricity generation at grid connected power plants, or</i></p> <p>ii) <i>Independently engage in the sale of CERs, therefore BWCC will receive a fee for their service.</i></p> <p>Also a local stakeholder meeting was held on 12/12/2011 to discuss the PoA, with a notification published in the Sunday Times on 27/10/2011, inviting stakeholders to this meeting. This notification states that <i>“The project will look to receive Carbon revenue to reduce the cost of solar PV installations.”</i></p>	<p>Hence it is substantiated that incentive from the CDM was seriously considered in the decision to proceed with the programme of activity. Furthermore as per § 3 of annex 26, EB 60 /B04-6/, “Guidelines for the demonstration and assessment of prior consideration of the CDM” do not apply to PoAs, as at present it is expected that no component of the programme will commence prior to the start date of validation of the PoA i.e., 23/12/2011</p> <p>Hence CAR is closed.</p>
<p>CAR 13: PP shall provide explanation on application of methodological choices as provided in the approved methodology and applicable tools to a typical SSC-CPA.</p>	<p>E.6.1.1. /</p>	<p>The required information has been introduced. A explanation has been given on the application of the methodological choices for this PoA as seen in section E.6.1 of the PoA-DD.</p>	<p>In section E.6.1 of the revised PoA-DD explanation on application of methodological choices as provided in the approved methodology and applicable tools to a typical SSC-CPA has been included.</p> <p>The same was found to be appropriate.</p> <p>Hence CAR is closed.</p>
<p>CAR 14: PP should only provide relevant information under the different sections of the PoA-DD in line with the requirements of SSC-CDM-PoA-DD form (version 01).</p>	<p>E.7.2.4. /</p>	<p>This has been done by taking into account all of the previous corrective actions.</p>	<p>PP has revised the PoA-DD and relevant information under the different sections of the PoA-DD in line with the requirements of SSC-CDM-PoA-DD form (version 01) have been provided.</p>

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			<p>This is found to be satisfactory.</p> <p>Hence CAR is closed.</p>
<p>CAR 15: In section E.8 of the PoA-DD, it has also not been clearly mentioned whether the entity responsible for determining the same are also the project participant as mentioned in Annex I of PoA-DD.</p>	E.8.1.5. /	<p>The required information has been added in section E.8 with BWCC appointing BWC to develop the baseline, and BWC not being a project participant.</p>	<p>Section E.8 of the PoA-DD has been revised and provides clear information that the entity responsible for the application of the baseline study and monitoring methodology is not the project participant as mentioned in Annex I of PoA-DD.</p> <p>Hence CAR is closed.</p>
<b>CLARIFICATION REQUESTS</b>			
<p>CL 1: The project participant is requested to clearly specify in the PoA-DD what kind of training and maintenance efforts will be required in order to carry out the project as per schedule during the project period.</p>	A.4.2.8. / A.4.2.9. /	<p>This is clarified in 'The Management System for the South African Small-Scale Solar Electrical Programme'; which was submitted to the DOE. As mentioned in section A.4.4.1 and point 3 of section E.7.2 of the PoA.</p>	<p>Section E.7.2 of the revised PoA-DD states that the personnel involved with monitoring and collection of data will undergo regular training. The same is also a part of "The Management System for the South African Small-Scale Solar Electrical Programme."</p> <p>It also states that trained staff members of the technology/equipment supplier will carry out operation and maintenance of solar electrical systems.</p> <p>Hence CL is closed.</p>
<p>CL 2:</p>	A.4.2.10. /	<p>This eligibility criterion has been added as eligibility</p>	<p>In section A.4.2 of the revised</p>

