



# VALIDATION REPORT

## CAMCO CARBON AFRICA LIMITED

### VALIDATION OF THE SMALL SCALE GRID-CONNECTED SOLAR POWER PROGRAMME

BUREAU VERITAS CERTIFICATION  
REPORT No. **KENYA-VAL/010/2011**  
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**Summary:**

Bureau Veritas Certification has made the validation of the Small Scale Grid-connected Solar Power Programme project of Camco Carbon Africa Limited, located on Green Street, Channel House, St Helier, Jersey, JE2 4UH, Channel Islands on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion. The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the validation process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies the baseline and monitoring methodology AMS I.D. Grid connected renewable electricity generation --- Version 17.0 and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.

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KENYA-val/010/2011	CDM		
Project title:			
Small Scale	Grid-connected	Solar	Power Programme
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Work approved by:

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## 1 INTRODUCTION

Camco Carbon Africa Limited has commissioned Bureau Veritas Certification to validate its CDM project the Small Scale Grid-connected Solar Power Programme project (hereafter called “the PoA”) in the Republic of South Africa.

This report summarizes the findings of the validation of the project, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting. A separate validation report for the first specific CPA submitted together with the PoA is provided as attachment to this report.

### 1.1 Objective

The validation serves as project design verification and is a requirement of all projects. The validation is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design, as documented, is sound and reasonable, and meet the stated requirements and identified criteria. Validation is a requirement for all CDM projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).

UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

### 1.2 Scope

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

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



### 1.3 Validation team

The validation team consists of the following personnel:

FUNCTION	NAME	CODE HOLDER*	TASK PERFORMED
Lead Verifier	ANDREW KINYANJUI	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Verifier	EDGAR AMBAZA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Technical Specialist	JAMES MWANIKI	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input type="checkbox"/> RI
Financial Specialist	N.A.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI
Internal Technical Reviewer (ITR)	WANG Zhenning	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Specialist supporting ITR	N.A.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI

\*DR = Document Review; SV = Site Visit; RI = Report issuance

## 2 METHODOLOGY

The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a validation protocol was customized for the project, according to the version 01.2 of the Clean Development Mechanism Validation and Verification Manual, issued by the Executive Board at its 55<sup>th</sup> meeting on 30/07/2010. The protocol shows, in a transparent manner, criteria (requirements), means of validation and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes, details and clarifies the requirements a CDM project is expected to meet;
- 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 completed validation protocol is enclosed in Appendix A to this report.

### 2.1 Review of Documents

The PoA-DD, generic CPA-DD and Specific CPA-DD submitted by Camco Carbon Africa Limited and additional background documents related to the project design and baseline, i.e. country Law, Clean Development Mechanism Project Standard(PS), Approved methodology, Kyoto Protocol,



Clarifications on Validation Requirements to be Checked by a Designated Operational Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, Camco Carbon Africa Limited revised the PoA-DD and generic CPA-DD and resubmitted it on 29/11/2012. The validation findings presented in this report relate to the project as described in the PoA-DD version 2.0 and generic CPA-DD version 2.0. A separate report on the assessment of the first specific CPA to be included in this PoA is attached to this report.

## 2.2 Follow-up Interviews

On 30<sup>th</sup>–31<sup>st</sup> January 2012 Bureau Veritas Certification performed interviews with stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Camco Carbon Africa Limited were interviewed (see References). The main topics of the interviews are summarized in Table 1.

**Table 1 Interview topics**

Interviewed organization	Interview topics
Camco Carbon Africa Limited (CME)	<ul style="list-style-type: none"> <li>➤ Staff Training,</li> <li>➤ Project operation</li> <li>➤ sustainability</li> <li>➤ Project Design and implementation</li> <li>➤ Monitoring Plan and management procedures</li> <li>➤ Monitoring data</li> <li>➤ GHG Calculation</li> <li>➤ Data uncertainty and residual risks (QA/QC)</li> <li>➤ Environmental Impacts</li> <li>➤ Compliance with National Laws and Regulations</li> <li>➤ Additionality</li> <li>➤ Baseline data</li> <li>➤ Algorithms</li> <li>➤ Compliance with National Laws and Regulations</li> <li>➤ Monitoring</li> </ul>
LOCAL Stakeholder	<ul style="list-style-type: none"> <li>➤ Relevance of Sustainability Criteria</li> <li>➤ Stakeholder engagement</li> <li>➤ Energy savings</li> <li>➤ Energy use</li> <li>➤ Compliance with National Laws and Regulations</li> </ul>



## **2.3 Resolution of Clarification and Corrective Action Requests**

The objective of this phase of the validation is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the programme design.

Corrective Action Requests (CAR) is issued, where:

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

The validation team may also use the term Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

The validation team may also raise a forward action request (FAR) during validation to identify issues related to programme implementation that require review during the first verification of the CPA under the PoA.

To guarantee the transparency of the verification process, the concerns raised are documented in more detail in the verification protocol in Appendix A.

## **2.4 Internal Technical Review**

The validation report underwent an Internal Technical Review (ITR) before requesting registration of the programme.

The ITR is an independent process performed to examine thoroughly that the process of validation has been carried out in conformance with the requirements of the validation scheme as well as internal Bureau Veritas Certification procedures.

The Team Leader provides a copy of the validation report to the reviewer, including any necessary validation documentation. The reviewer reviews the submitted documentation for conformance with the validation scheme. This will be a comprehensive review of all documentation generated during the validation process.

When performing an Internal Technical Review, the reviewer ensures that:





The validation activity has been performed by the team by exercising utmost diligence and complete adherence to the CDM rules and requirements.

The review encompasses all aspects related to the project which includes PoA design, baseline, additionality, monitoring plans and emission reduction calculations, internal quality assurance systems of the CME as well as the PoA, review of the stakeholder comments and responses, closure of CARs, CLs and FARs during the validation exercise, review of sample documents.

The reviewer compiles clarification questions for the Team Leader and Validation Team and discusses these matters with Team Leader.

After the agreement of the responses on the 'Clarification Request' from the Team Leader as well as the PP(s) the finalized validation report is accepted for further processing such as uploading on the UNFCCC webpage.

### **3 VALIDATION CONCLUSIONS**

In the following sections, the conclusions of the validation are stated.

The findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are described in the Validation Protocol in Appendix A.

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A. The validation of the Project resulted in 2 Corrective Action Requests (CARs), 5 Clarification Requests (CLs) and 1 Forward Action Requests (FARs) for the PoA; and 2 CARs, 7 CLs and 1 (FAR) for the first CPA submitted together with the PoA.

The CARs and CLs were closed based on adequate responses from the Project Participant(s) which meet the applicable requirements. They have been reassessed before their formal acceptance and closure.

The number between brackets at the end of each section correspond to the VVM paragraph

#### **3.1 Approval (49-50)**

Letters of approval have been received and the following are support documentation:

- Letter of Approval from host party, Republic of South Africa, Department of Energy DNA dated 16/05/2012 provided.<sup>7</sup>



- Letter of Approval from project participant United Kingdom, Environmental Agency, Ref: EA/CamcoCarbAfrica/01/2012, 19/06/2012. Erreur ! Source du renvoi introuvable.

Bureau Veritas Certification received both letters of approval from Camco Carbon Africa Limited and does not doubt their authenticity.

The title and contents of the letters of approval refer to the precise proposed CDM programme activity title in the PoA-DD being submitted for registration.

Bureau Veritas Certification considers the letters are in accordance with paragraphs 45 - 48 of the VVM as follows:

- (a) Both letters confirm the Party is a Party to the Kyoto Protocol;
- (b) Both letters confirm the participation is voluntary;
- (c) The letter from the host country confirms that the proposed PoA contributes to the sustainable development of the country;
- (d) Both letters refer to the precise proposed PoA title in the PDD being submitted for registration.
- (e) Both letters of approval are unconditional with respect to the items above.
- (f) Both letters of approval have been issued by the Parties' DNAs and are valid for the proposed PoA under validation.

### **3.2 Participation (54)**

The participation for each project participant has been approved by a Party of the Kyoto Protocol. The validation team concluded this by referring to the UNFCCC [website](#).

### **3.3 Contribution to sustainable development (127 and 45)**

The host Party's DNA confirmed the contribution of the project to the sustainable development of the host Party through a letter of approval. Refer to item 3.1 of this report.

### **3.4 Project design document (57)**

The validation team hereby confirms that the PoA-DD, generic CPA-DD and specific CPA-DD complies with the latest PoA-DD form CDM-SSC-PoA-DD version 1 and CPA-DD form CDM-SSC-CPA-DD version 1.

