VALIDATION REPORT

EMERGENT VENTURES INDIA PRIVATE LIMITED

VALIDATION OF THE NATIONAL SOLAR POWER DEVELOPMENT PROGRAMME, INDIA

REPORT NO. INDIA-VAL-POA/367.49/2012

REVISION NO. 01

BUREAU VERITAS CERTIFICATION

62/71 Boulevard du Château
92571 Neuilly Sur Seine Cdx - France

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Client: Emergent Ventures India Pvt. Ltd.	Client ref.: Mr. Atul Sanghal

Summary:

Bureau Veritas Certification has made the validation of the National Solar Power Development Programme, India PoA of Emergent Ventures India Pvt. Ltd. applicable to the project boundary of the entire host country of India 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 PoA'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 PoA activity correctly applies the baseline and monitoring methodology AMS-I.D. Version 17 and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.

Report No.: INDIA-VAL-PoA/367.49/2012		Subject Group: CDM
Project title: National Solar Power Development Programme, India		
Work carried out by: Anupam Badola – Team Leader V. Senthil Kumar – Team Member		
Internal Technical Review carried our by: H.B. Muralidhar General Manager, Climate Change Services		
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Indexing terms

Work approved by:
Flavio Gomes

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1 INTRODUCTION

Emergent Ventures India Pvt. Ltd. has commissioned Bureau Veritas Certification to validate its CDM PoA National Solar Power Development Programme, India (hereafter called "the project") applicable to the project boundary of the entire host country of India.

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.

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 meets 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	Anupam Badola	☒Yes ☐ No	☒DR ☒SV ☐RI
Verifier	V. Senthil Kumar	☒Yes ☐ No	☒DR ☒SV ☐RI
Technical Specialist	Not Applicable	☐Yes ☐ No	☐DR ☐SV ☐RI

Financial Specialist	Not Applicable	☐Yes ☐ No	☐DR ☐SV ☐RI
Internal Technical Reviewer (ITR)	H.B. Muralidhar	☒Yes ☐ No	☒DR ☐SV ☐RI
Specialist supporting ITR	Insert name of N.A.	☐Yes ☐ No	☐DR ☐SV ☐RI
Report approval	Flavio Gomes	☐Yes ☒ No	☒DR ☐SV ☒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 PoA, according to the version 01.2 of the Clean Development Mechanism Validation and Verification Manual, issued by the Executive Board at its 55th 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 Design Document (PDD) submitted by Emergent Ventures India Pvt. Ltd. and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for Completing the PoA Design Document (CDM-PoADD), 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, Emergent Ventures India Pvt. Ltd. revised the PDD and resubmitted it on 05/2012.

The validation findings presented in this report relate to the project as described in the PoADD version 1.2.

2.2 Follow-up Interviews

On 04/01/2012 Bureau Veritas Certification conducted the site visit of the associated CPA and also performed interviews with project stakeholders and the associated CPA to confirm selected information and to resolve issues identified in the document review. Representatives of Emergent Ventures India Pvt. Ltd. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Emergent Ventures India Pvt. Ltd.	➢ Preparation of the Programme of Activities ➢ The eligibility criteria for inclusion of the CPAs under the PoA ➢ Additionality of the PoA ➢ Management system implemented by the CME for the PoA ➢ Baseline and the monitoring procedure identified by the CME ➢ Data recording, archiving, procedures to avoid double counting, de-bundling and review of the inclusion of the CPAs ➢ Review of the document control process of each CPA under the proposed PoA
LOCAL Stakeholder	➢ Views and concerns about the project activity CPA. ➢ Confirmation of local stakeholder's meeting conducted by the associated CPA included in the proposed PoA
CONSULTANT	➢ Not Applicable

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 project design.

Corrective Action Requests (CAR) is issued, where:

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

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.

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 a Internal Technical Review (ITR) before requesting registration of the PoA.

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 Lead Verifier 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 project design, baseline, additionality, monitoring plans and emission reduction calculations, internal quality assurance systems of the project participant as well as the project activity, 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 Lead Verifier and Validation Team and discusses these matters with Lead Verifier.

After the agreement of the responses on the 'Clarification Request' from the Lead Verifier 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 PoA resulted in 08 Corrective Action Requests (CARs) and 06 Clarification Requests (CLs).

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)

Bureau Veritas Certification received letter of approval from the CME (Emergent Ventures Pvt. Ltd.). In accordance with Para 48 of VVM version 1.2, the validation team does not doubt the authenticity of the letter of approval as the letter of approval (Ref /1/) dated 03/04/2012, bearing reference no. 4/2/2012-CCC, has been issued on the official letter head of the issuing authority (i.e. Ministry of Environment and Forest, Govt. of India which is Designated National Authority of India) and signed by the deputy secretary climate change.

The title and contents of the letter of approval refer to the precise proposed CDM PoA title in the web-hosted PoADD and the revised PoADD being submitted for registration. Also, the letter of approval mentions that PoA contributes to the sustainable development in India. The letter is unconditional with respect to the party to the Kyoto Protocol, voluntary participation and contribution to sustainable development. The validation team confirms that the host country approval letter is in accordance with paragraphs 45 – 48 of VVM version 1.2. Bureau Veritas Certification considers the letters are in accordance with paragraphs 45 - 48 of the VVM.

However, at the time of the issuance of the DVR, the host country approval letter was not available to the project participant and hence, the validation team raised CL 1. In the response to CL 1, the project participant provided a copy of the host country approval letter issued by Ministry of Environment and Forest; Government of India. Hence, CL 1 was closed by the validation team.

3.2 Participation (54)

The participation for each project participant has been approved by a Party of the Kyoto Protocol.

The PoADD specifies the name of the Coordinating/Managing Entity as M/s Emergent Ventures Pvt. Ltd. and this entity's participation is approved by DNA approval letter (Letter No: 4/2/2012-CCC dated 03/04/2012 (Ref /1/). Hence, the validation team confirms that the participation has been approved by a Party of the Kyoto Protocol (National CDM Authority, Government of India). In accordance with Para 48 of the VVM version 1.2, the validation team does not doubt the authenticity of the letter of approval as the same has been issued on the official letterhead of the Government of India; Ministry of Environment and Forest, signed by Deputy Secretary Climate Change (Ref. No. 4/2/2012-CCC; dated 03/04/2012). The letter of approval clearly states that India has ratified the Kyoto Protocol and the approval is for voluntary participation in CDM project activity. Also, the letter of approval confirms that PoA contributes to sustainable development in India.

3.3 PoA design document (57)

The validation team hereby confirms that the PoADD complies with the applicable forms of the guidance documents for completion of PoADD. The proposed PoA is a small-scale activity and the validation team confirms that the CME has used the appropriate and applicable PoADD form for the web-hosting and the PoADD being submitted for registration[1].

The Bureau Veritas Certification made the PoADD, it's associated CPADD and generic CPA DD form available for public comments on UNFCCC web-interface from 06/09/2011 to 05/10/2011 based on the latest available PoADD, CPADD forms at the time of web-hosting. However, after the desk review of the PoADD the validation team observed that some of the sections of the PoADD were not complete. The details of the same have been described under subsequent sections of the validation report.

3.4 Changes in the PoADD

The PoADD, Generic CPADD and the specific CPADD using methodology AMS-I.D. Version 17 were webhosted on the UNFCCC website for global stakeholders comments in accordance with the CDM Modalities and Procedures from 06/09/2011 to 05/09/2011.

The validation team carried out the desk review of the web-hosted PoADD published for global stakeholder comments and found some inadequacies in the same which have been discussed in details under section 3.5 of the validation report. The revised PoADD being submitted for registration has following changes in comparison to the web-hosted PoADD:

[1] http://cdm.unfccc.int/Reference/Manuals/VVM_and__VVStimeline.pdf In accordance with the Detailed timeline and milestones for the implementation of the PS, VVS and PCP, the existing PoADD and CPADD forms can be submitted for request for registration by DOE until 30th Sept. 2012

- The project participant's view on country's sustainable development has been incorporated under section A.2 of the PoADD
- The technology description provided under section A.4.2.1 has been corrected by the CME
- The eligibility criteria for the inclusion of the CPAs under the proposed PoA have been detailed with respect to their verifiability, comprehensiveness and being objective under section A.4.2.2
- System/procedure to avoid double accounting have been further clarified by the CME
- The justification for the applicability conditions of the applied methodology AMS-I.D. Version 17 have been detailed under section E.2 of the PoADD
- The additionality demonstration of the PoA has been revised in accordance with the latest approved version 08 of the Appendix A to Attachment B
- Procedures for computation of the project emissions arising from fossil fuel consumption and fossil fuel monitoring procedures as applicable to CPAs on case-by-case basis have been incorporated by the CME in the revised PoADD

The validation team confirms that the above-subject changes bring more clarity and meet the requirements of the CDM Modalities and Procedures applicable for the Programmes of Activity CDM projects. The validation team confirms that the PoADD, version no. 1.2 being submitted for registration complies with all the relevant forms and guidance approved by the CDM Executive Board.

3.5 Project description (64)

The process undertaken to validate the accuracy and completeness of project description was carried out by means of the desk review of web-hosted PoADD, CPADD, interviews of the personnel involved in implementation of the PoA and associated CPA being submitted to the validation team. The validation team also carried out the physical site inspection of the associated CPA on 04/01/2012 and also reviewed the supporting documents related to the PoADD and CPADD during validation site visit and desk review.

The PoA, titled as "National Solar Power Development Programme, India" has been developed by the Emergent Ventures India Private Limited. The PoA aims at installation and operation of grid-connected solar power projects based on Solar Photovoltaic (SPV) and/or Concentrated Solar Power (CSP) of up to 15 MW installed capacity. The project boundary of the proposed PoA has been considered as entire host country of India (host country). Thus, the host country itself becomes the project boundary for the programme. Since the proposed PoA only covers the grid connected renewable electricity generation technology (only solar PV and solar thermal), in the absence of the CPAs covered/to be covered under the PoA, the equivalent electricity would have been generated through the grid connected power plants in India which mainly rely on the fossil fuel for electricity generation. Thus, the CPAs under the proposed PoA will lead to the emission reductions by injecting the renewable electricity into the fossil fuel dominated regional grids of India that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.

The validation team observed based on the desk review of the web-hosted PoADD that under section A.2, the project participant's view on sustainable development indicators (as set out by the National CDM Authority of India) was not provided in the web-hosted PoADD. The validation team raised CAR 1 with respect to the same. In response to CAR 1, the CME provided it's view on all the four sustainable development indicators set out by the national CDM authority of India (India DNA). In addition, the host country approval letter (Ref /1/) also confirms that project activity contributes to the sustainable development in India. Hence, CAR 1 was closed by the validation team.

It was noted by the validation team that in section A.2 of the web-hosted PoADD, the project participant specified that "Each SSC-CPA(s) under the PoA is expected to generate approximately 1500 MWh of net electricity/annum/MW installed capacity which corresponds to an emission reduction of approximately 1200 tCO2/annum". The validation team raised CL 2 on the same for the further justification of the expected electricity generation and emission reduction for the each CPA to be included in the PoA considering the fact that each CPA may vary with respect to the project capacity, technology type (CSP or PV), emission factor of the grid, etc. In response to CL 2 the project participant provided the revised PoADD and only specified the expected electricity generation and emission reductions from the associated CPA being submitted for registration along with the PoA. Hence, the revision was accepted by the validation team and CL 2 was closed.

The project participant, under section A.4.2.1, of the web-hosted PDD provided the generalised technology description of the CPAs to be implemented under the proposed PoA programme. It was observed by the validation team that in the pictorial diagram of the grid connected solar photovoltaic technology; the storage battery devices were depicted. Thus, validation team raised a Clarification Request (CL 3) on the same. In response to the CL 3, the project participant stated that there will be no batteries for the storage of the direct current from the Solar PV projects as all the CPAs will be grid connected projects. The validation team also confirmed the same during the site visit conducted for the associated CAP on 04/01/2012. The project participant provided the revised PoADD where Batteries were removed from the pictorial diagram of the grid connected solar photovoltaic technology. Based on the description contained in the revised PoADD and validation of the same through physical site visit conducted for the associated CPA, the validation team confirmed the description appropriate and closed CL 3.

The CME provided the eligibility criteria for the inclusion of the CPAs under the proposed PoA under section 4.2.2 of the web-hosted PDD. However, it was noted by the validation team that the eligibility criteria, presented in the web-hosted PoADD, were not sufficiently objective and comprehensive to permit the assessment of the inclusion of the CPAs in the proposed PoA and raised CAR 2 on the same.

Further during the course of validation, the CDM Executive Board approved the "Standard for the development of eligibility criteria for the inclusion of a project activity as a CPA under the PoA" in the CDM Executive Board meeting report 63 (Annex 3). The standard provides explicit guidance on the eligibility criteria need to be developed by the CME for the inclusion of the CPA. The CME revised the eligibility criteria for the inclusion of the CPA under the proposed PoA in accordance with Annex 3 of EB 63. The validation team assessed, in details, each of the eligibility criteria based on its being verifiable, comprehensiveness and being objective and the assessment of the validation team has been presented in the table below:

Sr. No.	Eligibility Criteria	The evaluation of each of the eligibility criteria (developed by the CME for inclusion of the CPA under the proposed PoA) by the validation team	
		Is it verifiable?	**Is it objective?**
a.	The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA;	Yes, the evaluation criterion is verifiable as supporting documents referred for verification are DPR, Lat/long obtained through GPS device, EPC purchase orders and statutory approvals obtained for the project	Yes, the evaluation criterion is objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.
b.	Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);	Yes, the CME has developed a system to provide a unique identification number to the each CPA to be included in the proposed PoA. In addition, the CME has proposed the cross-verification of the information from the UNFCCC website	Yes, the evaluation criterion is objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.