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<p>PP should clarify why no eligibility criteria for inclusion of CPAs was developed against the following two requirements of Annex 3 of EB 65 §14:</p> <ul style="list-style-type: none"> <li>• Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance</li> <li>• 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</li> </ul>		<p>criteria 8 in Table A-4.2. And a signed confirmation of this has been submitted to the DOE.</p> <p>This eligibility criterion is not applicable since the CME opts for verification of each CPA under the PoA..</p>	<p>PoA-DD, eligibility criterion has been provided for no diversion of ODA.</p> <p>In section A.4.4.2 of the revised PoA-DD, CME opts for verification of each CPA under PoA and hence applicability criterion for sampling is not applicable.</p> <p>The same was found to be satisfactory.</p> <p>Hence CL is closed.</p>
<p>CL 3: The PP should describe that a record keeping system for each CPA under the PoA, exists and is holistic and complete.</p>	<p>A.4.4.2. /</p>	<p>This is provided and clarified in Section 4 of 'The Management System for the South African Small-Scale Solar Electrical Programme', which was submitted to the DOE.</p>	<p>Section A.4.4.1 of revised PoA-DD provides a procedure for record keeping system for each CPA under the PoA.</p> <p>"The Management System for the South African Small-Scale Solar Electrical Programme" provides (as part of Annexures) templates for agreement between the owner of CPA and the CME to ensure the same.</p> <p>The same is found to be satisfactory.</p> <p>Hence CL is closed.</p>
<p>CL 4: The PP should describe a system to avoid double accounting i.e. to avoid that an included CPA under this PoA is not already registered as a CDM project or CPA in another PoA.</p>	<p>A.4.4.3. /</p>	<p>This information has been added in Table A.4-2 criteria 2, as well as in The Management System for the Small Scale Electrical System Programme, Table 1 point d), which is mentioned in section A.4.4.1.</p>	<p>Section A.4.4.1 of revised PoA-DD provides procedure to avoid double accounting i.e. to avoid that an included CPA under this PoA is not already registered as a CDM project or CPA in</p>

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			<p>another PoA.</p> <p>“The Management System for the South African Small-Scale Solar Electrical Programme” provides (as part of Annexures) templates for agreement between the owner of the CPA and the CME to ensure the same.</p> <p>The same is found to be satisfactory.</p> <p>Hence CL is closed.</p>
<p>CL 5: The PP should clearly describe a system or procedure to detect whether a CPA to be included in the PoA is not a de-bundled component of another CPA or CDM project for SSC-CPA (type 2).</p>	A.4.4.4. /	<p>See eligibility criteria 9 in Table A.4-2.</p> <p><i>“For CPA (type 1 and type 2) debundling checks shall be performed in line with EB 54 Annex 13.”</i></p> <p>The required information has been added in section A.4.4.1.</p> <p><i>“The de-bundling check will be conducted on the CPA level according to the guidelines as explained below.</i></p> <p><i>An activity within a proposed CPA<sup>11</sup> of this PoA shall be deemed to be a de-bundled component of a large scale activity if there is already an activity<sup>12</sup>, which satisfies both conditions (a) and (b) below:</i></p> <p><i>a) It has the same activity implementer as the proposed small scale CPA activity or has a coordinating or managing entity, which also manages a large scale PoA of the same technology/measure, and;</i></p> <p><i>b) The boundary is within 1 km of the boundary of</i></p>	<p>Section A.4.4.1 of the revised PoA-DD provides a procedure to ensure that a CPA to be included in the PoA is not a de-bundled component of another CPA or CDM project activity. Furthermore the same is also an eligibility criterion for the inclusion of future CPAs.</p> <p>The same is found to be satisfactory.</p> <p>Hence CL is closed.</p>

<sup>11</sup> Since there might be more than one activity within a CPA, the de-bundling check will be done for all activities within a Type 2 CPA and not only at CPA level.