### **3.5 PoA description (64)**

This PoA cover the geographical boundaries of the South Africa, with intent to expand the PoA boundaries, Post registration, by including more host countries. The validation team confirms that the boundary can be amended post registration as clarified through EB 60 annex 26.



The PoA aims to encourage the development of small scale grid-connected (less than or equal to 15MW) solar photovoltaic and solar thermal electricity technologies (hereinafter referred to as “solar power”).

More than one technology has been included in the PoA i.e. electricity generation from solar photovoltaic and solar thermal technologies are included in this PoA within the eligibility criteria of approved small scale methodology AMS-1.D – *Grid connected renewable electricity generation (version 17, EB 61)*. The objective and outcome of the PoA is the same for all small scale grid-connected solar power projects as much as the technologies applied in the CPA's may differ. The development of economically viable low carbon electrical generation capacity, which delivers power to the national/region grid that would have otherwise have been generated by the operation of existing grid-connected power plants and by the addition of new generation sources to the grid. The length of the PoA is 28 years and is inline with CDM requirements for PoAs.

The process undertaken to validate the accuracy and completeness of the PoA description involved physical site visit for two days (30th–31st January 2012) whereby a number of stakeholders were interviewed. Furthermore during the site visit the validation team was able have an overview of the infrastructure already in place. The validation team hereby confirms that the programme description in PoA-DD (Version 2, 29/11/2012) is accurate and complete in all respects.

### **3.6 Operational and management arrangements (VVM 166)**

Validation team has assessed the management system described in the PoA-DD in accordance with “*Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities*”. The validation team assessed compliance of the operational and management arrangements with paragraph 17 of the standard as follows:

*(a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies;*

The validation team confirms that the CME has defined roles and responsibilities of personnel involved in the CPA inclusion process as follows:

The CME is responsible for assessing and reviewing potential CPAs and through a contractual agreement with the implementing entity, assesses the eligibility for inclusion of the CPA. The CME has setup and split responsibility between three teams, CDM qualification, legal and POA team. All three teams report to the CME Managing Director who has



overall responsibility for the inclusion process. The PoA team will be responsible for the initial screening of CPAs that are likely to be included in the PoA; the Qualification team will carry out the technical review of the CPA, assess the eligibility of the CPAs for inclusion to the PoA and complete CPA-DD, while the Legal team will be responsible for contracting issues.

The role of the implementing entity is to provide all of the necessary project information and documentation to the CME to facilitate a comprehensive assessment of potential CPA's eligibility under the PoA, and enable the CME to complete the CPA-DD.

*(b) Records of arrangements for training and capacity development for personnel;*

The CME has described a future plan for training and capacity building in section A.4.1. as follows: staff members and respective roles will be recorded and kept up-to-date to allow for any gaps that may emerge in the CME team structures or capabilities of personnel to be easily identified and addressed. Training will be provided where applicable and a record of training provided to personnel will be kept and made available to the DOE on request. The validation team raised a Forward Action Request (FAR), that during the first verification of the first CPA, documentary evidence to show that training/ capacity building was conducted for the first CPA shall be provided by the CME.

*(c) Procedures for technical review of inclusion of CPAs;*

The validation team confirms that the CME has included a procedure for technical review of inclusion of CPAs as follows: The CME will perform a detailed technical review of all potential CPAs to ensure that only eligible CPAs under the eligibility criteria of the PoA are pursued. The CME will request the following documents: Feasibility study, Project information memorandum, Environmental impact assessment, Engineering design plans, Financial marketing materials and Financial due diligence report. Where such documents will not be available, the CME, together with the CPA implementing entity will take an informed view of the validity and accuracy of the CPA technical information available.

*(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);*

The validation team confirms that the CME has set a procedure to avoid double counting as follows: before inclusion of a CPA, a double accounting check will be performed. The double accounting check will involve cross checking the CPA against the CME's data base, UNFCCC database and CDM PoA project database information provided by the UNEP Risø Centre and the Institute for Global Environmental Strategies, to ensure that the



CPA is not already 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;*

The CME has developed an electronic database system that they will manage and maintain records and documents for the PoA. The Database system contains the following information for each CPA under the PoA: Unique CPA identification code<sup>7</sup>, CPA title/project name, Implementing entity – name, address, contact details, Solar power technology employed, installed generation capacity, Name of the electricity system to which the CPA is connected to, Location and CPA start date.

*(f) Measures for continuous improvements of the PoA management system;*

The validation team confirms that the CME has set up measures to improve the PoA management system as follows: the CME will carry out an annual assessment of the PoA management process. Participation will be drawn from all team members and CPA implementing entities.

The annual assessment will take the form of a questionnaire that will be sent out electronically to all CME staff and on paper to participating CPA implementing entities.

*(g) Any other relevant elements.*

The validation team confirms that the CME has further included other relevant elements to the management system which include: a procedure to check and ensure that any CPA to be included in the PoA is not a de-bundled component of another CPA or CDM project activity and a procedure to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA.

The validation team hereby confirms that the CME has developed and implemented a management system that includes complete elements required by **Para.17 of EB65 Ann03** and **VVM 166**. The validation team is also able to conclude that the CME has competencies to check the features of potential CPAs and ensures that each CPA will meet all requirements and eligibility criteria before inclusion in the PoA.

### **3.7 Eligibility criteria for inclusion a CPA in the PoA (167)**

Validation team has assessed the eligibility criteria for inclusion a CPA in the PoA in accordance with “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities”. The validation team assessed the compliance of the eligibility criteria to paragraph 14 of the standard as follows:



- a) The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA;*

The CME has set a criterion to check the geographical boundary of a CPA as follows: The CME requires that the CPA be located within the geographical boundary as stated in section A.4.1.2 of the PoA DD, which currently are the sovereign borders of the Republic of South Africa.

- b) Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);*

The CME has set a criterion to avoid double counting of emission reduction as follows: The CME requires the a CPA passes the double counting checks as detailed in section A.4.4.1 of the PoA DD. The CME has included a procedure to ensure that no double counting occurs as described in section 3.6 above

- c) The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;*

The CME has set a criterion to ensure that CPAs comply with the technologies being promoted by this PoA as follows: The CME requires that a CPA shall either: (a) Install a new solar power plant at a site where there was no solar power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a capacity addition (increase in the installed power generation capacity of an existing solar power plant); (c) Involve a retrofit (repair or modification of an existing solar power plant with the purpose of improving efficiency or performance without adding additional solar power plants or units); or (d) Replacement or retrofit of an existing solar plant with a new solar power plant or unit with generation capacity greater than or equal to the redundant unit(s)

The CME has set a criterion to ensure that a CPA complies with testing/certification requirement as follow: Each CPA is required to comply with all testing and certification requirements for solar power technologies in the relevant host country

- d) Conditions to check the start date of the CPA through documentary evidence;*

The CME has set a criterion that checks the start date of a CPA through documentary evidence as follows: The CME requires a CPA to have its start date (as defined in the CDM Glossary of Terms, version 06) falling after the start of validation of the PoA and supported by documentary evidence.

- e) Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;*





The validation team confirms that the CME has set criteria that ensure compliance with the applicability conditions of AMS-I.D version 17 as follows:

- a. A CPA shall either: (a) Install a new solar power plant at a site where there was no solar power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a capacity addition (increase in the installed power generation capacity of an existing solar power plant); (c) Involve a retrofit (repair or modification of an existing solar power plant with the purpose of improving efficiency or performance without adding additional solar power plants or units); or (d) Replacement or retrofit of an existing solar plant with a new solar power plant or unit with generation capacity greater than or equal to the redundant unit(s)
- b. A CPA shall either: (a) Supply electricity to a national/regional grid; or (b) Supply electricity to an identified consumer via national/regional grid through a contractual arrangement
- c. If the CPA has both solar power and non-solar power components, the eligibility limit of 15MW shall apply only to the solar power component. If the CPA involves a capacity addition then the added capacity shall not exceed 15MW and should be physically distinct from the existing solar power units; in the case of replacement or retrofit, the total output of the replaced or retrofitted solar power units shall not exceed 15MW
- f) *The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified in Section A of the standard ;*

The CME has set a criterion for CPAs' demonstration of additionality as follows: the CME requires a CPA to demonstrate additionality as detailed in section E.5 of the PoA-DD and section B.3. of the specific CPA DD. These sections give the conditions of additionality as follows: the CME requires that a CPA proves that it falls under Project types that are explicitly listed in the positive list of grid-connected renewable electricity generation technologies as described in Guidelines on the demonstration of additionality of small-scale project activities (Ver09.0, EB68, Annex27). The CPA shall demonstrating compliance to the eligibility criteria by showing that the CPA involves installation of solar technologies for electricity generation, the CPA is grid-connected and the CPA capacity is equal to or less than 15 MW. The validation team confirms that this criteria complies with paragraph 9 of the standard (EB65 annex3) since the additionality related eligibility criteria is derived from paragraph 2 of the Guidelines on the demonstration of additionality of small-scale project activities (Ver09.0, EB68, Annex27). *The PoA-specific requirements stipulated by the CME including any*



*conditions related to undertaking local stakeholder consultations and environmental impact analysis;*

The CME has set the following related criteria:

The CME requires that a CPA be in full compliance with all relevant host country laws, regulations and industry standards including undertaking local stakeholder consultation, environmental impact analysis and project licencing

A CPA will not be eligible for inclusion in the PoA if any of the energy generating equipment employed by the CPA has been transferred from another activity

*g) Conditions to provide an affirmation that funding from Annex 1 parties, if any, does not result in a diversion of official development assistance;*

The validation team confirms that the CME has a condition to avoid diversion of ODA from Annex 1 parties, if any, as follows: the CME requires that, where public funding is used in a CPA, it shall not result in a diversion of any official development assistance. The CPA is required to give details of public funding in such a case.