		(which is reliable, updated and verifiable information).	
c.	The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;	Yes, the CME has provided the basis for the evaluation on the grounds of the review of one or more of supporting documents such as tender documents, purchase orders, power purchase agreements, commissioning certificates of the project and technology offer provided by the supplier.	Yes, the evaluation criterion is objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.
d.	Conditions to check the start date of the CPA through documentary evidence;	Yes, the evaluation criterion relies on the verification of the start date of the CPA in accordance with the glossary of the CDM terms (earliest date of the financial commitment of the PP towards construction or implementation) through review of the EPC contracts/purchase orders placed by the CPA project developer. Further, the criterion ensures that start date of the CPA remains after the first date of publication of the PoA for global stakeholder comments i.e. 06/09/2011.	Yes, the evaluation criterion is objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.
e.	Conditions that ensure compliance with applicability and other requirements of single or multiple methodology/ies applied by CPAs;	Yes, the PoA is only applying a single methodology AMS-I.D. Version 17. The criterion also provides the provision of applying the latest available version of the methodology for the subsequent CPAs to be included under the PoA. The criterion also ensures that multiple methodologies are not applied under the PoA and also allows the confirmation of the same by means of taking an undertaking from the CPA	Yes, as the PoA does not allow the multiple methodologies, the provisions included related to applying the latest available version of the methodology and The details of the applicability criteria under the AMS-I.D. have been listed by the CME under section E.2 of the PoADD which sufficiently pinpoint the compliance with the applicability of the methodology and is of the relevance to the issue in the question.

		PP. The details of the applicability criteria under the AMS-I.D. have been listed by the CME under section E.2 of the PoADD.	
f.	The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality	Yes, the proposed PoA only involves the implementation of the projects which automatically deemed additional by the CDM Executive Board and termed as positive list of technologies. The PoA aims at implementation of grid connected solar PV / solar thermal projects of up to 15 MW capacities). The evaluation criterion along with the description presented in section E.5.2 of the PoADD sufficiently justifies the additionality evaluation of the each CPA to be included under the PoA.	Yes, in section E.5.2 following three criteria have been incorporated by the project participant which are objective in nature and verifiable through the supporting evidences a) The SSC-CPA shall involve implementation and operation of a new power generation plant through either solar photovoltaic (SPV) or solar thermal technology b) The electricity generated from the SSC-CPA project activity should be supplied to the national / regional grid system within India and c) The installed capacity of SSC-CPA shall not exceed 15 MW. The CME has also referred to the documentary verifiable evidences such as DPR, purchase orders, PPAs to ascertain the eligibility of the CPA under positive list of technology.
g.	The PoA-specific requirements stipulated by the CMEs including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;	Yes, in accordance with the notification from Government of India, Ministry of Environment and Forest, the solar PV technology[2] and solar thermal technology[3] do not come under the ambit of the EIA regulation. Thus, EIA requirement for the solar PV technology and solar thermal technology, EIA is not applicable.	The EIA is not applicable for the solar thermal and solar PV technology. The evaluation criterion for the local stakeholder meeting consultation has been made objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.

[2] http://moef.nic.in/downloads/public-information/OM-SolarPV.pdf
[3] http://mnre.gov.in/file-manager/UserFiles/environmental_clearance_grid_connect_stp_jnnsm.pdf

		However, the project participant has incorporated the evaluation criterion for the local stakeholder consultation process at the time of inclusion of the CPA under PoA by means of validation of the records of the stakeholder meeting such as photographs, minutes of meeting, notice/advertisement for the meeting, attendee list to confirm the same.	
h.	Target group (e.g. domestic/commercial/industrial, rural/urban, grid connected/off-grid) and distribution mechanisms (e.g. direct installation);	Yes, the target group identified by the CME is “grid connected projects” i.e. electricity to be injected in the regional grids of India. The same to be verified by the CME by means of the review of the Power Purchase Agreement or any approval from the concerned statutory body.	Yes, the evaluation criterion is objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.
i.	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 does not intend to apply sampling. Instead, all the SSC-CPA activities to be monitored and verified. This is the optimal approach in the context of the grid connected power plants and the applied methodology AMS-I.D. Version 17.	Yes, the evaluation criterion is objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.
j.	The conditions that ensure that CPA in aggregate meets the small-scale or micro-scale threshold criteria and remain within those thresholds throughout the crediting period of the CPA;	Yes, the CME has referred to the latest applicable version of the Attachment A to Appendix B (version 8) and applied the positive list of the technology guidance for the additionality demonstration of the each CPA. In section E.5.2 following three criteria have been incorporated by the project	Yes, the evaluation criterion is objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.

		participant which are objective in nature and verifiable through the supporting evidences a) The SSC-CPA shall involve implementation and operation of a new power generation plant through either solar photovoltaic (SPV) or solar thermal technology b) The electricity generated from the SSC-CPA project activity should be supplied to the national / regional grid system within India and c) The installed capacity of SSC-CPA shall not exceed 15 MW. The provisions for the capacity threshold check incorporated are government approvals, PPAs. Since 100% of the CPA individually verified and sampling is not applicable under the PoA. The validation team is of the opinion that criterion is verifiable.	
k.	The requirements for the de-bundling check, in case CPAs belong to small scale (SSC) or micro scale project categories	Yes, the CME has developed the criterion considering the latest de-bundling guidance for the PoAs (EB 54, Annex 13). The verification of the same has been introduced by the CME by means of the a) undertaking from the SSC-CPA entity pertaining to the de-bundling requirements and cross-checking the information from the land survey documents and geo-coordinates of the project.	Yes, the evaluation criterion is objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question. In addition, 100% of the CPAs will be verified as sampling has not been introduced by the CME.
l.	Conditions to provide	Yes, the CME has introduced	Yes, the evaluation criterion is

	an affirmation that funding from Annex I parties, if any, do not result in a diversion of official development assistance.	the means of verification from the supporting documents to check the funding pattern such as CA Certificate, Loan Sanction letter or Undertaking from the SSC-CPA project developer.	objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.
m.	The condition to ensure that the CPA shall meet all the legal requirements (i.e. clearances / NOC's) from the national / local government bodies for the successful implementation of the project activity.	In accordance with Para 14 (footnote 2), the validation team felt requirement of this additional evaluation criterion to make the eligibility criteria comprehensive. Thus, the CME has introduced this additional eligibility criterion. The criterion is verifiable as the CME relies on the NOCs, Clearances from the statutory bodies obtained by the CPA developer such as consent to establish and consent to operate issued from statutory bodies.	Yes, the evaluation criterion is objective as it pinpoints the information source for evaluation and is of relevance to the issue in the question.

Thus, based on the above-assessment of the each of the eligibility criterion established by the CME, the validation team confirms that eligibility criteria are verifiable, objective in nature and comprehensive in totality. The CME has included the eligibility criteria and their evaluation methods in the revised PoADD being submitted for registration. Hence, CAR 2 raised on the eligibility criteria by the validation team was closed successfully.

The validation team raised CL 4 as the management system and procedures developed by the CME were not available to the validation team. In response to CL 4, the project participant provided the PoA Manual, which is a comprehensive document covering the implementation and management procedure for the proposed PoA. However, it was observed by the validation team in the first review of the PoA Manual that some of the procedures were not explicit pertaining to the roles and responsibilities of the personnel involved in the process of inclusion of the CPAs, records of arrangements for training and capacity development for personnel, Procedures for technical review of inclusion of CPAs. The CME resubmitted the corrected PoA Manual with procedures on the above-specified areas. The validation team reviewed the revised PoA Manual and confirms that it meets the requirements of the Para 17 of the EB 65, Annexure 3 and closed CL 4.

The CME provided the details of the system/procedure to avoid double accounting e.g. 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 in section A.4.4 of the web-hosted PDD. The validation team raised CL 6 as CME did not provide the system procedure and related supporting documents to avoid double accounting.

In response to CL 6, the CEM provided the PoA Manual (which is a comprehensive control procedure developed by the CME for the PoA) and undertaking from the SSC-CPA. In addition, the CME revised the PoADD section A.4.4 to bring more clarity on the system/procedure to avoid double accounting. Thus, validation team by review of the revised PoADD and PoA Manual provided by the CME confirms that system/procedure to avoid double accounting have been sufficiently addressed and thus, closed CL 6.

Thus, based on the above, analysis/findings of the validation team and review of the revised PoA description presented by the CME being submitted for validation, the DOE hereby confirms that the project description in PoADD (Ref /2/) is accurate and complete in all respects and that the changes in the revised PoADD as compared to the web-hosted PDD, with respect to the technology description, eligibility criteria for inclusion of the CPAs, procedures to avoid double accounting, de-bundling, data monitoring, archiving systems, etc. are, clear, explicit and comprehensive in nature. The analysis of the validation team related to the application of the approved CDM methodology, baseline identification, emission reduction calculations, additionality demonstration and the monitoring plan adopted under the PoADD have been discussed under the following sections of the validation report.

3.6 Baseline and monitoring methodology

3.6.1 General requirement (76-77)

The steps taken to assess the relevant information contained in the PDD against each applicability condition are described below.

The CME has applied the small-scale methodology AMS-I.D. Version 17 for the proposed PoA. The validation team assessed each of the applicability condition of the methodology AMS-I.D. Version 17 as discussed below:

Applicability condition of the methodology	Validation team's analysis of each applicability condition for the PoA
a. The project activity comprises renewable energy generation units, such as photovoltic, hydro, tidal/wave, wind, geothermal and renewable biomass that supply electricity to a national or a regional grid? Note: Project activities that displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit shall apply AMS-I.F.	The proposed CDM PoA comprises of CPAs of energy (electricity) generation using renewable source of energy i.e. installation of new grid connected solar photovoltaic and solar thermal technology. The CPAs will be connected to the regional grid of India. Thus, the CPAs displace the electricity from electricity distribution system. Hence, the PoA fulfills this applicability condition. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA.
b. Has the project participant provided justification in line with the applicabiltiy of methodology with respect to Table 2 of approved methodology?	Yes, as the PoA ensures only CPAs of installation of new grid connected solar photovoltaic and solar thermal technology, it is justified as the CPAs will inject the renewable electricity generated to the regional grid of India. Thus, AMS-I.D. is applicable. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA.
c. Does the project activity install a new power plant at site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); involve a capacity addition involve a retrofit of (an) existing plant(s) or involve a replacement of (an) existing plant(s)	The PoA ensures only CPAs of installation of new (Greenfield) grid connected solar photovoltaic and solar thermal technology to be covered under the PoA. Thus, the PoA meets this applicability condition. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA.
d. For Hydro power plants with reservoirs, does it satisfy at least one of the following conditions i. the project activity is implemented in an exisitng reservoir with no change in the volume of reservoir ii. the project activity is implemented in an exisitng reservoir, where the volume of reservoir is increased and the power density of the project activity, is greater than 4 W/m2 iii. the project activity results in new reservoirs and the power density of the power plant is greater than 4	Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA.

W/m2.	
e. Is the following guideline followed: i. If the new unit has both renewable and non-renewable components (eg., a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. ii. If the new unit co-fires fossil fuels, the capacity of the entrie unit shall not exceed the limit of 15 MW.	The proposed PoA only covers the Solar Thermal energy based and solar PV based electricity generation projects up to 15 MW installed capacity. Thus, SSC-CPA under the PoA will not have co-firing systems. However, there may be a possibility of the hybrid projects such as combination of renewable and non-renewable components (hybrid systems such as solar-natural gas, solar-diesel or other fossil fuel systems). In such case, the PoADD cleary explains that in such case the renewable component shall be less than 15MW capacity.
f. Combined heat and power (co-generation) systems are not eligible under this category	Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA.
g. 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	The CME has explicitly specified under the PoADD that in cases where SSC-CPA(s) under the PoA involves the addition of solar power generating units to the existing solar power generation facility, the added capacity of units to the SSC-CPA shall be lower than 15 MW and will be physically distinct from the existing units.
h. 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.	Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA.
Specific applicability conditions proposed by the methodology AMS-I.D. for the PoAs	
i. In the specific case of biomass project activities the applicability of the methodology is limited to either project activities that use biomass residues only or biomass from dedicated plantations complying with the applicability conditions of AM0042.	Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA.
j. In the specific case of biomass project activities the determination of leakage shall be done following the general guidance for leakage in small-scale	Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion

biomass project activities (attachment C of Appendix B19 of simplified modalities and procedures for small-scale clean development mechanism project activities; decision 4/CMP.1) or following the procedures included in the leakage section of AM0042.	of the CPA.
k. In case the project activity involves the replacement of equipment, and the leakage from the use of the replaced equipment in another activity is neglected because the replaced equipment is scrapped, an independent monitoring of scrapping of replaced equipment needs to be implemented. The monitoring should include a check if the number of project activity equipment distributed by the project and the number of scrapped equipment correspond with each other. For this purpose scrapped equipment should be stored until such correspondence has been checked. The scrapping of replaced equipment should be documented and independently verified.	The SSC-CPAs to be included under the PoADD are related to the new grid connected solar PV plants or grid connected solar thermal power plants. Thus, the project activity does not involve the replacement of the equipments. Hence, this condition is not applicable. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA.

Based on the above-specified assessment, the validation team confirms that applied methodology AMS-I.D. version 17 is applicable to the PoA and CPAs to be included under the PoA. It is further confirmed by the validation team that eligibility criteria defined by the CME for the inclusion of the CPAs under the PoA sufficiently covers the applicability of the methodology AMS-I.D. version 17. However, it was observed by the validation team that some of the applicability conditions of the methodology were not clearly explained under section E.2 of the PoADD. Thus, validation team raised CAR 5 with respect to the same. The CAR 5 was closed after the CME provided the revised PDD with justification of the each of the applicability conditions under section E.2 of the PoADD.