<sup>12</sup> Which may be a (i) registered small-scale CPA of a PoA, (ii) an application to register another small-scale CPA of a PoA or (iii) another registered CDM project activity

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		<p><i>the proposed small-scale CPA activity, at the closest point.</i></p> <p><i>If a proposed activity of a small-scale CPA of this PoA is deemed to be a debundled component in accordance with the criteria above, but the total size of such a CPA activity combined with a registered small-scale CPA of a PoA or a registered CDM project activity does not exceed the limits for small-scale CDM project activities, the activity of a CPA of this PoA can qualify to use simplified modalities and procedures for small-scale CDM project activities.</i></p>	
<p>CL 6: The PP should provide evidences to the DOE to validate that a system is in place to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA.</p>	A.4.4.5. /	<p>A signed declaration (or agreement) between the owner of the activity and the CME has been made, as can be found in the Annexures of “The Management System for the South African Small-Scale Solar Electrical Programme”. This declaration needs to be signed before an activity can be included into a CPA.</p>	<p>The “The Management System for the South African Small-Scale Solar Electrical Programme” provides (as part of Annexures) templates for agreement between the owner of the activity and the CME to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA.</p> <p>The same is found to be satisfactory.</p> <p>Hence CL is closed.</p>
<p>CL 7: The PP states that monitoring plan is designed to calculate GHG emission reductions at CPA level. But as per the discussion with PP the SSC-CPA (Type 1) involve installation of several small scale activities with capacity below 0.15 MW and proper sampling approach and procedure should be provided in accordance with “STANDARD FOR SAMPLING AND SURVEYS FOR CDM PROJECT ACTIVITIES AND PROGRAMME OF ACTIVITIES”.</p>	A.4.4.6. / A.4.4.7. /	<p>Section A.4.4.2. states that:</p> <p><i>“This PoA does not use sampling method but will verify every each CPA. In addition, any sampling method or procedure is not utilised to implement the monitoring activity of the CPAs under the PoA.”</i></p>	<p>Section A.4.4.2 of the revised PoA-DD clearly states that CME opts for verification of each CPA under the PoA and does not envisage any sampling.</p> <p>The same was found to be satisfactory.</p> <p>Hence CL is closed.</p>

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<p>CL 8: Project participants should substantiate with evidences that no funding exists for PoA and if it exists it does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those parties.</p>	<p>A.4.5.1. / A.4.5.2. / F.2.1. / F.2.2. /</p>	<p>This information has been added in as eligibility criteria 8 in Table A-4.2 A signed declaration has been submitted to the DOE.</p>	<p>The CME has provided a written declaration (dated 07/08/2012) that the PoA does not involve any ODA.  Hence CL is closed.</p>
<p>CL 9: The starting date of PoA should be at least 4 week later from the date of request for registration. The PP is required to change the start date considering the same.</p>	<p>B.1.1. /</p>	<p>The starting date of PoA has been changed to 01/01/2013.</p>	<p>The starting date of PoA has been changed from 23/09/2011 to 01/01/2013 which is line with requirements of UNFCCC for uploading the PoA on the website for registration.  3.8  Hence CL is closed.</p>
<p>CL 10: In section E.7.2 of the PoA-DD, clearly specify the operation and management structure along with procedure for data collection, recording, checking, data transfer and archiving system for CPA under PoA and justify how it is consistent for all CPA under this PoA.</p>	<p>E.7.2.1. / E.7.2.2. / E.7.2.3. /</p>	<p>Section E.7.2 has been modified and information has been added to meet the requirements of this clarification.</p>	<p>Section E.7.2 of the revised PoA-DD provides clear information on operation and management structure along with procedure for data collection, recording, checking, data transfer and archiving system for CPA under PoA. The same is also a part of "The Management System for the South African Small-Scale Solar Electrical Programme, which applies to all the CPA under PoA. The same was found to be appropriate.  Hence CL is closed.</p>

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**Table3: Forward Action Requests**

Forward action request	Reference to Table 2	Response by project participants	Validation Conclusion
	-	-	-



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## APPENDIX B CERTIFICATE OF COMPETENCE

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Vikash Kumar Singh


is hereby certified as a

**Qualified CDM Technical Reviewer**

with Carbon Check (Pty) Ltd, under the regulations of the  
UNFCCC and Carbon Check's qualification criteria, in the following  
Technical Area/s:

**1.2, 3.1, 13.1**

Awarded: 11 October 2012

  
\_\_\_\_\_  
Chief Executive Officer  
Mr Adam Simcock