*h) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid connected/off-grid) and distribution mechanisms (e.g. direct installation);*

The CME has set the following related criterion: the CME requires that a CPA should either: (a) Supply electricity to a national/regional grid; or (b) Supply electricity to an identified consumer via national/regional grid through a contractual arrangement

*i) 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;*

The CME has not included any sampling requirements in the eligibility criteria since no sampling will be involved in this PoA.

*j) Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or microscale threshold criteria<sup>6</sup> and remains within those thresholds throughout the crediting period of the CPA;*

The CME has set the following criteria: For greenfield projects, have a total installed capacity of less than or equal to 15MW. If the CPA has both solar power and non-solar power components, the eligibility limit of 15MW shall apply only to the solar power component. If the CPA involves a capacity addition then the added capacity shall not exceed 15MW and should be physically distinct from the existing solar power units; in the case of replacement or retrofit, the total output of the replaced or retrofitted solar power units shall not exceed 15MW and If multiple sites





are included under a single CPA, all 15MW capacity constraints above refer to the aggregate capacity of all of the installations included. The validation team confirm that these criteria will ensure that the CPAs will remain within the small scale threshold.

*k) Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories.*

The CME has set the condition for debundling check as follows: The CME requires that a CPA shall pass the double counting checks as detailed in section A.4.4.1 of the PoA DD. This section of the PoA-DD provides a procedure and condition to ensure that a CPA is not a debundled component of another CPA or CDM project activity.

From the above analysis, the validation team confirms that, the eligibility criteria set by the CME, are verifiable.

The eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA.

Bureau Veritas Certification hereby confirms that the specified eligibility criteria in the PoA-DD are sufficient to ensure that all CPAs would comply with the CDM requirement applicable to the PoA, which includes the means of demonstrating the additionality of the CPA and the applicability of the applied methodology.

### **3.8 Baseline and monitoring methodology**

#### **3.8.1 Applicability of the selected baseline and monitoring methodology (76-77)**

The CME has indicated that all CPAs under the PoA will apply AMS-1.D version 17. The validation team has assessed the relevant information contained in the PoA-DD against each relevant applicability condition of the selected methodology as follows:

*Applicability condition (a): This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass: 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. (AMS-1.D ver 17 para 1)*

A review of the PDD and subsequent interview with the CME indicate that each CPA to be considered for inclusion in the PoA must comprise of solar power generation units that supply electricity to the national or regional grid; or to an identified consumer facility via the nation/regional grid through a contractual arrangement. The validation team confirms the applicability condition has been fulfilled.



*Applicability condition (b): 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 addition; (c) Involve a retrofit of (an) existing plant(s); or (d) Involve a replacement of (an) existing plant(s) (AMS-I.D ver 17 para 3)*

To full fill applicability condition (b) above, the CME indicates that each CPA must involved either:- The 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 (Greenfield plant), or a capacity addition (increase in the installed power generation capacity of an existing power plant), or a retrofit (repair or modification of an existing power plant with the purpose of improving efficiency or performance without adding additional power plants or units) or Replacement or retrofit of an existing plant with a new plant or unit with generation capacity greater than or equal to the redundant unit(s). The validation team confirms the applicability condition has bee fulfilled.

*Applicability condition (c): If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW (AMS-I.D ver 17 para 5)*

*Applicability condition (d): 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 (AMS-I.D ver 17 para 7)*

*Applicability condition (e): 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 (AMS-I.D ver 17 para 8)*

For applicability conditions (c), (d) and (e), the CME has indicated that for each CPA depending on the type of project, the following capacity constraints apply:

- For greenfield plants, a total installed capacity of less than or equal to 15MW
- If the CPA has both renewable and non-renewable components, the eligibility limit of 15MW shall apply only to the renewable component
- If the CPA employs technology that co-fires renewable and non-renewable fuels the capacity of the entire system shall not exceed 15MW



- If the CPA involves the addition of renewable generation then the added capacity shall not exceed 15MW and should be physically distinct from the existing units; in the case of replacement or retrofit, the total output of the replaced or retrofitted units shall not exceed 15MW

The validation team confirms the applicability conditions (c), (d) and (e) have been fulfilled.

By reviewing the PoA-DD and subsequent interview with the CME, the DOE hereby confirms that the selected baseline and monitoring methodology (Grid connected renewable electricity generation --- Version 17.0), is applicable to the PoA, which complies with all the applicability conditions therein.

### 3.8.2 PoA boundary (80)

The boundary for the PoA in terms of geographical area is defined as the geographical boundaries of the Republic of South Africa. The project boundary for each CPA to be included in the PoA is defined as the project power plant and all power plants connected physically to the electricity system that the CPA project power plant is connected to. The main source of GHG is CO<sub>2</sub> arising from fossil fuels fired in power plants connected to the national/region electricity system that the CPA is connected to, and for some solar technologies supplementary fossil fuels for electricity generation. CH<sub>4</sub> and N<sub>2</sub>O are considered as minor sources.

Bureau Veritas Certification confirms that in establishing the boundary of the PoA, the project participants have taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary. The DOE hereby confirms that the identified boundary and the selected sources and gases are justified for the PoA.

### 3.8.3 Baseline identification (87-88)

The steps taken to assess the requirement given in paragraph 81 and 82 of the VVM are described below:

The CME has indicated that all CPA to be included in the PoA will apply AMS-I.D version 17. The methodology expressly prescribes the baseline as:

*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*

Given that the methodology has a predetermined baseline, the validation team has assessed the applicability conditions of the methodology to the PoA as described in 3.8.1 of this report. The assessment concluded that the PoA has met all the applicability condition of therein. The baseline prescribed in the methodology is therefore applicable to the CPAs to be included in the PoA and no further assessment is required.



Based on the above assessment, the validation team hereby confirms that:

- (a) All the assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;
- (b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoA-DD;
- (c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- (d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD;
- (e) 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 PoA.

Verification of the sources of information used, in the PDD on this matter was cross checked during the site visit and objective evidence produced in hard copy or online visit to a number of websites quoted in the PDD.

### 3.8.4 Algorithms and/or formulae used to determine emission reductions (92-93)

The steps taken to assess the requirement outlined in paragraph 89 the VVM are described below. The validation team has compared the equations and parameters in the PDD against those provided in the methodology as follows:

#### Baseline emissions

From the approved methodology selected by CME (AMS-I.D version 17), baseline emissions are calculated as the product of electrical energy baseline  $EG_{BL, y}$  expressed in MWh of electricity produced by the renewable generating unit multiplied by the grid emission factor.

According to the CME, the quantity of electricity produced by each CPA ( $EG_{BL, y}$ ,  $EG_{BL, retrofit, y}$  or  $EG_{BL, capacity addition, y}$ ) will be determined through measurements. The grid emission factor will be calculated using the latest *"Tool to calculate the emission factor for an electricity system"*, using transparent and verifiable data that will be presented in each CPA design document. Then depending on the activity the CPA is involved in, the baseline emissions will be calculated as follows:

For Greenfield sites

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

Where:

$BE_y$  - Baseline Emissions in year  $y$  (t CO<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  $y$  (t CO<sub>2</sub>/MWh)

For retrofit or capacity addition projects

$$BE_{retrofit, CO_2, y} = EG_{BL, retrofit, y} * EF_{CO_2, grid, y}$$

Where:

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

$EG_{BL, retrofit, y} = 0$  on or after the point in time when the existing equipment would need to be replaced in any case in the absence of the project activity.