In addition the applied methodology AMS-I.D. Version 17, the validation team confirms that CME has correctly applied the “Tool to calculate the emission factor for an electricity system” Version 2.2.1. The “Tool to calculate project or leakage CO2 emissions from fossil fuel combustion” Version 2.0 has also been applied by the CME for the accounting of the project emissions from fossil fuel consumption applicable on CPAs of hybrid solar projects (having non-renewable component). Thus, the DOE hereby confirms that the selected baseline and monitoring methodology

AMS-I.D. Version 17(Ref /12/), "Tool to calculate the emission factor for an electricity system" Version 2.2.1 (Ref /13/) and "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" Version 2.0 (Ref /14/) are previously approved by the CDM Executive Board, and applicable to the PoA, which, complies with all the relevant applicability conditions therein.

The validation team confirms that, in accordance with Para 77 of Validation and Verification Manual version 1.2, as a result of the implementation of the proposed CDM PoA, project emissions occurring during the operation of the proposed CPAs (for specific cases of hybrid plants) based on the solar PV technology / solar thermal technology within the CPA project activity boundary have also been addressed by the CME and the monitoring and accounting procedures for the fossil fuels (which may be consumed during the operation of the CPAs) have also been provided. The CME has incorporated the details of the project emission calculation approach from the fossil fuel usage and the fossil fuel monitoring system in the revised PoADD being submitted for the registration. Hence, the validation team confirms that potential greenhouse gas emissions occurring within the proposed PoA boundary as a result of the implementation of the CPAs which are expected to contribute more than 1% of the overall expected average annual emissions reductions, have been considered by the CME. The details of the same have been explained under section 3.6.4 of the validation report.

3.6.2 Project boundary (80)

The project boundary considered for the PoA by the CME is the entire host country of India. The validation team considers the project boundary appropriate for the PoA scale activity. Further, the investment climate and implementation activity procedures will not vary too much within the host country. In addition, the regional grid system in India is presently divided in two regional grids namely, NEWNE Grid and Southern Grid.

The CPA being included or to be included in the future under the PoA are grid connected Solar PV or Solar Thermal power plants. Thus for the individual CPA, in accordance with the methodology AMS-I.D. all power plants connected to the regional grid comes under the project boundary. In such a case, the project boundary of the PoA covers both the regional grids of India as entire host country has been selected as a project boundary. Based on the above assessment, the DOE hereby confirms that the identified boundary and the selected sources and gases are justified for the project activity.

3.6.3 Baseline identification (87-88)

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

The methodology AMS I.D. ver. 17 prescribes baseline for the grid connected renewable electricity generation projects. The project activity is the installation of a new grid-connected renewable power plant/unit. Hence, 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. The same is in line with paragraph 10 of AMS I.D. ver. 17.

The baseline emissions are the product of electrical energy baseline EGBL,y expressed in MWh of electricity produced by the renewable generating unit multiplied by the grid emission factor.

$BE_y = EG_{BL,\,y} * EF_{CO2,grid,y}$

Where:

BE_y = Baseline Emissions in year y (t CO2)
$EG_{BL,\,y}$ = Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y (MWh)
$EF_{CO2,grid,y}$ = CO2 Emission Factor of the grid in year y (t CO2/MWh)

The Emission Factor can be calculated in a transparent and conservative manner as follows:

a) Combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the approved methodology “Tool to calculate the emission factor for an electricity system”.
OR
b) The weighted average emissions (in tCO2/MWh) of the current generation mix.

In the proposed PoA the CME has opted to choose the combined margin emission factor approach which is in accordance with the Tools to calculate emission factor for an electricity system.

The CME has used the official published data on operating and build margin emission factors. The version of the data used is as available on the date of webhosting of the PoADD for global stakeholder comments (viz. start of validation). This data is published by Central Electricity Authority, CEA (version 6) who is the sole authority for the publication of such data in India. This data is based on version 2.0 of the “Tool to calculate the emission factor for an electricity system"; however, the project participant has used the latest available version (version 2.2.1) of the tool. The CEA has also published version 7 of the CEA database which is in accordance with version 2.2.1 of the Tool. However, version 7 of the CEA database was not available at the time of the web-hosting of the PoADD. In addition validation team has also checked the revisions took place in version 7 of the CEA database as compared to version 6 and confirms that it is only updated with respect to the data addition for year 2010-11, including new stations and units commissioned during 2010-11[4]. Thus, the validation team confirms that CEA database version 6 can still be used by the CME since the determination of the emission factor in the CEA database follows steps of the Tool to calculate the emission factor for an electricity system version 02.2.1 and reflects the latest available officially published data available at the time of the web-hosting of the PoADD.

The CME has applied weight factors for the OM and BM [75% & 25% respectively] as specified in the tool (owing to intermittent and non-dispatch-able nature of the solar and wind power projects) to arrive at the emission factor for the combined margin.

Accordingly, the combined margin emission factor value for NEWNE grid is calculated as 0.9487 tCO2/MWh for the associated CPA being submitted for registration along with the PoA as the CPA is connected to the NEWNE grid. Validation team agrees to this emission factor since it is based on the official background data published by CEA (Central Electricity Authority) which is an official central government agency. The validation team further notes that the emission factors are not provided by DNA but by a competent authority (CEA).

Based on the above assessment, the DOE hereby confirms that:
(a) All the assumptions and data used by the project participants are listed in the P0ADD, including their references and sources;
(b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoADD;
(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 PDD;
(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 the proposed CDM project activity.

[4] http://www.cea.nic.in/reports/planning/cdm_co2/user_guide_ver7.pdf

3.6.4 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 PoADD has used the algorithms and formulae in accordance with the methodology applied viz. AMS-I.D, Version 17 and Tool to calculate emission factor for an electricity system Version 2.2.1. The detailed algorithms and/or formulae used in the calculations of baseline emissions and emission reductions are explained in section E.6.1 of the PoADD. The equations including the fixed parametric values are used for calculation of SSC-CPA emission reduction has been detailed under section E.6.2 of the PoADD being submitted for the registration. The validation team confirms that the formulae have been applied correctly in line with the applied methodology AMS-I.D, Version 17.

Baseline emissions

As per the requirement of applied methodology AMS-I.D, Version 17, project participant has calculated the baseline emissions by following Para 11 of methodology i.e. net electricity supply by the project activity multiplied by the combined margin emission factor of the associated grid in India (either NEWNE grid or Southern Grid), as reported in section 3.6.3 above. The detailed calculations for the same have been provided under section E.6.1 of the PoADD.

Project Emissions

The project activity involves electricity generation by “renewable source” and hence in accordance with Para 20 of the methodology AMS-I.D, Version 17, the project emissions were considered as zero by the CME in the web-hosted PoADD for both Solar PV and solar thermal technologies.

However, in the opinion of the validation team, solar technology may also have fossil fuel based non-renewable component (hybrid power plants), and hence, considering zero project emissions at PoA scale were not appropriate. Hence, the validation team raised CAR 6 on the justification of the exclusion of the gases and sources during the project activity emissions. In response to the CAR 6, the CME introduced the project emissions accounting procedure to incorporate the project emissions arising from the burning of the fossil fuels during the operation of the CPAs (using hybrid technology) in accordance with the “Tool to calculate project or leakage CO2 emissions from fossil fuel combustion” Version 2.0 (Ref /14/).

The project participant has selected the option B provided in the Tool for the project emission calculations from the fossil fuel consumption. The validation team accepted the selection of Option B as Option A requires

CO2 emission coefficient computation based on the chemical composition of the fossil fuel type which may not be available to the fossil fuels used in the respective CPAs considering the fact that the project boundary of the PoA is entire host country India. Thus, validation team based on the review of the revised PoADD submitted by the CME, closed CAR 6 and confirms that procedures for accounting of the project emissions arising from the fossil fuel consumptions during the CPAs operation (in case of hybrid projects) have been correctly incorporated by the CME in accordance with the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" Version 2.0.

Leakage

With reference to Para 22 of methodology AMS-I.D, version 17 (Ref /12/), project activity does not lead to any leakage emissions since there was no transfer of equipment to or from the project activity. The PoA involves the new grid connected solar thermal or solar PV projects only. The eligibility criteria identified by the CME sufficiently address this applicability condition of the methodology for the inclusion of the CPA. Hence the leakage from project activity is considered to be zero.

Emission Reductions

As per the requirement of applied methodology AMS I.D., Version 17, the CME has included the provisions of the emission reductions in the PoADD being submitted for registration as per Para 23 of methodology. Algorithm and formulae has been included in E.6.1 and E.6.2 of the PoADD. Thus, the validation team confirms that the baseline emissions, project emissions, leakage and emission reductions arising from the CPAs to be included under the PoA can be accounted and replicated using the procedures provided in the PoADD being submitted for registration.

Based on the above assessment, the DOE hereby confirms that:
(a) All assumptions and data used by the CME are listed in the PoADD, including their references and sources;
(b) All documentation used by CME as the basis for assumptions and source of data is correctly quoted and interpreted in the PoADD;
(c) All values used in the PoADD are considered reasonable in the context of the proposed CPAs to include in the PoA;
(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 and the procedures provided in the PoADD;

3.7 Additionality of a project activity (97)

The steps taken and sources of information used, to cross-check the information contained in the PDD on this matter are described below:

3.7.1 Prior consideration of the clean development mechanism (104)

In accordance with the Para 3 of Annex 26 of EB 60[5], "Guidelines for the demonstration and assessment of prior consideration of the CDM" is not applicable to the PoA considering the fact that no component of the programme will commence prior to the start date of validation. However, the CME has ensured through the eligibility criteria of the inclusion of the CPAs under the proposed PoA that no project activity shall be included as a CPA in the proposed PoA having start date prior to the date of publication of the PoA for the publication of the global stakeholder comments i.e. 06/09/2011. Thus, in light of the above-specified clarification from the CDM Executive Board and the above-specified eligibility condition included by the CME, no further analysis on prior consideration is required under "Guidelines for the demonstration and assessment of prior consideration of the CDM".

3.7.1.1 Historical information on project timeline

The project activity is a PoA. The CME published the PoA for the global stakeholder comments on 06/09/2011. The host country approval was obtained for the PoA recently on 03/04/2012.

3.7.2 Identification of alternatives (107)

The approved methodology AMS-I.D, version 17 prescribes the baseline scenario, hence as per para 105 of VVM manual, version 1.2 (Ref /18/), no further analysis on identification of alternatives is required.

3.7.3 Investment analysis (114)

The proposed PoA only covers grid connected solar PV or solar thermal projects of up to 15 MW capacity as a CPA for the inclusion. The verifiable and objective eligibility criteria have been drawn by the CME to ensure the fulfillment of the above-specified conditions. The validation team confirms based on the synthetic description of the eligibility criteria of the PoA that it is not possible to include any other project apart from solar thermal and solar PV up to 15 MW capacity as a CPA and thus it can be stated that no further additionality demonstration required for the PoAs or CPA in accordance with the currently applicable and approved Appendix A to Attachment B, version 8 (Ref /15/) as in accordance with the guidance presented in Appendix A to Attachment B "The positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers, consists of the following grid-connected renewable electricity generation technologies of installed capacity up to 15 MW:

(a) Solar technologies (photovoltaic and solar thermal electricity generation);
(b) Off-shore wind technologies;

[5] http://cdm.unfccc.int/Reference/Guidclarif/PoA/poa_guid06.pdf

(c) Marine technologies (wave, tidal).

At the time of the publication of the PoA for the global stakeholder consultation (06/09/2011), the guidance on the automatic additionality demonstration was not available and thus, the additionality demonstration was provided by means of investment barrier in accordance with than applicable Attachment A to Appendix B and Guidelines for demonstrating additionality of micro-scale project activities. The validation team raised CL 5 and CAR 7 with respect to the demonstration of the additionality presented in the web-hosted PDD. In the response to CAR 7 and CL 5, the project participant referred to the than approved version 8 of the Appendix A to Attachment B stating that all the CPAs will fall under the positive list of technology. The validation team thoroughly assessed the eligibility criteria developed for the inclusion of the CPAs and confirms that all the CPAs to be included based on the defined eligibility criteria being submitted for registration ensure that only grid connected solar thermal and solar PV electricity generation projects up to 15 MW will be covered under the PoA. Thus, the validation team closed CAR 7 and CL 5 and confirms that based on the revisions of the Appendix A to Attachment B (version 8), which is applicable for the small-scale PoA, the further demonstration of the additionality is not required.

3.7.4 Barrier analysis (118)

The validation team confirms based on the description of the eligibility criteria of the PoA that it is not possible to include any other project apart from solar thermal and solar PV up to 15 MW capacity as a CPA and thus it can be stated that no further additionality demonstration required for the PoAs or CPA in accordance with the currently applicable and approved Appendix A to Attachment B (version 8) as in accordance with the guidance presented in Appendix A to Attachment B (Ref /15/) “The positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.

3.7.5 Common practice analysis (121)

The PoA is a small-scale activity. Common practice is not applicable. Additionally, the validation team confirms based on the description of the eligibility criteria of the PoA that it is not possible to include any other project apart from solar thermal and solar PV up to 15 MW capacity as a CPA and thus it can be stated that no further additionality demonstration required for the PoAs or CPA in accordance with the currently applicable and approved Appendix A to Attachment B (version 8) as in accordance with the guidance presented in Appendix A to Attachment B (Ref /15/) “The positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers.

3.8 Monitoring plan (124)

The DOE hereby confirms that the monitoring plan complies with the requirements of the methodology. In order to assess the monitoring plan's compliance with applied monitoring methodology, the validation team carried out the desk review of the web-hosted PoADD and the subsequently revised PoADD submitted for registration. The validation team confirms based on the desk review of the monitoring plan of the PoADD being submitted for registration that it complies with the applied monitoring methodology AMS-I.D. Version 17 and the associated applicable "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" (Ref /14/).

In addition, the validation team also carried out site visit of the CPA being submitted for the validation along with the PoA on 04/01/2012 and confirms that the monitoring requirements presented in the applied methodology AMS-I.D. Version 17 is mainly based on the metering instruments (energy meters) and hence feasible within the project design. Following monitoring parameters have been identified by the CME in the monitoring plan presented in the PoA

Sr. no.	Parameter	Assessment of the validation team
1.	Quantity of net electricity supplied to the grid as a result of implementation of the CPAs in year y ($EG_{BL,y}$)	The CME has correctly identified the monitoring parameter which is a net of total electricity supplied to the grid arrived from measure values of the electricity exported to the grid and imported from the grid. In accordance with the monitoring methodology requirement, the CME has ensured that at least continuous monitoring, hourly measurement and monthly recording will be carried out. In addition, in accordance with the General Guidance to the small scale methodologies version 17, the CME has also introduced that calibration of the energy meters will be carried out at least once in three years. Further, as per the requirement of the methodology, electronic data archiving and provisions to retain the monitored data for a minimum of two years after the end of the crediting period of each SSC-CPA, data cross-checking provisions from the records of the sold electricity have been incorporated in the monitoring plan.
2.	Quantity of fossil fuel type i combusted in the project activity during	This parameter is applicable on case-to-case basis for the CPAs and may not be applicable to all CPAs included in the PoA. The monitoring

	year y ($FC_{i, j, y}$)	procedure presented in the PoADD relies on the measured and recorded quantities of fuels. Further, as per the requirement of the methodology, electronic data archiving and provisions to retain the monitored data for a minimum of two years after the end of the crediting period of each SSC-CPA, data cross-checking provisions from the records of the purchased fuel have been incorporated in the monitoring plan. The CME has also provided the satisfactory calibration procedure in accordance with the Tool to calculate project or leakage CO2 emissions from fossil fuel combustion and General guidance to the small scale methodologies version 17.
3.	CO2 emission factor of fossil fuel type i	This parameter is applicable on case-to-case basis for the CPAs and may not be applicable to all CPAs included in the PoA. The CME has provided the provisions of the emission factors of the upper uncertainty range of the fossil fuels based on the IPCC 2006 default values. In case there is any change in the IPCC default values, such provision of monitoring has also provided by the CME in the proposed PoA. This is in accordance with the guidance and options provided in the Tool to calculate project or leakage CO2 emissions from fossil fuel combustion.
4.	Net calorific value of fossil fuel type i	This parameter is applicable on case-to-case basis for the CPAs and may not be applicable to all CPAs included in the PoA. The monitoring plan relies on the upper uncertainty range of the calorific values of the fossil fuels from IPCC 2006 default values. In case there is any change in the IPCC default values, such provision of monitoring has also been provided by the CME in the proposed PoA. This is in accordance with the guidance and options provided in the Tool to calculate project or leakage CO2 emissions from fossil fuel combustion.

The validation team raised CAR 8 after reviewing the monitoring plan presented in the web-hosted PoA as it was not addressing the data uncertainty and provisions related to the monitoring of the fossil fuel consumption. CAR 8 was successfully closed after the CME provided the revised PoADD incorporating all the relevant monitoring parameters to the PoADD (as discussed above) and the procedure related to data uncertainty. Thus, the validation team hereby confirms that the CME is able to implement the monitoring plan, the monitoring plan is feasible within the project design and the monitoring plan presented in the PoADD is covering the relevant monitoring parameters to the CPAs associated or to be associated in the PoA.

3.9 Sustainable development (127)

The host Party's DNA confirmed the contribution of the project to the sustainable development of the host Party. The CME has provided the host country approval for the PoA dated 03/04/2012 bearing Reference No. 4/2/2012-CCC.

3.10 Local stakeholder consultation (130)

The steps taken to assess the adequacy of the local stakeholder consultation are described below.

In accordance with the PoA Guidance approved by the CDM Executive Board, the CME in the PoADD specify whether the local stakeholder consultation to be carried out at the PoA level as a whole activity or at the individual CPA level. The CME has selected to carry out the local stakeholder meet at the individual CPA level. In the opinion of the validation team this option has been appropriately considered by the CME as the PoA boundary is the entire host country of India and it is not promising to carry out the local stakeholder meet at the PoA level considering the fact that associated CPAs may come up in any region of the host country. It has also been specified under the PoADD that details of the local stakeholder consultation process to be provided under the respective CPAs.

3.11 Environmental impacts (133)

In accordance with the notification from Government of India, Ministry of Environment and Forest, the solar PV technology6 and solar thermal technology7 does not come under the ambit of the EIA regulation. Thus, EIA requirement for the solar PV technology and solar thermal technology, EIA is not applicable. The CME has considered the assessment of the environmental impacts at the PoA level and provided in the PoADD that in accordance with the host country regulations, the assessment of the environmental impacts not required for the solar thermal and solar PV based renewable energy power projects. The validation team, after reviewing the relevant notification from the Ministry of Environment and Forest, confirms that the CME has appropriately specified non-requirement of the environmental impacts for the solar

[6] http://moef.nic.in/downloads/public-information/OM-SolarPV.pdf
[7] http://mnre.gov.in/file-manager/UserFiles/environmental_clearance_grid_connect_stp_jnnsm.pdf

thermal and solar PV based renewable energy power projects and accepted the description presented in the PoADD.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

The PoADD, Generic CPADD and the specific CPADD using methodology AMS-I.D. Version 17 were webhosted on the UNFCCC for global stakeholders comments as per CDM requirements. The project was webhosted from 06/09/2011 to 05/09/2011. No comments were received on the PoA during the global stakeholder comments.

5 VALIDATION OPINION

Bureau Veritas Certification has performed a validation of the National Solar Power Development Programme, India PoA in India. 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.

Project participant/s used the latest additionality demonstration guidance approved by the CDM Executive Board applicable to the small-scale Programme of Activities (Attachment A to Appendix B). In line with the same, the PoADD provides details of the eligibility criteria defined by the CME for inclusions of the CPAs. The PoA has been developed only for the grid connected solar PV or solar Thermal technologies up to 15 MW capacity which fall under the positive list of technologies in accordance with Attachment A to Appendix B (Version 8). Thus, in accordance with the latest guidance provided by the CDM Executive Board, not further additionality demonstration needed for the projects under positive list of technologies.

By synthetic description of the project, the project is likely to result in reductions of GHG emissions partially. The CPA included and to be included under this PoA fall/ will fall under the positive list of technologies and thus, emission reductions attributable to the project are additional to any that would occur in the absence of the project activity.

The review of the PoADD being submitted for registration and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria listed by the UNFCCC for Programme of Activities. In our opinion, the PoA correctly applies and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas

Certification thus requests registration of ‘National Solar Power Development Programme, India’ as CDM Programme of Activity.

6 REFERENCES

/1/ Host Country Approval No. 4/2/2012-CCC dated 03/04/2012

/2/ PoA Design Document (PoADD) version 1.2, dated 14/05/2012

/3/ Web-hosted PoADD, version 01, dated 25/08/2011

/4/ Central Electricity Authority (CEA) database version 6.0

/5/ EIA Notification dated 14/09/2006

/6/ PoA Manual developed by the CME dated 02/2012 Version 1.2

/7/ Detailed timeline and milestones for the implementation of the PS, VVS and PCP available at http://cdm.unfccc.int/Reference/Manuals/VVM_and_ VVStimeline.pdf

/8/ Programme design document form for small-scale CDM Programmes of activities located at http://cdm.unfccc.int/Reference/PDDs_Forms/PoA/PoA_form02_v01.pdf

/9/ Notification from Ministry of Environment and Forest, Government of India on non-applicability of Environment Impact Assessment for Solar PV projects located at http://moef.nic.in/downloads/public-information/OM-SolarPV.pdf

/10/ Notification from Ministry of Environment and Forest, Government of India on non-applicability of Environment Impact Assessment for Solar PV projects located at http://mnre.gov.in/file-manager/UserFiles/environmental_clearance_grid_connect_stp_jnnsm.pdf

/11/ Guidelines for the demonstration and assessment of prior consideration of the CDM located at http://cdm.unfccc.int/Reference/Guidclarif/PoA/poa_guid06.pdf

/12/ AMS-I.D.– Grid connected renewable electricity generation(version 17)

/13/ Tool to calculate the emission factor for an electricity system(version 02.2.1)

/14/ Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" Version 2.0

/15/ Attachment A of Appendix B of the Simplified Modalities and Procedures for Small Scale project activities (Version 08)

/16/ Guidelines for the reporting and validation of Plant load factors(version 01)

/17/ General Guidelines to SSC CDM methodologies(version 17)

/18/ Validation and Verification Manual Version 1.2

/19/ Procedures for approval of the application of multiple methodologies to a Programme of Activities, EB 47, Annex 31

/20/ Procedures for registration of a Programme of Activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities, EB 55, Annex 38

/21/ Standard for sampling and surveys for CDM project activities and Programme of Activities, EB 65, Annex 2

/22/ Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for Programme of Activities, EB 65, Annex 3

/23/ Standard for demonstration of additionality of GHG emission reductions achieved by a Programme of Activities, EB 63, Annex 2

/24/ Standard for the development of eligibility criteria for the inclusion of a project activity as a CPA under the PoA, EB 63, Annex 3

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. Srinidhi Sunder, Consultant, Emergent Ventures India Pvt. Ltd

/2/ Mr. Muthukumar Rathinam, Sr. Consultant, Emergent Ventures India Pvt. Ltd

/3/ Mr. Atul Sanghal, Head-Carbon Advisory, Emergent Ventures India Pvt. Ltd

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7 CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Mr. Anupam Badola, (Team Leader): Bureau Veritas Certification, Climate Change Lead Verifier

He is post graduate in Environmental Science with about five years of work experience in climate change services. He has previously worked with a manufacturing organisation and a carbon advisory firm in India on CDM project development, CDM project due diligence, stack and ambient air pollution monitoring, water pollution monitoring, etc. He is an EMS Lead Auditor and has undergone intensive training on Clean Development Mechanism. He is involved in the Validation/Verification of CDM/VCS projects with Bureau Veritas Certification since year 2009 and completed the validation/verification of the various CDM/VCS projects.

Mr. Senthil Kumar. V, (Team Member): Bureau Veritas Certification, Climate Change Verifier

He is a Environmental Engineer with over 6 years of experience in the field of Consultancy related to Training and Implementation of Management Systems (ISO : 9000, 14000 & 18000) for various organizations. For the last 4 years, he is involved in different type of Clean Development Mechanism Projects. He has also experience in offering project management services to various renewable energy projects. Has undergone training related to Clean Development Mechanism and is currently involved in validation and verification of CDM project activities.

Mr. H. B. Muralidhar (Internal Technical Reviewer): Bureau Veritas Certification, General Manager, Climate Change Services

He is a Graduate in Electrical Engineering with 25 years of experience power generation and distribution related fields as well as in management system auditing. Lead auditor in Bureau Veritas Certification for Environment Management System, Quality Management System and Occupational Health and Safety Management System. He is the Lead auditor for Environmental Management System, Quality Management system and Occupational Health and Safety Management System. He has undergone intensive training on Clean Development Mechanism. He is the technical expert & conducted Validation / Verification for more than 50 CDM Projects.

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APPENDIX A: COMPANY CDM PROJECT VALIDATION PROTOCOL

VALIDATION PROTOCOL

Table 1 Validation requirements based on the Clean Development Mechanism Validation and Verification Manual (Version 01.2)

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
1. Approval			COUNTRY A (India)	-	-
a. Have all Parties involved approved the project activity?	VVM	44	The project participant to provide the host country approval letter from the Indian DNA for the proposed PoA.	CL 1	OK
b. Has the DNA of each Party indicated as being involved in the proposed CDM project activity in section A.3 of the PDD provided a writTen letter of approval? (If yes, provide the reference of the letter of approval, any supporting documentation, and specify if the letter was received from the project participatn or directly from the DNA)	VVM	45	The PoA has been envisaged in India. The only party involved in the PoA is India. However, the host country approval letter has not been provided by the PP yet.	(CL 1)	OK
c. Does the letter of approval from DNA of each Party involved:	VVM	45	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
i. confirm that the Party is a Party of the Kyoto Protocol?	VVM	45.a	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
ii. confirm that participation is voluntary?	VVM	45.b	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
iii. confirm that, in the case of the host Party, the proposed CDM project activity contributes to the sustainable development of the country?	VVM	45.c	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
iv. Refers to the precise proposed CDM project activity title in the PDD being submitted for registration?	VVM	45.d	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
d. Is(are) the letter(s) of approval unconditional with respect to (i) to (iv) above?	VVM	46	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
e. Has(ve) the letter(s) of approval been issued by the	VV	47	The host country approval letter has not been provided	(CL 1)	OK