Where

$BE_{retrofit, CO_2, y}$  - The baseline emissions in year  $y$  (tCO<sub>2</sub>)

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

$EG_{PJ, facility, y}$  - Quantity of net electricity generation supplied by the total power plant (of which the project activity forms a part of) to the grid in year  $y$  (MWh)

$EG_{historical}$  - Annual average historical net electricity generation by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity (MWh)

Average of historical net electrical energy levels delivered by the existing facility, spanning all data from the most recent available year (or month, week or other time period) to the time at which the facility was constructed, retrofit, or modified in a manner that significantly affected output (i.e., by 5% or more), shall be used.

A minimum of 3 years of historical generation data is required for retrofit/replacement project activities. For any relevant CPA, if historical generation data of the require duration is not available, then that CPA will not be included under this PoA

$\sigma_{historical}$  - Standard deviation of the annual average historical net electricity generation by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity (MWh)

### Project emissions

For CPAs which also use supplementary fossil fuels



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

Where:

$PE_y$  - Project emissions in year y (tCO<sub>2</sub>e/y)

$PE_{FF,y}$  - Project emissions from fossil fuel consumption in year y (tCO<sub>2</sub>/y)

$PE_{FF,y}$  shall be calculated as per the latest version of the “Tool to calculate project leakage or CO<sub>2</sub> emissions from fossil fuel combustion”.

### Leakage emissions

Leakage is considered to be zero, since any CPA that employs electricity generation technology that has been transferred from another activity is ineligible under the PoA

### Emissions reduction

Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y$$

Where:

$ER_y$  Emission reductions in year y (tCO<sub>2</sub>e/y)

$BE_y$  Baseline emissions in year y (tCO<sub>2</sub>e/y)

$PE_y$  Project emissions in year y (tCO<sub>2</sub>e/y)

Steps taken and equations applied, by the CME, to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected baseline and monitoring methodology

Based on the above assessment, the validation team hereby confirms that:

- (a) All assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;
- (b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PoA-DD;
- (c) All values used in the PoA-DD are considered reasonable in the context of the proposed CDM project activity;
- (d) The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions;
- (e) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PoA-DD.

By crosschecking the equations, parameters, their description and application in the PoA against the requirements of the approved AMS-I.D, the validation team confirms that the CME has correctly applied the methodology to determine baseline emissions, Project emissions, leakage





emissions and emissions reduction for each CPA that will be included in the PoA

### 3.9 Additionality of PoA

#### 3.9.1 Start date of the PoA/CPA (104)

That start date of the PoA has been defined as the date when the PoA-DD is published for Global Stakeholder Consultation (06/12/2011 - [weblink](#)). The validation team confirms that this is inline with the latest definition of the start date of a PoA (Glossary of terms version 7).

The eligibility criteria of the start date for inclusion of CPA has been set as follows: *The CME requires a CPA to have its start date (as defined in the CDM Glossary of Terms, version 06) falling after the start of validation of the PoA and supported by documentary evidence.*

Bureau Veritas Certification confirms: that the start date of any CPA will not be prior to the commencement of the validation of the PoA, which is the date of the CDM-PoA-DD was first published for global stakeholder consultation (06/12/2011- [weblink](#))

#### 3.9.2 Demonstration of additionality of the PoA as a whole (97)

Additionality is demonstrated at the CPA level through illustrating compliance with the eligibility criteria set out in section A.4.2.2. of PoA DD. More specifically, all eligible CPAs will i) employ a solar power technology (photovoltaic or solar thermal electricity generation); ii) be grid-connected, and iii) have a generation capacity no greater than 15MW. Additionality of eligible CPAs is therefore predefined in accordance with Guidelines on the demonstration of additionality of small-scale project activities (Ver09.0, EB68, Annex27)

Project types that are explicitly listed in the positive list of grid-connected renewable electricity generation technologies in Guidelines on the demonstration of additionality of small-scale project activities (Ver09.0, EB68, Annex27) are automatically defined as additional without further documentation of barriers. Solar technologies up to 15MW of installed capacity are included in the positive list and are therefore defined as additional.

Validation team has assessed the additionality of a PoA in accordance with Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities and confirms that:

- a) None of the proposed CPAs would occur in the absence of CDM since the PoA intends to use economies of scale to make the CPAs viable and therefore without the PoA the CPAs will not be implemented.
- b) The CME has developed an additionality related eligibility criteria derived from paragraph 2 of Guidelines on the demonstration of



additionality of small-scale project activities (Ver09.0, EB68, Annex27). The criteria are described in section E.5.2 of the PoA-DD version 2. The criteria is set such that any CPA to be included in the PoA will fall under the positive list of project activities that are defined as automatically additional

Bureau Veritas Certification confirms that the CME has complied with the additionality related requirements of the standard and that none of the implemented CPA would occur in the absence of CDM.

### 3.10 Monitoring plan (124)

The validation team hereby confirms that the monitoring plan complies with the requirements of the methodology.

The steps taken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the programme design are described below.

The validation team reviewed the PoA description and the selected methodology to identify relevant parameters that require monitoring. The following parameters were identified:

CO<sub>2</sub> emission factor of the grid electricity in year y ( $EF_{CO_2,y}$ ),

CO<sub>2</sub> emission factor of fossil fuel type i,

Net calorific value of fossil fuel type i,

Quantity of fossil fuel consumed in year y

Quantity of net electricity supplied to the grid in year y ( $EG_{facility,y}$ ,  $EG_{actual,y}$ ,  $EG_{add,y}$ )

The validation team confirms that the CME has correctly identified and described all of the above parameters. Each CPA is required to report  $EF_{CO_2,y}$  in the CPA-DD while the rest of the parameters will be monitored throughout the crediting period.

The validation team confirms that the CME has documented Data monitoring procedures, QA and QC procedures, and an organisation of the monitoring plan. The CME has opted for verification of each CPA by DOE. Monitoring plan for each CPA will be developed according to the applied baseline and monitoring methodology. The transparent system will be developed for monitoring, data collection and storage at PoA level.

The validation team has conducted a review of documents and physical inspection of the proposed CPA to assess the monitoring plan.





The validation team hereby confirms that the monitoring arrangements are feasible within the project design and that the means of implementation are sufficient to ensure that the emission reductions can be report ex post and verified. The validation team hereby confirms that the project participants are able to implement the monitoring plan.

### **3.11 Environmental impacts (133)**

The CME has undertaken an analysis of environmental impacts at CPA level.

The CME has included, in the eligibility criteria for CPAs, full compliance with all relevant host country laws, regulations and industry standards including environmental impact analysis.

### **3.12 Local stakeholder consultation (130)**

The CME has undertaken the local stakeholder consultation at CPA level. The CME has included, in the eligibility criteria for CPAs, full compliance with all relevant host country laws, regulations and industry standards including undertaking local stakeholder consultation.

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

The PDD using Baseline and monitoring methodology AMS-1.D – Grid connected renewable electricity generation (version 17, EB 61), was webhosted on the UNFCCC [website](#) for global stakeholder's comments as per CDM requirements and invited comments prior to end of Global Stakeholder Consultation on 06 Dec 2011 by Parties, stakeholders and non-governmental organizations.

No comments were received during this period.

## **5 Validation opinion**

Bureau Veritas Certification has performed a validation of the Small Scale Grid-connected Solar Power Programme. The validation was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The validation consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final validation report and opinion.

The CME used the latest Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities for demonstration of the additionality. In line with this standard, the PoA-DD demonstrate the in



the absence of CDM none of the CPA would be implemented under the PoA.

The Small Scale Grid-connected Solar Power Programme offer the ability to exploit smaller pockets of solar energy resources that have less potentially negative impact on the local environment (such as smaller areas of land taken up by solar arrays). Small scale projects attract capital flows from smaller developers looking for opportunities to enter the market, which helps to create and sustain local businesses and employment. The project is likely to result in reductions of GHG emissions partially. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The review of the PoA-DD version 02, 29/11/2012 and generic CPA-DD and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification thus requests registration of “Small Scale Grid-connected Solar Power Programme” as CDM programme of Activity.



## 6 REFERENCES

### Category 1 Documents:

Documents provided by Type the name of the company that relate directly to the GHG components of the project.

1. Small Scale Grid-connected Solar Power Programme PoA-DD, ver. 1.0, 28/11/2011
2. Small Scale Grid-connected Solar Power Programme CPA-DD, ver. 1.0, 28/11/2011
3. Small Scale Grid-connected Solar Power Programme PoA-DD - Template.doc
4. AMS-1.D – *Grid connected renewable electricity generation (version 17, EB 61)*
5. Small Scale Grid-connected Solar Power Programme PoA-DD, ver. 2.0, 23/03/2012
6. Small Scale Grid-connected Solar Power Programme CPA-DD, ver. 2.0, 23/03/2012
7. LOA\_South\_Africa.
8. LOA\_UK

### Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents.