CHECKLIST QUESTION		Ref.	§	COMMENTS	Draft Concl	Final Concl
	respective Party's designated national authority (DNA) and is valid for the CDM project activity under validation?	M		by the PP yet.		
f.	Is there doubt with respect to the authenticity of the letter of approval?	VVM	48	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
g.	If yes, was verified with the DNA that the letter of approval is authentic?	VVM	48	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
2.	**Participation**			PP1 (insert PP1 name)		
a.	Have all project participants been listed in a consistent manner in the project documentation?	VVM	51	Yes, the Emergent Ventures India Pvt. Ltd. (EVI) is the CME in the PoA which has been consistently listed in the PoADD	OK	OK
b.	Has the participation of the project participants in the project activity been approved by a Party to the Kyoto Protocol?	VVM	51	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
c.	Are the project participants listed in tabular form in section A.3 of the PDD?	VVM	52	Yes, the CME of the PoADD has been listed as per the prescribed tabular format in the PoADD.	OK	OK
d.	Is the information in section A.3 consistent with the contact details provided in annex 1 of the PDD?	VVM	52	Yes, the Emergent Ventures India Pvt. Ltd. (EVI) is the CME in the PoA which has been consistently listed in the PoADD	OK	OK
e.	Has the participation of each of the project participants been approved by at least one Party involved, either in a letter of approval or in a separate letter specifically to approve participation? (Provide reference of the approval document for each of the project participants)	VVM	52	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
f.	Are any entities other than those approved as project participants included in these sections of the PDD?	VVM	52	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
g.	Has the approval of participation issued from the relevant DNA?	VVM	53	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
h. Is there doubt with respect to (g) above? l	VVM	53	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
i. If yes, was verified with the DNA that the approval of participation is valid for the proposed project participant?	VVM	53	The host country approval letter has not been provided by the PP yet.	(CL 1)	OK
3. Project desing document					
a. Has the PoADD used as a basis for validation prepared in accordance with the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM website?	VVM	55	Clean development mechanism Small-scale programme of activities design document form version 01 has been used by the project participant which is appropriate.	OK	OK
b. Is the PoADD in accordance with the applicable CDM requirements for completing the PoADD?	VVM	56	No, some section of the web-hosted PoADD are not complete. Please refer below for details.	-	-
c. Is the title of the programme of activity provided in section A.1 of the PoADD?	PoA DD form	Version 1	Yes, the title, version number and date has been provided in section A.1 of the PoADD.	OK	OK
d. Has General operating and implementing framework of PoA been provided in section A.2?	PoA DD form	Version 1	Yes, it has been provided.	OK	OK
e. Has Policy/measure or stated goal of the PoA been provided in section A.2?	PoA DD form	Version 1	The sustainable development indicators, stipulated by the National CDM Authority of India (NCDMA) have not been discussed in section A.2 of the PoA DD. Please clarify the following with supporting evidence: "It has been specified in the section A.2 of the PoA DD that Each SSC-CPA(s) under the PoA is expected to generate approximately 1500 MWh of net electricity/annum/MW installed capacity which corresponds to an emission reduction of approximately 1200 tCO_2/annum". The project participant to justify the	CAR 1 CL 2	OK OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			same.		
f. Has Confirmation that the proposed PoA is a voluntary action by the coordinating/managing entity been provided in section A.2 of the PoADD?	PoA DD form	Version 1	Yes, the same has been provided.	OK	OK
g. Has following information been provided under section A.3 of the PoADD: a) Coordinating or managing entity of the PoA as the entity which communicates with the Board and b) Project participants being registered in relation to the PoA. Project participants may or may not be involved in one of the CPAs related to the PoA?	PoA DD form	Version 1	Yes, the information on coordinating or managing entity of the PoA as the entity which communicates with the Board and project participants being registered in relation to the PoA has been provided by the CME under section A.3 of the PoADD.	OK	OK
h. Has the information on section A.4 been provided in accordance with the Small-scale programme of activities design document form?	PoA DD form	Version 1	Yes, it has been specified under section 4.1.1 that host party is India and in section A.4.1.2, the project boundary defined as entire host country of India.	OK	OK
i. Has the descrion of a typical small-scale CDM programme activity (CPA) been provided under section A.4.2.1 of the PoADD?	PoA DD form	Version 1	In section A.4.2.1 the project participant has provided the technology description of the Solar PV technology. In page number 6 of the PoADD, the project participant has provided the diagrammatic representation of the technology. Please clarify whether Batteries will be used to store DC energy generated by the solar panels.	CL 3	OK
j. Is the criteria for enrolling the CPA described under section A.4.2.2? (the criteria for demonstrating additionality of CPA shall be described in section E.5)	PoA DD form	Version 1	In section A.4.2.2, of the PoADD, the project participant has provided the eligibility criteria for the inclusions of SSC-CPA to the PoA. However, some of the eligibility criteria are not sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA in accordance with Para 13 of the CDM Executive Board meeting report 63, Annex 3.	CAR 2	OK
i. Has project participant developed the management system and procedures in	PoA DD	Version 1	The project participant to provide a copy of the management system and procedures developed by the	CL 4	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
accordance with Para 9 of CDM Executive Board EB 63 Annex 3?	form		CME in accordance with para 9 of the CDM Executive Board meeting report 63, Annex 3.		
k. In section A.4.3, following been demosntrated?					
i. The proposed PoA is a voluntary coordinated action?	PoA DD form	Version 1	Yes, description on the same has been provided by the PP.	OK	OK
ii. If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA;	PoA DD form	Version 1	In section A.4.3 of the PoADD, the project participant has referred to the Attachment A to Appendix B for the demonstration of the additionality. However, the project participant has not provided the version number of the Attachment A to Appendix B. Also, the project participant to clarify how the additionality demonstration provided by the project participant in the section A.4.3 of the PoADD meets the requirements of the Annexure 2 of the CDM Executive Board meeting report 63.	CAR 3	OK
iii. If the PoA is implementing a mandatory policy/regulation, this would/is not enforced;	PoA DD form	Version 1	This condition is not applicable to the PoA.	OK	OK
iv. If mandatory a policy/regulation is enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation.	PoA DD form	Version 1	This condition is not applicable to the PoA as it is not being enforced due to mandatory policy regulation.	OK	OK
v. The information presented in section A.4.3 shall constitute the demonstration of additionality of the PoA as a whole.	PoA DD form	Version 1	In section A.4.3 of the PoADD, the project participant has also presented the "Institutional barrier or limited information", "Organizational Capacity" and "land scarcity". Please clarify how this is in accordance with Annexure 2 of CDM Executive Board meeting report 63.	CL 5	OK
l. In section A.4.4.1, has description of the operational and management arrangements established by the		Annex 3	PoADD form	-	-

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
coordinating/managing entity for the implementation of the PoA provided including:					
i. A record keeping system for each CPA under the PoA?	PoA DD form	Version 1	A record keeping system has been provided. However, please refer to 3.j.i. above.	-	-
ii. A system/procedure to avoid double accounting e.g. 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?	PoA DD form	Version 1	a) In section A.4.4 of the PoADD, the project participant has stated the system/procedure to avoid double accounting e.g. 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 and The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity. The project participant to provide copy of the related supporting documents and control procedures adopted by the CME. b) The scenarios related to inclusion/exclusion of withdrawn CDM project activity, etc. are not clear from the description presented. c) It is not clear from the description as how CME will ensure through verifiable evidence that the CPAs included under the proposed PoA does not fall within one km boundary of the proposed CPA.	CL 6	OK
iii. The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity.	PoA DD form	Version 1	Refer to 3.l.ii. above	-	-

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iv. The provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA;	PoA DD form	Version 1	Yes, it has been provided. However, refer to 3.l.ii. above	-	-
m. Has project participant provided following details under section A.4.4.2 of the PoADD?	PoA DD form	Version 1			
i. 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.	PoA DD form	Version 1	This is not applicable. Sampling is not required in the project activity.	OK	OK
ii. In case the coordinating/managing entity opts for a verification method that does not use sampling but verifies each CPA whether in groups or not, with different or identical verification periods) a transparent system is to be defined and described that ensures that no double accounting occurs and that the status of verification can be determined anytime for each CPA;	PoA DD form	Version 1	Yes, it has been provided. However, refer to 3.l.ii. above	OK	OK
n. Has information related to the public funding been provided in section A.5 of the PoA-DD?	PoA DD form	Version 1	Yes, it has been provided by the project participant.	OK	OK
o. Has information related to the starting date of the PoA been provided in section B.1 of the PoA-DD?	PoA DD form	Version 1	Yes, it has been specified in DD/MM/YYYY format and it the date when prior consideration information was sent to UNFCCC.		
p. Has length of the PoA been provided in section B.2 of the PoA-DD in years and months?	PoA DD form	Version 1	In section B.2 the length of the PoA activity has not been specified in the years and months.	CAR 4	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
q. Is the following information provided under section C of the PoADD?	PoA DD form	Version 1			
i. Does the PoA-DD provide information on the envrionmental analysis to be carried out on PoA level or CPA level under section C.1 of the PoA-DD?	PoA DD form	Version 1	Yes, it has been specified that environmental analysis to be carried out at PoA level.	OK	OK
ii. Has documentation on the analysis of the environmental impacts, including transboundary impacts provied in section C.2 of the PoADD?	PoA DD form	Version 1	The solar power generation projects in the host country do not require Environmental Impact Assessment analysis. The same has been specified by the PP under section C.2 of the PoADD.	OK	OK
iii. Has requirement of the EIA for each CPA with respect to the requirement of the host country been provided under section C.3 in the specific context of the CPAs being eligible for inclusion under the PoA?	PoA DD form	Version 1	The solar power generation projects in the host country do not require Environmental Impact Assessment analysis.	OK	OK
r. Is the following information provided under secction D of the PoADD?	PoA DD form	Version 1		-	-
i. Is it indicated at which level local stakeholder comments are invited?	PoA DD form	Version 1	Yes, the PP has indicated that local stakeholder comments to be invited at CPA level. This is more realistic approach and validation team accepted the same.	OK	OK
ii. Has brief description how comments by local stakeholders have been invited and compiled, been provided under section D.2?	PoA DD form	Version 1	The PP has indicated that local stakeholder comments to be invited at CPA level. This is more realistic approach and validation team accepted the same.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iii. Has the summary of the comments received been provided under section D.3?	PoA DD form	Version 1	The PP has indicated that local stakeholder comments to be invited at CPA level. This is more realistic approach and validation team accepted the same.	OK	OK
iv. Has information on how due account was taken of any comments received, been provided under section D.4?	PoA DD form	Version 1	Yes, the PP has indicated that local stakeholder comments to be invited at CPA level. This is more realistic approach and validation team accepted the same.	OK	OK
s. Is the following information available under section E of the PoADD:	PoA DD form	Version 1		-	-
i. Title and reference of the approved SSC baseline and monitoring methodology applied to a SSC-CPA included in the PoA in E.1	PoA DD form	Version 1	Yes, it has been provided. The validation team confirms that approved SSC baseline and monitoring methodology is approved for use in a PoA by the CDM EB.	OK	OK
ii. Justification of the choice of the methodology and why it is applicable to a SSC-CPA in E.2	PoA DD form	Version 1	In section E.2 of the webhosted PoADD, the project participant has demonstrated the applicability of the methodology AMS ID version 17 for the proposed PoA. However, some of the applicability conditions are not justified explicitly.	CAR 5	OK
iii. Description of the sources and gases included in the SSC-CPA boundary in E.3	PoA DD form	Version 1	In section E.3 of the PoADD, the project participant has not provided justifications for the exclusions of the gases and sources during the project activity.	CAR 6	OK
iv. Description of how the baseline scenario is identified and description of the identified baseline scenario in E.4	PoA DD form	Version 1	In accordance with the applied methodology, the baseline scenario is that the electricity delivered to	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			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. The same has referred to by the PP.		
t. In section E.5, description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the SSC-CPA being included as registered PoA (assessment and demonstration of additionality of SSC-CPA): including:	PoA DD form	Version 1		-	-
i. Assessment and demonstration of additionality for a typical SSC-CPA in section E.5.1	PoA DD form	Version 1	Yes, it has been provided. However, please refer to 3.t.ii. below.	-	-
ii. Key criteria and data for assessing additionality of a SSC-CPA in section E.5.2			In section E.5.2 of the PoADD, the project participant has stated one of the additionality demonstrations of the CPAs based on the condition that the geographic location of the project activity is in LDCs/SIDs or in a special underdeveloped zone of the host country identified by the Government before 28 May 2010. However, as evident and understood from the PoADD, all the CPAs to be included in the PoA will be grid connected solar PV or CSP projects. The Project participant to justify the additionality demonstration of the CPAs under the condition of underdeveloped zone of the host country identified by the Government before 28 May 2010 in accordance with SSC clarification 449.	CAR 7	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
u. Has the PP provided following information under section E.6 of the PoADD?	PoA DD form	Version 1		-	-
i. Explanation of methodological choices, provided in the approved baseline and monitoring methodology applied, selected for a typical SSC-CPA under E.6.1 of the PoADD	PoA DD form	Version 1	Yes, the methodological choices have been detailed by the project participant in section E.6.1 of the PoADD.	OK	OK
ii. Equations, including fixed parametric values, to be used for calculation of emission reductions of a SSC-CPA under section E.6.2 of the PoADD	PoA DD form	Version 1	In section E.3 of the PoADD, the project participant has not provided justifications for the exclusions of the gases and sources during the project activity.	(CAR 6)	OK
iii. Data and parameters that are to be reported in CDM-SSC-CPA-DD form in section E.6.3 of the PoADD	PoA DD form	Version 1	Yes, it has been provided by the project participant. However, please refer to 3.s.iii. above.	-	-
v. Has the PP provided following information under section E.7 of the PoADD?	PoA DD form	Version 1		-	-
i. Data and parameters to be monitored by each SSC-CPA under section 7.1 of the PoADD?	PoA DD form	Version 1	Yes, it has been provided. However, please refer to section 7 of the protocol below.	-	-
ii. Has the description of the monitoring plan for a SSC-CPA been provided under section E.7.2 of the PoADD?	PoA DD form	Version 1	The monitoring plan presented in section E.7.2 of the PoA DD (description of the monitoring plan for SSC CPA) does not indicate the procedures set out by the CME for the data uncertainty.	CAR 8 (b)	OK
4. Project description					
a. Does the PoA DD contain a clear description of the project activity that provides the reader with a clear understanding of the precise nature of the project activity and the technical aspects of its	VVM	58	In section E.3 of the PoADD, the project participant has not provided justifications for the exclusions of the gases and sources during the project activity.	(CAR 6)	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
implementation?					
b. Is the description of the proposed PoADD:	VVM	59	a) In section A.4.4 of the PoADD, the project participant has stated the system/procedure to avoid double accounting e.g. 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 and The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity. The project participant to provide copy of the related supporting documents and control procedures adopted by the CME. b) The scenarios related to inclusion/exclusion of withdrawn CDM project activity, etc. are not clear from the description presented. c) It is not clear from the description as how CME will ensure through verifiable evidence that the CPAs included under the proposed PoA does not fall within one km boundary of the proposed CPA.	(CL 6)	OK
i. sufficiently covering all relevant elements?	VVM	59	In section A.4.3 of the PoADD, the project participant has also presented the “Institutional barrier or limited information”, “Organizational Capacity” and “land scarcity”. Please clarify how this is in accordance with Annexure 2 of CDM Executive Board meeting report 63.	(CL 5)	OK
ii. acurate?	VV	59	Please refer to 4.a and 4.b. above.	-	-