- /1/ Baseline Information
- /2/ Renewables 2011, Global status report
- /3/ UN Energy for Sustainable Development: Policy Options for Africa
- /4/ IPP Procurement Programme - RFP
- /5/ TENDER NO: DOE/001/2011/2012, The Republic of South Africa, Department of Energy Request for qualification and proposals for new generation Capacity under the IPP procurement programme



**Persons interviewed:**

List persons interviewed during the validation or persons that contributed with other information that are not included in the documents listed above.

1. Mr. Eoin Martin
2. Glen Louwrens
3. Nathan Williams - EAB-Astrum Energy (Pty) Ltd



## 7 CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

### Bureau Veritas Certification - Lead Verifier and team leader – Andrew Kinyanjui

Andrew Kinyanjui – Holds Diploma in Chemical Engineering. He had 5 yrs experience in Industrial production before joining BV. He has obtained 7 years experience in management systems audits and training and two years experience in CDM validation / verification at BV. He obtained the certificate of CDM Lead Verifier certificate. and Lead auditor for ISO 14001 He conducted Validation / Verification for more than 4 CDM/GS Projects.

### Verifier – Edgar Ambaza

Edgar Ambaza – Holds BSc Natural Resource Management. He has worked in manufacturing sectors for 3 years before joining BV. He has undergone intensive training on Clean Development Mechanism at BV. He obtained the certificate of CDM Lead Verifier certificate and Lead auditor for ISO 14001 and 50,001.

### Technical Specialist – James Mwaniki

Graduate in Electrical Engineering with over 25 years of experience power generation and energy demand and distribution as well as in energy management audits. He is the technical expert & supported this Validation.

### Internal Reviewer – WANG Zhenning

He holds an MSc Degree in Environmental Technology and Bachelor Degree in Environmental Engineering. Before joining BV in 2010, he gained 4 years of technical experiences in the CDM industry in P.R China. He obtained the certificate of CDM Verifier in Nov 2010 and Lead Auditor for ISO14001.



## VALIDATION REPORT

## APPENDIX A: COMPANY CDM PROGRAMME VALIDATION PROTOCOL

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
1. Approval			<i>COUNTRY A</i> <i>(Republic of South Africa)</i>	<i>COUNTRY B</i> <i>(United Kingdom of Great Britain and Northern Ireland)</i>		
1.1. Have the letters of approval obtained from each host Party and Annex I Party which wishes to be involved in the PoA?	EB55 Ann38 VVM	9  45	<a href="#">CAR 1</a> Letters of approval not provided CAR 1 was closed by providing Letter of Approval from Department of Energy DNA) dated 16/05/2012 provided.	United Kingdom, Environmental Agency (DNA) issued LoA Ref: EA/Camco Carb Africa/01/2012 issued on 19/06/2012 was provided.	<a href="#">CAR 1</a>	CAR closed OK
1.2. Are letters of approval be issued in accordance with the guidance provided by the Board (EB 16 report, Annex 6)?  - The Party is a Party of the Kyoto Protocol - The participation is voluntary - In the case of the host Party, the proposed	EB55 Ann38  EB16 Ann6 VVM	9  1  45	Yes, as referred in the two letters of approval		Ok	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
CDM programme contributes to the sustainable development of the country  - Refers to the precise proposed CDM project activity title in the PoA-DD being submitted for registration						
1.3. Has the coordinating/managing entity obtained letters of authorization of its coordination of the PoA from each host Party?	EB55 Ann38	10	Yes, as per the LoA from the two parties		Ok	OK
1.4. If, subsequent to the registration of the programme, the coordinating/managing entity has changed, are below documents submitted?  - New letter(s) of authorization by the each respective host Party stating the change in the coordinaing/managing entity  - A confirmation from new coordinating/managing entity that the PoA will be developed and implemented with the same set framework as originally described in the CDM-SSC-PoA-DD	EB55 Ann38	12	N.A.	N.A.	OK	OK
1.5. Is (are) the letter(s) of approval unconditional with respect to (b) above?	VVM	46	No	No	OK	OK
1.6. Has (ve) the letter(s) of approval been issued by the respective Party's designated national authority (DNA) and is valid for the CDM project	VVM	47	Yes, Department of Energy, Republic South Africa	Yes, Environmental Agency, United	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
activity under validation?				Kingdom		
1.7. Is there doubt with respect to the authenticity of the letter of approval?	VVM	48	No	No	OK	OK
1.8. If yes, was verified with the DNA that the letter of approval is authentic?	VVM	48	N/A		OK	OK
<b>2. Participation</b>			<i>PP1 (Camco Carbon Africa Limited)</i>	<i>PP2 (Camco Carbon Africa Limited)</i>		
2.1. Are the operators of individual CPAs considered to be project participants?	EB55 Ann38	8	No	N.A.	OK	OK
2.2. Is CDM programme participation recorded at the PoA level?	EB55 Ann38	8	Yes.	Yes.	OK	OK
2.3. Has the approval of participation issued from the relevant DNA?	VVM	53	Yes, Department of Energy, Republic South Africa	Yes, Environmental Agency, United Kingdom	Ok	OK
2.4. Is there doubt with respect to (2.3) above?	VVM	53	No	No	Ok	OK
2.5. If yes, was verified with the DNA that the approval of participation is valid for the proposed project participant?	VVM	53	N/A	N/A	Ok	OK
2.6. Does the DOE have a contractual relationship with the project participants?	EB50 Ann48	7	No.	Yes.	OK	OK





## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
<b>3. General description of PoA(Section A of CDM-SSC-PoA-DD)</b>					
3.1. In Section A.1 of CDM-SSC-PoA-DD, is a title for the PoA provided?	EB33	Ann43	Yes. Small Scale Grid-connected Solar Power Programme	OK	OK
3.2. Description of programme of activities(Section A.2 of CDM-SSC-PoA-DD)	EB33	Ann43			
3.2.1. Is a framework developed for the implementation of the proposed CDM PoA and inclusion of CPAs under the PoA?	EB33 PS	Ann43	Yes, a clear framework has been provided under section A.4.4.1. Operational and management plan, of the PoA DD	OK	OK
3.2.2. Is Policy/measure or stated goal that the proposed PoA seeks to promote provided?	EB33	Ann43	Yes. The goal of this PoA is to encourage development of small scale grid-connected solar photovoltaic and solar thermal electricity technologies, achieving emission reductions across a number of developing countries.	OK	OK
3.2.3. Is it confirmed that the proposed PoA is a voluntary action by the coordinating/managing entity	EB33	Ann43	Yes. It has been confirmed that the PoA is a voluntary action by Camco Carbon Africa Limited	OK	OK
3.3. Coordinating/managing entity and participants of PoA(Section A.3 of CDM-SSC-PoA-DD)	EB33	Ann43			