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
	M				
iii. providing the reader with a clear understanding of the nature of the proposed CDM PoA activity?	VVM	59	Please refer to 4.a and 4.b. above.	-	-
iv. Are there any changes/modifications compared to the webhosted PDD?	VVM	59	Yes, the web-hosted PDD demonstrated the additionality based on the investment barrier. However, based on the recent changes approved by the CDM executive Board under meeting report 63, the positive list of technology has been introduced. The project activity falls under the same and the revised additionality demonstration presented by the project participant is based on the positive list of technology.	OK	OK
c. Is the proposed CDM PoA activity in existing facilities or or utilizing existing equipments?	VVM	60	The proposed PoA included new grid connected solar PV/thermal projects upto 15 MW installed capacity.	OK	OK
d. Is the CDM PoA activity one of the following types:	VVM	60		-	-
i. Large scale?	VVM	60	No, it is a small-scale PoA	OK	OK
ii. Non-bundled small scale projects with emission reductions exceeding 15,000 tonnes per year?	VVM	60	It is small scale PoA DD with individual CPA of upto 15 MW capacity	OK	OK
iii. Bundled small scale projects, each with emission reductions not exceeding 15,000 tonnes?	VVM	60	No, it is not a bundled activity	OK	OK
e. If yes to (c) and (d) above, was a physical site inspection conducted to confirm that the description in the PDD reflects the proposed CDM project activity, unless other means are specified in the methodology?	VVM	60	Yes, a site visit was conducted by a 2 member validation team.	OK	OK
f. If yes to (d.iii) above, was the number of physical site visits base on sampling?	VVM	60	Not applicable. Sampling is not applicable.	-	-
g. If yes is the sampling size appropriately justified through statistical analysis?	VVM	60	Not applicable. Sampling is not applicable.	-	-

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
h. For other individual proposed small scale CDM project activities with emission reductions not exceeding 15,000 tonnes per year, was a physical site inspection conducted?	VVM	61	Yes, a site visit was conducted by a 2 member validation team.	OK	OK
i. For all other proposed CDM project activities not referred to in paragraphs 59 – 61, and for other individual proposed small scale CDM project activities with emission reductions not exceeding 15,000 tonnes per year, was a physical site inspection conducted?	VVM	62	Yes, a site visit was conducted by a 2 member validation team.	OK	OK
j. If no, was it appropriately justified?	VVM	62	Refer to 4.e. above	-	-
k. Does the proposed CDM PoA activity involve the alteration of an existing installation or process?	VVM	63	Refer to 4.c. above	-	-
l. If yes, does the project description clearly state the differences resulting from the project activity compared to the pre-project situation?	VVM	63	Refer to 4.c. above	-	-
5. Baseline and monitoring methodology					
a. General requirement					
a. Do the the baseline and monitoring methodologies selected by the project participants comply with the methodologies previously approved by the CDM Executive Board?	VVM	65	Yes, the PP has selected previously approved methodology AMS-I.D. for the PoA activities.	OK	OK
b. Is the selected methodology applicable to the project activity?	VVM	66	Refer to (5.b.a) below	-	-
c. Had the PP correctly applied the selected methodology?	VVM	66	Refer to (5.b.d) below	-	-
d. Had the selected methodology been correctly applied with respect to project boundary?	VVM	67	Refer to (5.c) below	-	-

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
e. Had the selected methodology been correctly applied with respect to baseline identification?	VVM	67	Refer to (5.d) below	-	-
f. Had the selected methodology been correctly applied with respect to Algorithms and/or formulae used to determine emission reductions?	VVM	67	Refer to (5.e) below	-	-
g. Had the selected methodology been correctly applied with respect to additionality?	VVM	67		-	-
i. Has project participant demonstrated the PoA additionality in accordance with Attachment A to Appendix B?			Yes, the attachment A to Appendix B has been referred to by the project participant.	OK	OK
h. Had the selected methodology been correctly applied with respect to monitoring methodology?	VVM	67		-	-
i. Has project participant applied relevant guidance provided in monitoring methodology AMS-I.D. for the PoA activity?	AMS	ID	In section E.2 of the webhosted PoADD, the project participant has demonstrated the applicability of the methodology AMS ID version 17 for the proposed PoA. However, some of the applicability conditions are not justified explicitly.	(CAR 5)	. OK
b. Applicability of the selected methodology to the project activity					
a. Is the selected baseline and monitoring methodology, previously approved by the CDM Executive Board, applicable to the PoA including that the used version is valid?	VVM	68	Yes, the PP has selected previously approved methodology AMS-I.D. version 17 for the PoA activities.	OK	OK
i. Does the project activity comprises renewable energy generation units, such as photovoltic, hydro, tidal/wave, wind, geothermal and renewable biomass that supply electricity to a national or a regional grid? Note: Project activities that displace electricity from an electricity	AMS	ID	The proposed CDM PoA comprises of CPAs of energy (electricity) generation using renewable source of energy i.e. solar energy. The project activity involves installation of solar PV/thermal technology. The CPAs will be connected to the regional grid of India. Thus, the CPAs displaces the electricity from electricity	OK	OK

	CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
	distribution system that is or would have been supplied by at least one fossil fuel fired generating unit shall apply AMS-I.F.			distribution system.		
ii.	Has the project participant provided justification in line with the applicabiltiy of methodology with respect to Table 2 of approved methodology?	AMS	ID	Yes, it has been provided.	OK	OK
iii.	Does the project activity install a new power plant at site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant); involve a capacity addition involve a retrofit of (an) existing plant(s) or involve a replacement of (an) existing plant(s)	AMS	ID	The PoA comprises of the new grid connected solar PV or solar thermal projects.	OK	OK
iv.	For Hydro power plants with reservoirs, does it satisfy at least one of the following conditions (a) the project activity is implemented in an exisitng reservoir with no change in the volume of reservoir (b) the project activity is implemented in an exisitng reservoir, where the volume of reservoir is increased and the power density of the project activity, is greater than 4 W/m2 (c) the project activity results in new reservoirs and the power density of the power plant is greater than 4 W/m2.	AMS	ID	Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects.	OK	OK
v.	Is the following guideline followed: (a) If the new unit has both renewable and non-renewable components (eg., a wind/diesel unit), the eligibility limit of 15 MW for a small-scale	AMS	ID	In section E.2 of the webhosted PoADD, the project participant has demonstrated the applicability of the methodology AMS ID version 17 for the proposed PoA. However, some of the applicability conditions are not	(CAR 5)	OK

CHECKLIST QUESTION		Ref.	§	COMMENTS	Draft Concl	Final Concl
	CDM project activity applies only to the renewable component. (b) If the new unit co-fires fossil fuels, the capacity of the entrie unit shall not exceed the limit of 15 MW.			justified explicitly.		
vi.	Is the following guideline followed: Combined heat and power (co-generation) systems are not eligible under this category			Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects.	OK	OK
vii.	Is the following guideline followed: 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 distinct6 from the existing	AMS	ID	In section E.2 of the webhosted PoADD, the project participant has demonstrated the applicability of the methodology AMS ID version 17 for the proposed PoA. However, some of the applicability conditions are not justified explicitly.	(CAR 5)	OK
viii.	Is the following guideline followed: 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	ID	Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects.	OK	OK
ix.	In the specific case of biomass project activities the applicability of the methodology is limited to either project activities that use biomass residues only or biomass from dedicated plantations complying with the applicability conditions of AM0042.	AMS	ID	Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects.	OK	OK
x.	In the specific case of biomass project activities the determination of leakage shall be done following the general guidance for leakage in	AMS	ID	Not applicable as the PoA comprises of the new grid connected solar PV or solar thermal projects.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
small-scale biomass project activities (attachment C of Appendix B19 of simplified modalities and procedures for small-scale clean development mechanism project activities; decision 4/CMP.1) or following the procedures included in the leakage section of AM0042.					
xi. In case the project activity involves the replacement of equipment, and the leakage from the use of the replaced equipment in another activity is neglected because the replaced equipment is scrapped, an independent monitoring of scrapping of replaced equipment needs to be implemented. The monitoring should include a check if the number of project activity equipment distributed by the project and the number of scrapped equipment correspond with each other. For this purpose scrapped equipment should be stored until such correspondence has been checked. The scrapping of replaced equipment should be documented and independently verified.	AMS	ID	In section E.2 of the webhosted PoADD, the project participant has demonstrated the applicability of the methodology AMS ID version 17 for the proposed PoA. However, some of the applicability conditions are not justified explicitly.	(CAR 5)	OK
b. Has the DOE applied specific guidance provided by the CDM Executive Board in respect to the applicable approved methodology?	VVM	69	Yes, all the applicability conditions of the methodology have been assessed by the validation team with respect to the proposed PoA .	OK	OK
c. Is the methodology correctly quoted?	VVM	70	Yes, the methodology has been quoted correctly.	OK	OK
d. Are the applicability conditions of the methodology met?	VVM	71	In section E.2 of the webhosted PoA-DD, the project participant has demonstrated the applicability of the methodology AMS ID version 17 for the proposed PoA. However, some of the applicability conditions are not	(CAR 5)	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			justified explicitly.		
e. Is the proeject activity expected to result in emissions other than those allowed by the methodology?	VVM	71	In section E.3 of the PoADD, the project participant has not provided justifications for the exclusions of the gases and sources during the project activity.	(CAR 6)	OK
f. Is the choice of the methodology justified?	VVM	71	Refer to (5.b.d) above	-	-
g. Have the project participants shown that the project activity meets each of the applicability conditions or the approved methodology?	VVM	71	Refer to (5.b.d) above	-	-
h. Have the project participants shown that the project activity meets each of the applicability conditions of any tool or other methodology component referred to the methodology?	VVM	71	The tool referred by the methodology is “Tool to calculate emission factor of an electricity system” and Tool to calculate project and or leakage emissions from fossil fuel consumption, which is applicable in line with applied baseline and monitoring methodology.	OK	OK
i. Has project participant referred to the applicable tools referred by the methdology?			Yes, the project participant has referred to the applicable tools as specified above.	OK	OK
i. Is the DOE, based on local and sectoral knowledge, aware that comparable information is available from sources other than that used in the PDD?	VVM	71	The project information presented in the web-hosted PoADD and CPA DD has been cross-verified from the purchase orders and the physical site visit conducted by a two member validation team.	OK	OK
j. If yes, was the PDD cross checked agains the other sources to confirm that the project activity meets the applicability conditions of the methodology? (provide the reference to these choices)	VVM	71	The project information presented in the web-hosted PoADD and CPA DD has been cross-verified from the purchase orders and the physical site visit conducted by a two member validation team.	OK	OK
k. Can a determination regarding the applicability of the selected methodology to the proposed CDM project activity be made?	VVM	72	The methodology AMS-I.D. version 17 is applicable to the proposed PoA. However, please refer to 5.b.e. above.	-	-
l. If no, clarification of the methodoloy was requested, in accordance with the guidance provided by the CDM	VVM	72	The methodology AMS-I.D. version 17 is applicable to the proposed PoA. However, please refer to 5.b.e. above.	-	-

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Executive Board?					
m. If answer to (5.b.d) above is “no”, revision or deviation from the methodology was requested, in accordance with the guidance provided by the CDM Executive Board?	VVM	73	The methodology AMS-I.D. version 17 is applicable to the proposed PoA. However, please refer to 5.b.e. above.	-	-
n. If yes to (5.b.l) and (5.b.m) above, a request for registration was submited before the CDM Executive Board has approved the proposed deviation or revision?	VVM	74	The methodology AMS-I.D. version 17 is applicable to the proposed PoA. However, please refer to 5.b.e. above.	-	-
c. Project boundary					
a. Does the PoA DD correctly describe the project boundary, including the physical delineation of the proposed CDM project activity included within the project boundary for the purpose of calculating project and baseline emissions for the proposed CDM project activity?	VVM	78	The project boundary is the entire host country for the PoA which is reasonable in the context of the PoA.	OK	OK
b. Is the delineation in the PoADD of the project boundary correct?	VVM	79	The project boundary is the entire host country for the PoA which is reasonable in the context of the PoA.	OK	OK
c. Does the delineation in the PoADD of the project boundary meet the requirements of the selected baseline?	VVM	79	The project boundary is the entire host country for the PoA which is reasonable in the context of the PoA.	OK	OK
d. Have changes been made to the project boundary in comparison to the webhosted PoADD. If yes please comment on the reason for the changes.	VVM	79	The project boundary is the entire host country for the PoA which is reasonable in the context of the PoA.	OK	OK
e. Have all sources and GHGs required by the methodology been included within the project boundary?	VVM	79	The project boundary is the entire host country for the PoA which is reasonable in the context of the PoA.	OK	OK
f. Does the methodology allow project participant to choose whether a source or gas is to be included	VVM	79	The project boundary is the entire host country for the PoA which is reasonable in the context of the PoA.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
within the project boundary?					
g. If yes, have the project participants justified that choice?	VVM	79	The project boundary is the entire host country for the PoA which is reasonable in the context of the PoA.	OK	OK
h. If yes, is the justification provided reasonable? (provide reference to the supporting documented evidence provided by the project participants)	VVM	79	The project boundary is the entire host country for the PoA which is reasonable in the context of the PoA.	OK	OK
d. Baseline identification					
a. Does the PoA DD identify the baseline for the proposed CDM project activity, defined as the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed CDM project activity?	VVM	81	The web hosted PoADD identifies the baseline scenario as the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.	OK	OK
b. Has any procedure contained in the methodology to identify the most reasonable baseline scenario, been correctly applied?	VVM	82	The identification of the baseline scenario has been provided in accordance with the applied baseline methodology AMS I D, version 17.	OK	OK
i. Is the project activity new grid-connected renewable power plant/unit and hence the baseline scenario is the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources.	AMS	ID	The proposed CDM PoA involves installation of solar PV/Thermal based grid connected new power plant and hence the baseline scenario is the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources.	OK	OK
ii. Is the baseline emissions calculated as the product of electrical energy baseline EGBL, y expressed in MWh of electricity produced by the renewable generating unit multiplied by the grid emission $BE_{Y} = EG_{BL\ Y} * EF_{CO2\ grid\ Y}$	AMS	ID	The baseline emissions are calculated as the product of electrical energy baseline expressed in MWh of electricity produced by the renewable generating unit multiplied by the grid emission factor.	OK	OK
iii. Is the Emission Factor calculated in a transparent and conservative manner as follows: (a) A combined margin (CM), consisting of the	AMS	ID	The project participant has selected option (a) in accordance with the tool. It has been further specified that latest version of the CEA database will be used for	OK	OK