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
3.3.1. Coordinating or managing entity of the PoA as the entity which communicates with the Board	EB33	Ann43	Yes, Camco Carbon Africa Limited will be the coordinating/managing entity.  <a href="#">CAR 2</a>  However, the information in section A.3 is not consistent with the contact details provided in annex 1 of the PDD as only details of one party provided i.e. CME (Camco Carbon Africa) CAR 2 was closed after the PP amended the table in section A3 of PoA-DD to be consistent with information in Annex 1 Reference: PoA DD section A.3.	<a href="#">CAR 2</a>	CAR Closed OK
3.3.2. Project participants being registered in relation to the PoA	EB33 PS	Ann43	Yes.  Camco Carbon Africa Limited will project participant being registered in relation to the PoA.	OK	OK
3.4. Technical description of the programme of activities(Section A.4 of CDM-SSC-PoA-DD)	EB33	Ann43			
3.4.1. In Section A.4.1 of CDM-SSC-PoA-DD, is location of the programme of activities defined?	EB33	Ann43	Yes.	OK	OK
1.1. Host Party(ies)	EB33	Ann43	Yes.	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Republic of South Africa is Host Party.		
1.2. Definition of the boundary for the PoA in terms of a geographical area(e.g., municipality, region within a country, country or several countries) within which all CPAs included in the PoA will be implemented, taking into consideration the requirement that all applicable national and/or sectoral policies and regulations of each host country within that chosen boundary.	EB33	Ann43	The geographical location covered by the PoA has been defined as the sovereign borders of the, Republic of South Africa. The PP has intent to expand the boundary post registration.	Ok	OK
3.4.2. In Section A.4.2.1 of CDM-SSC-PoA-DD, is (are) technology or measures to be employed by the CPA provided?	EB33	Ann43	CPAs may employ any solar photovoltaic or solar thermal electricity generation technologies (less than or equal to 15MW) that are eligible under approved small scale methodology AMS-1.D – <i>Grid connected renewable electricity generation (version 17, EB 61)</i> .	OK	OK
3.4.3. In Section A.4.2.2 of CDM-SSC-PoA-DD, is eligibility criteria for inclusion of a CPA in the PoA provided?	EB33	Ann43	Yes	OK	OK
3.4.3.1. The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	EB65 Ann3	14(a)	Yes. Be located within the geographical boundary as stated in section A.4.1.2 of the PoA DD.	OK	OK
3.4.3.2. Conditions that avoid double counting of emission reductions like unique	EB65 Ann3	14(b)	Yes, a CPA under the PoA shall fulfill the	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
identifications of product and end-user locations (e.g. programme logo)			double accounting check to avoid the case of including a new CPA that has been already registered either as a CDM project activity or as a CPA of another PoA  Pass the double counting checks as detailed in section A.4.4.1 of the PoA DD		
3.4.3.3. The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	EB65 Ann3	14(c)	Yes.  Either: (a) Install a new solar power plant at a site where there was no solar power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a capacity addition (increase in the installed power generation capacity of an existing solar power plant); (c) Involve a retrofit (repair or modification of an existing solar power plant with the purpose of improving efficiency or performance without adding additional solar power plants or units); or (d) Replacement or retrofit of an existing solar plant with a new solar power plant or unit with generation capacity greater than or equal to the redundant unit(s)	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
3.4.3.4. Conditions to check the start date of the CPA through documentary evidence	EB65 Ann3	14(d)	Yes, Have its start date (as defined in the CDM Glossary of Terms, version 06) falling after the start of validation of the PoA, verified by documentary evidence	OK	OK
3.4.3.5. Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs	EB65 Ann3	14(e)	Yes ( derived from AMS-I.D version 17 para 1,3,5,7 and 8) a. A CPA shall either: (a) Install a new solar power plant at a site where there was no solar power plant operating prior to the implementation of the project activity (Greenfield plant); (b) Involve a capacity addition (increase in the installed power generation capacity of an existing solar power plant); (c) Involve a retrofit (repair or modification of an existing solar power plant with the purpose of improving efficiency or performance without adding additional solar power plants or units); or (d) Replacement or retrofit of an existing solar plant with a new solar power plant or unit with generation capacity greater than or equal to the redundant unit(s) b. A CPA shall either: (a) Supply	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			<p>electricity to a national/regional grid; or            (b) Supply electricity to an identified consumer via national/regional grid through a contractual arrangement</p> <p>c. If the CPA has both solar power and non-solar power components, the eligibility limit of 15MW shall apply only to the solar power component. If the CPA involves a capacity addition then the added capacity shall not exceed 15MW and should be physically distinct from the existing solar power units; in the case of replacement or retrofit, the total output of the replaced or retrofitted solar power units shall not exceed 15MW</p>		
3.4.3.6. The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality	EB65 Ann3	14(f)	<p>Yes,</p> <p>Demonstrate additionality as detailed in section E.5 of the PoA-DD and section B.3. of the specific CPA DD</p>	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
3.4.3.7. The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis	EB65 Ann3	14(g)	Yes,  Be in full compliance with all relevant host country laws, regulations and industry standards including undertaking local stakeholder consultation, environmental impact analysis and project licencing	OK	OK
3.4.3.8. Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance	EB65 Ann3	14(h)	Yes,  In the case where public funding is used, not result in a diversion of any official development assistance, as detailed in section A.4.5 of the PoA DD	OK	OK
3.4.3.9. Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid connected/ off-grid) and distribution mechanisms (e.g. direct installation);	EB65 Ann3	14(i)	Yes,  Either: (a) Supply electricity to a national/regional grid; or (b) Supply electricity to an identified consumer via national/regional grid through a contractual arrangement	OK	OK
3.4.3.10. 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	EB65 Ann3	14(j)	N.A. as no sampling will be involved.	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
3.4.3.11. Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or microscale threshold criteria and remains within those thresholds throughout the crediting period of the CPA	EB65 Ann3	14(k)	<p>Yes.</p> <p>For greenfield projects, have a total installed capacity of less than or equal to 15MW</p> <p>If the CPA has both solar power and non-solar power components, the eligibility limit of 15MW shall apply only to the solar power component</p> <p>If the CPA involves a capacity addition then the added capacity shall not exceed 15MW and should be physically distinct from the existing solar power units; in the case of replacement or retrofit, the total output of the replaced or retrofitted solar power units shall not exceed 15MW</p> <p>If multiple sites are included under a single CPA, all 15MW capacity constraints above refer to the aggregate capacity of all of the installations included</p>	OK	OK
3.4.3.12. Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or	EB65 Ann3	14(l)	<p>Yes.</p> <p>Pass the de-bundling checks as detailed</p>	OK	OK





## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
microscale project categories			in section A.4.4.1 of the PoA DD		
3.4.4. Is the eligibility criterion verifiable?	EB65 Ann3	15	CL 6 Yes, however eligibility criteria paragraph 14 (b, c) not completely addressed.	<u>CL 6</u>	CL closed. OK
3.4.5. Are the eligibility criteria sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA?	EB65 Ann3	16	CL 6 Yes, however eligibility criteria paragraph 14 (b, c) not completely addressed. CL 6 was closed as reference made to <i>section III B of the "Requirements for updating eligibility criteria" (para 14-18) of the Standard for the Development of Eligibility Criteria for the Inclusion of a Project Activity as a CPA under the PoA, version 01.0, Annex 3, EB 63.</i> have now been added to the PoA DD and generic CPA DD.	<u>CL 6</u>	CL closed. OK
3.4.6. In Section A.4.3 of CDM-SSC-PoA-DD, is additionality assessed and demonstrated as following?	EB33	Ann43			
3.4.6.1. Is the proposed PoA a voluntary coordinated action?	EB33	Ann43	Yes.	OK	OK
3.4.6.2. If the PoA is implementing a voluntary coordinated action, would it be	EB33	Ann43	None of the proposed CPAs would occur in the absence of CDM since the PoA	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
implemented in the absence of the PoA?			intends to use economies of scale to make the CPAs viable and therefore without the PoA the CPAs will not be implemented.		
3.4.6.3. If the PoA is implementing a mandatory policy/regulation, is this enforced?	EB33	Ann43	N.A.	OK	OK
3.4.6.4. If mandatory a policy/regulation is enforced, will the PoA lead to a greater level of enforcement of the existing mandatory?	EB33	Ann43	N.A.	OK	OK
3.4.7. In Section A.4.4.1 of CDM-SSC-PoA-DD, is the following description of the operational and management arrangement established by the coordinating/managing entity for the implementation of the PoA included?	EB33	Ann43			
3.4.7.1. A record keeping system for each CPA under the PoA	EB33	Ann43	Yes.  The CME will manage and maintain a safe electronic database for the PoA containing information required for each CPA under the PoA has been designed in Section 4.4.1 of PoA DD	OK	OK
3.4.7.2. A system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been	EB33	Ann43	Yes.  Every CPA to be included in the PoA will	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
already registered either as a CDM project or as a CPA of another PoA			be contracted on the basis that is exclusive to Camco Carbon Africa Limited. To fulfil this legal exclusivity requirement, each CPA will undergo a double accounting check to ensure that it has not already been registered as a CDM project activity or as a CPA in another PoA. Every CPA will be cross referenced with the UNFCCC CDM website project cycle and validation search pages: <a href="http://cdm.unfccc.int/Projects/projsearch.html">http://cdm.unfccc.int/Projects/projsearch.html</a> <a href="http://cdm.unfccc.int/Projects/Validation/index.html">http://cdm.unfccc.int/Projects/Validation/index.html</a>		
3.4.7.3. The SSC-CPA included in the PoA is not a de-bundled component of another CPA or CDM project activity	EB33	Ann43	Every CPA will be cross referenced with the UNFCCC CDM website project cycle and validation search pages: <a href="http://cdm.unfccc.int/Projects/projsearch.html">http://cdm.unfccc.int/Projects/projsearch.html</a> <a href="http://cdm.unfccc.int/Projects/Validation/index.html">http://cdm.unfccc.int/Projects/Validation/index.html</a> A CPA will be deemed a de-bundled component of a large scale project activity if an existing project activity	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			exists that is both: a) Implemented by the same entity or managed by the same CME as the proposed CPA; and b) Located within 1km of the proposed CPA, as measured from the closest point		
3.4.7.4. The provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA	EB33	Ann43	Yes.  A contractual arrangement will be executed between the CME and each CPA implementing entity as per the details provided in the PoA DD	OK	OK
3.4.7.5. A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies	EB65 Ann3	17(a)	Yes.  Role distributed between three teams: CDM qualification, legal and POA team	OK	OK
3.4.7.6. Records of arrangements for training and capacity development for personnel	EB65 Ann3	17(b)	A plan for training is indicated section A.4.1 of the PoA-DD. No records are available. Since this can only be verified after the implementation of the project, a FAR is raised.  FAR: Evidence to show that training/ capacity building was conducted for the first CPA shall be provided by the CME.	FAR	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
3.4.7.7. Procedures for technical review of inclusion of CPAs	EB65 Ann3	17(c)	<p>Yes.</p> <p>Procedures have been included.</p> <p><a href="#">CL 4</a></p> <p>However, the means of implementation of the monitoring plan sufficient to ensure that the emission reductions achieved by resulting from the proposed CDM project activity can be reported ex post and verified is not clear i.e. lack of quality assurance procedures</p> <p>CL 4 was closed by providing details relating to quality assurance in the monitoring plan at both the PoA DD and CPA DD levels.</p>	<a href="#">CL 4</a>	OK
3.4.7.8. Records and documentation control process for each CPA under the PoA	EB65 Ann3	17(e)	<p>Yes.</p> <p>Will be done through electronic database system.</p>	OK	OK
3.4.7.9. Measures for continuous improvements of the PoA management system	EB65 Ann3	17(f)	<p>Yes.</p> <p>Measures for continuous improvements of the PoA management system have been included.</p>	OK	OK
3.4.7.10. Any other relevant elements	EB65	17(g)	Yes,	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
	Ann3		A procedure to check and ensure that any CPA to be included in the PoA is not a de-bundled component of another CPA or CDM project activity and a procedure to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA.		
3.4.8. In Section A.4.4.2 of CDM-SSC-PoA-DD, is the following Information regarding monitoring plan provided?	EB33	Ann43			
3.4.8.1. Description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the amount of reductions of anthropogenic emissions by sources or removals by sinks of greenhouse gases achieved by CPAs under the PoA	EB33	Ann43	N/A as no sampling will be involved	OK	OK
3.4.8.2. In case the coordinating/managing entity opts for a verification method that does not use samping but verifies each CPA (whether in groups or not, with different or indentical verification periods), a transparent system is to be defined and described that ensures that no double accounting occurs and that the status of	EB33	Ann43	Yes. A transparent system is defined and described in Section A.4.4.1. of PoA_DD	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
verification can be determined anytime for each CPA					
3.5. In Section A.5 is information regarding public funding of the programme activities provided?	EB33	Ann43	Yes. No public funding involved and this is included at the CPA level.	OK	OK
4. Duration of the programme of activities(Section B of CDM-SSC-PoA-DD)	EB33	Ann43			
4.1. In Section B.1 of CDM-SSC-PoA-DD, is starting date of the PoA defined?	EB33	Ann43	The starting date of the PoA is the date when the PoA DD is published for Global Stakeholder Consultation.	OK	OK
4.2. In Section B.2 of CDM-SSC-PoA-DD, is length of the PoA defined?	EB33	Ann43	Yes. 28 years	OK	OK
5. Environmental Analysis(Section C of CDM-SSC-PoA-DD)	EB33	Ann43			
5.1. In Section C.1 of CDM-SSC-PoA-DD, is environmental analysis conducted at PoA level or CPA level?	EB33	Ann43	Yes. The environmental analysis is undertaken at CPA level.	OK	OK
5.2. If environmental analysis is conducted at PoA level, is the documentation on the analysis of the environmental impacts, including transboundary impacts provided in Section C.2 of CDM-SSC-PoA-DD	EB33	Ann43	N.A.	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
5.3. In Section C.3 of CDM-SSC-PoA-DD, is it stated that whether in accordance with the host Party laws/regulations, an environmental impact assessment is required for a typical CPA included in the PoA?	EB33	Ann43	N.A.	OK	OK
<b>6. Stakeholders' comments(Section D of CDM-SSC-PoA-DD)</b>					
6.1. In Section D.1 of CDM-SSC-PoA-DD, is the local stakeholder consultation process done at PoA level or CPA level?	EB33	Ann43	Yes. Local stakeholder comments are invited at CPA level.	OK	OK
If the comments by local stakeholders were invited with regard to the whole PoA,	EB33	Ann43			
6.2. In Section D.2 of CDM-SSC-PoA-DD how were these comments invited and compiled?	EB33	Ann43	N.A.	OK	OK
6.2.1. In Section D.3 of CDM-SSC-PoA-DD, is the summary of the comments received complete?	EB33	Ann43	N.A.	Closed	OK
6.2.2. In Section D.1 of CDM-SSC-PoA-DD, how due account was taken of all comments received?	EB33	Ann43	N.A.	Closed	OK
<b>7. Application of a baseline and monitoring methodology(Section E of CDM-SSC-PoA-DD)</b>					
7.1. In Section E.1 of CDM-SSC-PoA-DD, are title and reference of the approved methodology (including any other methodologies or tools)	EB33	Ann43	Yes. AMS-1.D – Grid connected renewable electricity generation (version 17, EB 61)	OK	OK





## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
applied to each CPA included in the PoA provided?					
7.2. Justification of the choice of the methodology and why it is applicable to each CPA(E.2 of CDM-SSC-PoA-DD)					
7.2.1. Is choice of an approved baseline and monitoring methodology (or combination of approved methodologies) justified?	EB33	Ann43	N.A.	OK	OK
7.2.2. Is each of the applicability conditions of the approved methodology or other methodology component referred to therein met?	EB33	Ann43	The applicability conditions in the PoA DD in section E.2 are complete and in line with the applied methodology.	OK	OK
7.3. In CDM-SSC-PoA-DD section E.3, is description of the sources and gases included in the SSC-CPA boundary provided?	EB33	Ann43	Yes.	OK	OK
7.4. In CDM-SSC-PoA-DD section E.4, are description of how the baseline scenario is identified and description of the identified baseline scenario provided?	EB33	Ann43	Assuming applicability of AMS-1.D as outlined in section E.2, the baseline scenario is that the electricity delivered to the grid as a result of the project activity would have otherwise been generated by the operation of grid-connected power plants and/or by the addition of new generation sources to the grid.	OK	OK
7.5. Assessment and demonstration of additionality	EB33	Ann41			



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
for a typical CPA(Section E.5 of CDM-PoA-DD)					
7.5.1. In Section E.5.1 of CDM-PoA-DD, have the PPs demonstrated additionality of a typical CPA using the procedure provided in the baseline and monitoring methodology applied?	EB33	Ann41	In accordance with Guidelines on the demonstration of additionality of small-scale project activities (Ver09.0, EB68, Annex27), project types that are explicitly listed in the positive list of grid-connected renewable electricity generation technologies are automatically defined as additional without further documentation of barriers.		OK
7.5.2. In Section E.5.2 of CDM-PoA-DD, have the PPs provided the key criteria for assessing additionality of a CPA when proposed to be included in the registered PoA?	EB33	Ann41	Yes	OK	OK
7.5.2.1. Have the PPs justified the choice of criteria based on the analysis in Section E.1?	EB33	Ann41	N/A		OK
7.5.2.2. Is it demonstrated how these criteria would be applied to the additionality of a typical CPA at the time of inclusion	EB33	Ann41	N/A		OK
7.5.2.3. Has the CME demonstrated that compliance with the additionality-related eligibility criteria set in the PoA design document will ensure that all the relevant additionality-related guidelines, tools or	EB65 Ann3	11	N/A		OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
any requirements embedded in the methodologies are met?					
7.5.2.4. For PoAs involving combinations of technologies/measures and/or methodologies, is the eligibility criteria relative to each of them proposed to demonstrate additionality	EB65 Ann3	12	N/A		OK
7.6. Estimation of Emission reductions of a CPA(Section E.6 of CDM-SSC-PoA-DD)					
7.6.1. In Section E.6.1 of CDM-PoA-DD, are methodological choices provided in the approved baseline and monitoring methodology applied, selected for a typical CPA explained and justified?	EB33	Ann43	Justification of the choice of the methodology has been provided in section E.2 of the PoA DD	OK	OK
7.6.2. In Section E.6.2 of CDM-PoA-DD, are equations including fixed/default parametric values to be used for calculations of emission reductions of a CPA provided and justified?	EB33	Ann43	<a href="#">CL 1</a> The PP calculates the project emissions as per the latest version of the "Tool to calculate project leakage or CO2 emissions from fossil fuel combustion". However version number missing. CL 1 was closed out by updating the PoA DD and CPA DD to this effect. Reference: PoA DD and CPA DD's	<a href="#">CL 1</a>	CL Closed. OK
7.6.3. In CDM-SSC-PoA-DD section E.6.3, are data and parameters that are to be reported in	EB33	Ann43	Yes.	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
CDM-SSC-CPA-DD provided?			The data and parameters to be reported have been provided in CDM-SSC-PoA-DD section E.6.3.		
7.7. Application of the monitoring methodology and description of the monitoring plan(Section E.7 of CDM-SSC-PoA-DD)					
7.7.1. In Section E.7.1 of CDM-PoA-DD, are data and parameters to be monitored by each CPA provided in accordance with the CDM-PoA-DD form?	EB33	Ann43	Yes.	OK	OK
7.7.2. In Section E.7.2 of CDM-PoA-DD, is a detailed description of the monitoring plan provided:	EB33	Ann43	Yes.	OK	OK
7.7.3. Is the monitoring plan for a CPA in accordance with the approved monitoring methodology?	VVM	122	Yes.		OK
7.8. In Section E.8 of CDM-SSC-PoA-DD for, is the following provided?					
7.8.1. Date of completion of the application of the baseline study and monitoring methodology	EB33	Ann43	Yes. The baseline study and monitoring methodology has been determined on 25/11/2011	OK	OK
7.8.2. The name of responsible person(s)/entity(ies)	EB33	Ann43	Yes, Eoin Martin Camco Carbon Africa Limited	OK	OK



## VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
<b>8. Other information(Annex of CDM-SSC-PoA-DD)</b>					
8.1. In Annex 1 of CDM-SSC-PoA-DD, is contact information on coordinating /managing entity and participants in the Programme of Activities provided as following?	EB33	Ann43	Yes.	OK	OK
8.1.1. Contact information on CME and participants in the PoA provided?	EB33	Ann43	Yes.	OK	OK
8.1.2. For each organization listed in section A.3, the following mandatory fields: Organization, Name of contact person, Street, City, Postfix/ZIP, Country, Telephone and Fax or e-mail	EB33	Ann43	Yes.	OK	OK
8.2. In Annex 2 of CDM-SSC-PoA-DD, is the background information regrading public funding provided?	EB33	Ann43	Yes.	OK	OK
8.3. In Annex 3 of CDM-SSC-PoA-DD, is the background information used in the application of the baseline methodology provided	EB33	Ann43	Yes.	OK	OK
8.4. In Annex 4 of CDM-SSC-PoA-DD, is the background information used in the application of the monitoring methodology provided	EB33	Ann43	Yes.	OK	OK

**Table 2:**

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
Letters of approval from all the parties have not been provided.	CAR 1	<p>Draft Validation Report is required by the South African DNA for the LoA process to begin.  UK LoA requires a host country LoA.  Excerpt from DNA doc:  <i>"The project developer then submits the project details to the DNA in the form of a Project Design Document (PDD). This must be accompanied by a completed application form. Note that the PDD should already have been validated by the Designated Operational Entity at this stage. See the UNFCCC website for further details of the validation process."</i></p> <p>Reference Doc provided</p>	CAR 1 has been closed by providing Letters of Approval from Republic of South Africa, Department of Energy (DNA) dated 16/05/2012 and United Kingdom, Environmental Agency (DNA) LoA Ref: EA/Camco Carb Africa/01/2012 issued on 19/06/2012 were provided.
The information in section A.3 is not consistent with the contact details provided in annex 1 of the PDD as only details of one party provided i.e. CME (Camco Carbon Africa)	CAR 2	<p>PP has amended section A3 to be consistent with annex 1  Reference: PoA DD section A.3.</p>	Closed



## VALIDATION REPORT

The summary of the comments received as provided in the PDD is not complete.	CAR 3	/	. CAR 3 refers to the specific CPA and has been moved to the right section of the CPA-DVR
In excel sheet ER calcs, from E51 to I51, the years indicated do not correspond to the data reference in <a href="http://www.eskom.co.za/content/calculationTable.htm">http://www.eskom.co.za/content/calculationTable.htm</a>	CAR 4	/	CAR 4 refers to the specific CPA and has been moved to the right section of the CPA-DVR
The PP calculates the project emissions as per the latest version of the "Tool to calculate project leakage or CO2 emissions from fossil fuel combustion". However version number missing.	CL 1	"Tool to calculate project leakage or CO2 emissions from fossil fuel combustion" (Version 02) has been used for the Project Design Document (PDD). PoA DD and CPA DD have been updated to this effect. Reference: PoA DD and CPA DD's	Closed
It is not clear if the CDM benefits were considered in the decision to undertake the project as a proposed CDM project activity	CL 2	It is not clear if the CDM benefits were considered in the decision to undertake the project as a proposed CDM project activity  In accordance with Annex 26 to EB meeting 60, paragraph 3: <i>"The Board agreed that the Guidelines for the demonstration and assessment of prior consideration of the CDM do not apply to PoA"</i>	Closed



## VALIDATION REPORT

Project participants have not demonstrated in the PDD on how due account of any comments received. However, the process is described.	CL 3	/	CL 3 refers to the specific CPA and has been moved to the right section of the CPA-DVR
The means of implementation of the monitoring plan sufficient to ensure that the emission reductions achieved by resulting from the proposed CDM project activity can be reported ex post and verified is not clear i.e. lack of quality assurance procedures	CL 4	<p><b>Camco:</b></p> <p>The means of implementation of the monitoring plan sufficient to ensure that the emission reductions achieved by resulting from the proposed CDM project activity can be reported ex post and verified is not clear i.e. lack of quality assurance procedures</p> <p>Further detail relating to quality assurance has now been provided in the monitoring plan at both the PoA DD and CPA DD levels.</p>	Closed





## VALIDATION REPORT

<p>It is not clear whether for a new project, for which PDD has not been published for global stakeholder consultation or a new methodology proposed to the CDM Executive Board before the project activity start date, if the PP had informed the Host Party DNA and/or the UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status? (Provide reference to such confirmation from host Party DNA and/or UNFCCC secretariat).</p>	CL 5	<p><b>Camco:</b>  <b>With reference to UNFCCC secretariat:</b> In accordance with Annex 26 to EB meeting 60, paragraph 3:  <i>"The Board agreed that the Guidelines for the demonstration and assessment of prior consideration of the CDM do not apply to PoA"</i>            Reference: Doc CL 2 in validation pack</p> <p><b>With reference to host party DNA:</b>            In accordance with the "South African DNA Project Approval Process"            (available here:  <a href="http://www.energy.gov.za/files/esources/kyoto/dnaapproval.pdf">http://www.energy.gov.za/files/esources/kyoto/dnaapproval.pdf</a>)            Under "Voluntary Screening", <i>"if the developer chooses initial voluntary screening, then they must submit a project identification note (PIN) and application form to the DNA"</i> Camco has discussed this project with the host party DNA and has chosen not to conduct initial screening for this Programme of Activities. Therefore, there is no requirement to officially inform the host party DNA of the commencement of the project activity and intention to seek CDM status.</p> <p><b>Conclusion:</b> the PP has not informed the Host Party DNA and/or the UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status as there is no requirement to do</p>	Closed
			56



## VALIDATION REPORT

Project description in the PDD does not sufficiently cover all relevant elements i.e. eligibility criteria paragraph 14 (b, c) not completely	CL 6	<b>Camco:</b> Reference to <i>section III B of the "Requirements for updating eligibility criteria" (para 14-18) of the Standard for the Development of Eligibility Criteria for the Inclusion of a Project Activity as a CPA under the PoA, version 01.0, Annex 3, EB 63.</i> have now been added to the PoA DD and generic CPA DD.	Closed
Only 14 power plants (ER calcs excel sheet) for ESKOM are considered in calculating the GEF. Information from ESKOM and NESRA indicates existence of more power plants. Kindly justify the exclusion of other power generation station like Acacia, Port Rex, Ankerli, Gourikwa, Municipal and Private power generation plants	CL 7	/	CL 7 refers to the specific CPA and has been moved to the right section of the CPA-DVR



## VALIDATION REPORT

In Step 4 of the “Tool to calculate the emission factor for an electricity system”, Option A has been chosen to calculate simple OM, kindly provide justification for the choice.	CL 8	/	CL 8 refers to the specific CPA and has been moved to the right section of the CPA-DVR
In Step 5 of the “Tool to calculate the emission factor for an electricity system” provides for a choice between two options; Please indication which option was taken and justification for the choice of such an option	CL9	/	CL 9 refers to the specific CPA and has been moved to the right section of the CPA-DVR



## VALIDATION REPORT

Kindly indicate the source of data for Net Calorific Value (NCVi,y) (GJ/t), Fuel CO2 Emission Factor (EFCO2,i,y) (tCO2/GJ) used in ER calcs excel sheet.	CL 10	/	CL 10 refers to the specific CPA and has been moved to the right section of the CPA-DVR
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