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	combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the .Tool to calculate the Emission Factor for an electricity system.. OR (b) The weighted average emissions (in t CO2/MWh) of the current generation mix. The data of the year in which project generation occurs must be used. Calculations shall be based on data from an official source (where available) and made publicly available.			the emission factor calculation for the each CPA in the PoA.		
iv.	Is the following guideline followed: - In the case of landfill gas, waste gas, wastewater treatment and agro-industries projects, recovered methane emissions are eligible under a relevant Type III category. - If the recovered methane is used for electricity generation for supply to a grid then the baseline shall be calculated in accordance with paragraphs below else use other applicable type I methodologies such as AMS-IA or AMS-I.F. - If the recovered methane is used for heat generation or cogeneration it is eligible under category I.C.	AMS	ID	The proposed CDM PoA only includes new grid connected solar power plant and hence this is not applicable.	OK	OK
v.	Is the following guideline followed for project activities that involve retrofits or replacements of an existing facility for renewable energy generation: - The baseline scenario is the continuing operation of the existing plant. - The methodology uses historical electricity	AMS	ID	The proposed CDM PoA only includes new grid connected solar power plant and hence this is not applicable.	OK	OK

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generation data to determine the electricity generation of the existing plant in the baseline scenario, assuming that the historical situation observed prior to the implementation of the project activity would continue. In the absence of the CDM project activity, the existing facility would continue to provide electricity to the grid BL retrofit y EG, at historical average levels EGhistorical, y until the time at which the electrical generation facility would be likely to be replaced or retrofitted in the absence of the CDM project activity ($DATE_{BaselineRretrofit}$). From that point of time onwards, the baseline scenario is assumed to correspond to the project activity, and baseline electricity production is assumed to equal the project.s net electricity production and no emission reductions are assumed to occur.					
vi. Is the following guideline followed for Retrofit/capacity addition of hydro, solar, wind, geothermal, wave and tidal plants: - Use of standard deviation for calculating baseline elecricity generation. - A minimum of 5 years (60 months) (excluding abnormal years) of historical generation data is required in the case of hydro facilities and for other facilities a minimum of 3 years (36 months) data is required. - In the case that 5 years of historical data are not available - e.g., due to recent retrofits or exceptional	AMS	ID	The proposed CDM PoA only includes new grid connected solar power plant and hence this is not applicable.	OK	OK

CHECKLIST QUESTION		Ref.	§	COMMENTS	Draft Concl	Final Concl
	circumstances8 - a new methodology or methodology revision shall be proposed. - In the case of wind, solar, wave or tidal power plants, the electricity produced by the added power plant(s) or unit(s) could be directly metered and used to determine EG BL,y. provided that the electricity produced by the added power plant(s) or unit(s) addition is separately metered. - Project activities for capacity addition in hydro or geothermal shall use equation 3 replacing subscript .retrofit. with .capacity addition.					
vii.	Is the following guideline followed for Retrofit renewable energy units other than hydro, solar, wind, geothermal, wave and tidal plants: Baseline emissions are calculated as: $BE_{retrofit,CO2,y} = (EG_{PJ,retrofit,y} - EG_{BL,retrofit,y})* EF_{CO2}$ EG historical - A minimum of 3 years of data is required. In the case that 3 years of historical data are not available 9- e.g., due to recent retrofits or exceptional circumstances - a new methodology or methodology revision shall be proposed	AMS	ID	The proposed CDM PoA only includes new grid connected solar power plant and hence this is not applicable.	OK	OK
viii.	Is the requirements concerning demonstration of the remaining lifetime of the replaced equipment met as described in the general guidelines to SSC methodologies? Note: If the remaining lifetime of the affected systems increases due to the project activity, the crediting period shall be limited to the estimated remaining lifetime, i.e., the time when the affected	AMS	ID	The proposed CDM PoA only includes new grid connected solar power plant and hence this is not applicable.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
systems would have been replaced in the absence of the project activity.					
ix. Is the following guideline followed for Capacity addition with renewable energy units other than hydro, solar, wind, geothermal, wave and tidal plants: - The baseline scenario is the existing facility that would continue to supply electricity to the grid at historical levels, until the time at which the generation facility would likely be replaced or retrofitted ($DATE_{BaselineRetrofit}$). - If the existing units shut down, are derated, or otherwise become limited in production, the project activity should not get credit for generating electricity from the same renewable resources that would have otherwise been used by the existing units (or their replacements).	AMS	ID	The proposed CDM PoA only includes new grid connected solar power plant and hence this is not applicable.	OK	OK
x. Does project activity involve co-firing ? If yes, the quantities and types of biomass and biomass to fossil fuel ratio to be used during crediting period is explained and documented transparently and presented in PDD ? Are exante estimation of these values provided in the PDD ?	AMS	ID	The proposed CDM PoA only includes new grid connected solar power plant and hence this is not applicable.	OK	OK
c. Does the selected methodology require use of tools (such as the “Tool for the demonstration and assessment of additionality” and the “Combined tool to identify the baseline scenario and demonstrate additionality”) to establish the baseline scenario?	VVM	82	The PoA qualifies the criteria of small-scale project activity as per the General Guidance to SSC CDM methodologies. Hence, Tool for the demonstration and assessment of additionality” and the “Combined tool to identify the baseline scenario and demonstrate additionality is not applicable. Further, the baseline	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			scenario has been prescribed by the applied baseline and monitoring methodology.		
d. If yes, was the methodology consulted on the application of thes tools? (In such cases, the guidance in the methodology shall supersede the tool.)	VVM	82	The PoA qualifies the criteria of small-scale project activity as per the General Guidance to SSC CDM methodologies. Hence, Tool for the demonstration and assessment of additionality" and the "Combined tool to identify the baseline scenario and demonstrate additionality is not applicable. Further, the baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
e. Does the methodology require several alternative scenarios to be considered in the identification of the most reasonable baseline scenario?	VVM	83	The baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
f. If yes, are all scenarios that are considered by the project participants and are supplementary to those required by the methodology reasonable in the context of the proposed CDM project activity?	VVM	83	The baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
g. Has any reasonable alternative scenario been excluded?	VVM	83	The baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
h. Is the baseline scenario identified reasonably supported by:	VVM	84	The baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
i. Assumptions?	VVM	84	The baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
ii. Calculations?	VVM	84	The baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
iii. Rationales?	VVM	84	The baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
i. Are the documents and sources referred to in the PoA DD correctly quoted and interpreted?	VVM	84	The documents are quoted correctly as referred in section B.4, Section B.6.1 and section B.6.3 of the web	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			hosted PDD.		
j. Was the information provided in the PoADD has been cross checked with other verifiable and credible sources, such as local expert opinion, if available? (idendify the sources)	VVM	84	The information provided in the web hosted PoADD has been cross-checked with the physical site visit and publicly available information (i.e. Central Electricity Authority, which is the only body under Government of India to produce such information).	OK	OK
k. Have all applicable CDM requirements been taken into account in the identification of the baseline scenario for the proposed CDM project activity?	VVM	85	The identification of the baseline scenario is in accordance with the applied baseline and monitoring methodology. The baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
l. Have all relevatn policies and circumstances been identified and correctly considered in the PoADD, in accordance with the guidance by the CDM Executive Board?	VVM	85	The identification of the baseline scenario is in accordance with the applied baseline and monitoring methodology. The baseline scenario has been prescribed by the applied baseline and monitoring methodology.	OK	OK
m. Does the PoADD provide a verifiable description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed CDM project activity?	VVM	86	The identification of the baseline scenario is in accordance with the applied baseline and monitoring methodology. The baseline scenario has been prescribed by the applied baseline and monitoring methodology. The PoADD also refers to the same guidance.	OK	OK
e. Algorithms and/or formulae used to determine emission reductions					
a. Do the steps taken and equations applied to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected baseline and monitoring?	VVM	89	The project participant has applied the equations of the baseline emissions and emission reduction calculations correctly in accordance with the applied baseline and monitoring methodology.	OK	OK
b. Have the equations and parameters in the PoADD been correctly applied with respect those in the select approved methodology?	VVM	90	The equations applied are in accordance with paragraph 11 (equation 1) and paragraph 23 (equation 10) of the selected approved baseline and monitoring methodology AMS I D, version 17.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Have project emissions considered as described in recent version of ACM0002 followed for: - Emissions related to the operation of geothermal power plants; - Emissions from water reservoirs of hydro power plants.	AMS	ID	The proposed CDM PoA only includes new grid connected solar power plant and hence this is not applicable.	OK	OK
ii. Is leakage considered, if the energy generating equipment is transfereed from another activity	AMS	ID	The proposed CDM PoA only includes new grid connected solar power plant and hence this is not applicable. However please refer to 5.b.a.xi. above.	-	-
iii. Is emission reduction calculated as per equation $ER_Y = BE_Y - PE_Y - LE_Y$	AMS	ID	The emission reductions are calculated as per equation $ER_Y = BE_Y - PE_Y - LE_Y$	OK	OK
c. Does the methodology provide for selection between different options for equations or parameters?	VVM	90	The project activity applies AMS I D, version 17 provides selection of the equation in line with the prescribed baseline scenario, which is correct.	OK	OK
d. If yes, has adequate justification been provided (based on the choice of the baseline scenario, context of the proposed CDM project activity and other evidence provided)?	VVM	90	The project activity applies AMS I D, version 17 provides selection of the equation in line with the prescribed baseline scenario, which is correct.	OK	OK
e. If yes, have correct equations and parameters been used, in accordance with the methodology selected?	VVM	90	Refer to (5.e.b) above	-	-
f. Will data and parameters be monitored throughout the crediting period of the proposed CDM project activity?	VVM	91	Some of the data / parameters will not be monitored throughout the crediting period and will be measure ex ante and will be fixed for entire crediting period for the individual CPA (such as grid electricity emission factor).	OK	OK
g. If no, and these data and parameters will remain fixed throughout the crediting period, are all data sources and assumptions:	VVM	91	The parameters related to the grid emission factors including OM emission factor, BM emission factor and CM emission factor will be fixed ex ante and throughput the crediting period of the individual CPA as specified in the PoA document.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Appropriate and correct?	VVM	91	The parameters related to the grid emission factors including OM emission factor, BM emission factor and CM emission factor will be fixed ex ante and throughput the crediting period of the individual CPA as specified in the PoA document.	OK	OK
ii. Applicable to the proposed CDM project activity?	VVM	91	The parameters related to the grid emission factors including OM emission factor, BM emission factor and CM emission factor will be fixed ex ante and throughput the crediting period of the individual CPA as specified in the PoA document.	OK	OK
iii. Resulting in a conservative estimate of the emission reductions?	VVM	91	This is a PoA activity. The emission factors for each CPA will be arrived upon based on the latest CEA data base available as specified in the PoA DD. This is accepted by the validation team as the ex ante fixed grid emission factor in the PoA may not be applicable to all CPAs.	OK	OK
h. Will data and parameters be monitored on implementation and hence become available only after validation of the project activity?	VVM	91	This is a PoA activity. The emission factors for each CPA will be arrived upon based on the latest CEA data base available as specified in the PoA DD. This is accepted by the validation team as the ex ante fixed grid emission factor in the PoA may not be applicable to all CPAs.	OK	OK
i. If yes, are the estimates provided in the PoADD for these data and parameters reasonable?	VVM	91	This is a PoA activity. The emission factors for each CPA will be arrived upon based on the latest CEA data base available as specified in the PoA DD. This is accepted by the validation team as the ex ante fixed grid emission factor in the PoA may not be applicable to all CPAs.	OK	OK
6. Additionality of a Project activity					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
a. Has the following guidance provided in the EB 65, Annex 3 been met for the additionality demonstration for proposed PoA:	EB 65	Annex 3		-	-
b. Additionality shall be demonstrated by establishing that in the absence of CDM, none of the implemented CDM Project Activity (CPA) would occur.	EB 65	Annex 3	The project participant has demonstrated the additionality at the PoA level and referred to the Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities.	OK	OK
c. PoAs that will include one or more microscale projects as CPA shall include eligibility criteria derived from all the relevant requirements of the .Guidelines for demonstrating additionality of microscale project activities..	EB 65	Annex 3	The project participant has demonstrated the additionality at the PoA level and referred to the Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities.	OK	OK
d. PoAs that will include one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of Attachment A of Appendix B of the .Simplified modalities and procedures for small-scale CDM project activities..	EB 65	Annex 3	The project participant has demonstrated the additionality at the PoA level and referred to the Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities.	OK	OK
e. PoAs that consist of one or more large scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements contained in the additionality section of the large scale methodologies.	EB 65	Annex 3	This is not applicable as the project participant has only considered the small scale type I projects to be covered under the proposed PoA.	OK	OK
f. The CME shall demonstrate that compliance with the additionality-related eligibility criteria set in the PoA design document will ensure that all the relevant additionality-related guidelines, tools or any requirements embedded in the methodologies are met.	EB 65	Annex 3	The project participant has demonstrated the additionality at the PoA level and referred to the Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities. Please refer to following sections related to the criteria provided under Attachment A to Appendix B	-	-

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			for additionality demonstration.		
i. Project participants shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers: a) investment barrier b) technological barrier c) barrier due to prevailing pracitce d) other barriers	EB 63	Annex 24	The project participant has referred to the paragraph 2 of the Attachment A to Appendix B (version 8) for the additionality demonstration and substantiated through the eligibility criteria of the PoA that each CPA to be covered under the proposed PoA will be covered under positive list of technologies and therefore no further analysis of the additionality be required as such projects are automatically defined additional in accordance with EB 63, Annex 24.	OK	OK
ii. The positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers, consists of the following grid-connected renewable electricity generation technologies of installed capacity up to 15 MW: a) Solar technologies (photovoltaic and solar thermal electricity generation); b) Off-shore wind technologies; c) Marine technologies (wave, tidal).	EB 63	Annex 24	The proposed PoA only covers CPAs of upto 15 MW capacity i.e. grid connected solar PV or solar thermal projects of upto 15 MW capacity. The project participant has also included the necessary eligibility criteria for the selection of the CPAs under the proposed PoA to ensure that each CPA gets covered under the positive list of technologies. Thus, the validation team confirms based on the synthetic description of the eligibility criteria of the PoA that it is not possible to include any other project apart from solar thermal and solar PV upto 15 MW capacity as a CPA and thus it can be stated that no further additionality demonstration required.	OK	OK
g. Based on the relevant guidance referred by the project participant for the demonstration of the additionality, is it possible to determine that in the absence of CDM, none of the implemented CDM Project Activity (CPA) would occur?	EB 63	Annex 24	The proposed PoA consists of grid connected solar PV or solar thermal power plants of upto 15 MW capacity which have been automatically defined additional. Thus it can be concluded that in the absence of CDM, none of the implemented CDM Project Activity (CPA) would	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			occur.		
a. Prior consideration of the Clean Development Mechanism					
a. Is the project activity a PoA?	EB 60	Annex 26	Yes, the project activity is a small-scale PoA.	OK	OK
b. If yes to above, has Para 3 of the EB 60, Annex 26, been followed?	EB 60	Annex 26	Yes, in accordance with the Para 3 of Annex 26 of EB 60, "Guidelines for the demonstration and assessment of prior consideration of the CDM" is not applicable to the PoAs considering the fact that no component of the programme will commence prior to the start date of validation. The same is applicable to the proposed PoA and thus, no further analysis on prior consideration is required under Guidelines for the demonstration and assessment of prior consideration of the CDM.	OK	OK
b. Identification of alternatives					
a. Does the approved methodology that is selected by the proposed CDM project activity prescribe the baseline scenario and hence no further analysis is required?	VVM	105	Yes, the methodology applied by the project participant prescribes the baseline scenario and hence, further analysis is required.	OK	OK
b. If no, does the PoADD identify credible alternatives to the project activity in order to determine the most realistic baseline scenario?	VVM	105	The methodology applied by the project participant prescribes the baseline scenario and hence, further analysis is required.	OK	OK
c. Does the list of alternatives given in the PoADD esure that:	VVM	106		-	-
i. the list of alternatives includes as one of the options that the project activity is undertaken without being registered as a proposed CDM project activity?	VVM	106	The methodology applied by the project participant prescribes the baseline scenario and hence, further analysis is required.	OK	OK
ii. the list contains all plausible alternatives that the DOE, on the basis of its local and sectoral	VVM	106	The methodology applied by the project participant prescribes the baseline scenario and hence, further	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
knowledge, considers to be viable means of supplying the outputs or services that are to be supplied by the proposed CDM project activity?			analysis is required.		
iii. the alternatives comply with all applicable and enforced legislation?	VVM	106	The methodology applied by the project participant prescribes the baseline scenario and hence, further analysis is required. The baseline alternative prescribed by the methodology comply with all applicable and enforced legislation.	OK	OK
c. Investment analysis					
a. Does the project activity fall under positive list of technologies which The positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers?	EB 62	Annex 5	Yes, the proposed PoA only covers CPAs of upto 15 MW capacity i.e. grid connected solar PV or solar thermal projects of upto 15 MW capacity. The project participant has also included the necessary eligibility criteria for the selection of the CPAs under the proposed PoA to ensure that each CPA gets covered under the positive list of technologies. Thus, the validation team confirms based on the synthetic description of the eligibility criteria of the PoA that it is not possible to include any other project apart from solar thermal and solar PV upto 15 MW capacity as a CPA and thus it can be stated that no further additionality demonstration required.	OK	OK
d. Barrier analysis					
a. Does the project activity fall under positive list of technologies which The positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers?	EB 62	Annex 5	Yes, the proposed PoA only covers CPAs of upto 15 MW capacity i.e. grid connected solar PV or solar thermal projects of upto 15 MW capacity. The project participant has also included the necessary eligibility criteria for the selection of the CPAs under the proposed	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			PoA to ensure that each CPA gets covered under the positive list of technologies. Thus, the validation team confirms based on the synthetic description of the eligibility criteria of the PoA that it is not possible to include any other project apart from solar thermal and solar PV upto 15 MW capacity as a CPA and thus it can be stated that no further additionality demonstration required.		
e. Common practice analysis					
a. Does the project activity fall under positive list of technologies which The positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional, without further documentation of barriers?	EB 62	Annex 5	Yes, the proposed PoA only covers CPAs of upto 15 MW capacity i.e. grid connected solar PV or solar thermal projects of upto 15 MW capacity. The project participant has also included the necessary eligibility criteria for the selection of the CPAs under the proposed PoA to ensure that each CPA gets covered under the positive list of technologies. Thus, the validation team confirms based on the synthetic description of the eligibility criteria of the PoA that it is not possible to include any other project apart from solar thermal and solar PV upto 15 MW capacity as a CPA and thus it can be stated that no further additionality demonstration required.	OK	OK
7. Monotoring plan					
a. Does the PoADD include a monitoring plan?	VVM	122	Yes, the PoADD includes the monitoring plan in section E.7.1 and E.7.2 of the PoADD.	OK	OK
b. Is this monitoring plan based on the approved monitoring methodology applied to the proposed	VVM	122	Yes, the monitoring plan is based on the approved monitoring methodology AMS-I.D. Version 17.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
CDM project activity?					
c. Were the list of parameters required by the the selected methodology identified?	VVM	123	The list of the relevant parameters required by the methodology for the monitoring are as follows: a) Quantity of net electricity supplied to the grid in year y b) CO2 emission factor of the fossil fuel type c) net calorific value of the fossil fuel type d) quantity of the fossil fuel consumed in year y	OK	OK
d. Does the monitoring plan contains all necessary parameters?	VVM	123	The PoA also covers the grid connected solar thermal project activities which can also run in the hybrid mode with fossil fuels. However, the monitoring plan contained in section E.7.1 of the PoADD does not cover the monitoring parameters related to the fossil fuel (CO2 emission factor of the fossil fuel, quantity of fossil fuel consumed and net calorific value of the fossil fuel)	CAR 8 (a)	OK
e. Are the parameters clearly described?	VVM	123	Please refer to 7.d. above.	-	-
f. Does the means of monitoring described in the plan comply with the requirements of the methodology?	VVM	123	Please refer to 7.d. above.	-	-
g. Has the CO2 emission factor of the grid electricity measured either by Combined Margin or by the Weighted Average emission?	AMS	I.D	The CO2 emission factor of the grid electricity is determined by the combined margin emission factor calculations based on the CEA database. This value has been fixed ex ante for the entire crediting period of the CPA and hence will not be monitored ex post.	OK	OK
h. Has the CO2 emission factor of fossil fuel type i measured as per the .Tool to calculate project or leakage CO2 emissions from fossil fuel combustion."	AMS	I.D	The PoA also covers the grid connected solar thermal project activities which can also run in the hybrid mode with fossil fuels. However, the monitoring plan contained in section E.7.1 of the PoADD does not cover the monitoring parameters related to the fossil fuel (CO2	CAR 8 (a)	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			emission factor of the fossil fuel, quantity of fossil fuel consumed and net calorific value of the fossil fuel)		
i. Has the Net calorific value of fossil fuel type i measured as per the .Tool to calculate project or a leakage CO2 emissions from fossil fuel combustion.	AMS	I.D	The PoA also covers the grid connected solar thermal project activities which can also run in the hybrid mode with fossil fuels. However, the monitoring plan contained in section E.7.1 of the PoADD does not cover the monitoring parameters related to the fossil fuel (CO2 emission factor of the fossil fuel, quantity of fossil fuel consumed and net calorific value of the fossil fuel)	CAR 8 (a)	OK
j. Has the Quantity of fossil fuel consumed in year y measured as per the .Tool to calculate project or a leakage CO2 emissions from fossil fuel combustion.	AMS	I.D	The PoA also covers the grid connected solar thermal project activities which can also run in the hybrid mode with fossil fuels. However, the monitoring plan contained in section E.7.1 of the PoADD does not cover the monitoring parameters related to the fossil fuel (CO2 emission factor of the fossil fuel, quantity of fossil fuel consumed and net calorific value of the fossil fuel)	CAR 8 (a)	OK
k. Has the Quantity of net electricity supplied to the grid in year y measured using energy meters.	AMS	I.D	The quantity of the net electricity supplied to the grid in year y is measured using energy meters of high accuracy class.	OK	OK
l. Is the quantity of net electricity supplied to the grid in year y monitored/recorded - Continuous monitoring, hourly measurement and at least monthly recording? Notes on measurement method: - Calibration should be undertaken as prescribed in the relevant paragraph of General Guidelines to SSC Methodologies. - If applicable, measurement results shall be cross checked with records for sold/purchased electricity (e.g., invoices/receipts)	AMS	I.D	Yes, the PoADD covers the at least continuous monitoring, hourly measurement and monthly recording of the electricity exported and imported from the grid to arrive at the net electricity supplied to the grid. It has been specified that calibration will be done at least once in three years which is in accordance to the General Guidelines to SSC Methodologies. Provisions for the cross-checking of the data has been	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
- The net electricity export/supplied to a grid is the difference between the measured quantities of the grid electricity export and the import. If applicable, cross check net electricity supplied to a grid as gross energy generation in the project activity power plant minus the auxiliary/station electricity consumption, technical losses and electricity import from the grid to the project power plant measured at the grid interface/connection used for billing purposes			provided through invoices of the sold electricity.		
m. Is the Quantity of biomass consumed in year y monitored/recorded Continuously or estimate using annual energy/mass balance? Notes on measurement method: - Use mass or volume based measurements. - Adjust for the moisture content in order to determine the quantity of dry biomass. - And/or perform an annual energy/mass balance that is based on purchased quantities and stock. - For projects consuming biomass and fossil fuel to produce electricity, a specific energy consumption11 of each type of fuel (biomass or fossil) to be used should be specified ex ante. The consumption of each type of fuel (biomass or fossil)shall be monitored. If fossil fuel is used, the electricity generation metered should be adjusted by deducting the electricity generation from fossil fuels using the specific energy consumption and the quantity of fossil fuel consumed The amount of electricity generated using biomass fuels calculated then shall be compared with the	AMS	I.D	There is no use of biomass fuel as the proposed PoA involves grid connected solar power plant based on photovoltaic technology/solar thermal technology. Hence, this is not applicable.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
amount of electricity generated calculated using specific energy consumption and amount of each type of biomass fuel used. The lower of the two values should be used to calculate emission reductions					
n. Is the Moisture content of the biomass residues monitored atleast on a monthly basis?	AMS	I.D	There is no use of biomass fuel as the proposed PoA involves grid connected solar power plant based on photovoltaic technology/solar thermal technology. Hence, this is not applicable.	OK	OK
o. Is the weighted average of the moisture content calculated for each monitoring period and used in the calculations? Notes on measurement method: On-site measurements In case of dry biomass, monitoring of this parameter is not necessary	AMS	I.D	There is no use of biomass fuel as the proposed PoA involves grid connected solar power plant based on photovoltaic technology/solar thermal technology. Hence, this is not applicable.	OK	OK
p. Is Net calorific value of biomass residue type k monitored annually? Notes on measurement method: Measurement in laboratories according to relevant national/international standards. Measure the NCV based on dry biomass. Check the consistency of the measurements by comparing the measurement results with measurements from previous years, relevant data sources (e.g. values in the literature, values used in the national GHG inventory) and default values by the IPCC. If the measurement results differ significantly from previous measurements or other relevant data sources, conduct additional measurements	AMS	I.D	There is no use of biomass fuel as the proposed PoA involves grid connected solar power plant based on photovoltaic technology/solar thermal technology. Hence, this is not applicable.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
q. Is the Standard deviation of the annual average historical net electricity generation delivered to the grid by the existing renewable energy plant that was operated at the project site prior to the implementation of the project activity calculated from data used to establish $EG_{historical}$?	AMS	I.D	The proposed PoA involves green field grid connected solar power plant based on photovoltaic/thermal technology. Hence, this is not applicable.	OK	OK
r. Is the parameters relevant to reservoir based hydro and geothermal plants monitored following the most recent version of ACM0002?	AMS	I.D	The proposed PoA involves green field grid connected solar power plant based on photovoltaic/thermal technology. Hence, this is not applicable.	OK	OK
s. Are the monitoring arrangements described in the monitoring plan feasible within the project design?	VVM	123	The monitoring arrangements presented in the PoADD relies on the metered data. Hence, feasible.	OK	OK
t. Does the monitoring plan provide details regarding calibration of monitoring equipments/ instruments or does it include zero check as a substitute for calibration? (zero check can not be considered as a substitute for calibration)	EB 24	37	It has been specified that calibration will be done at least once in three years which is in accordance to the General Guidelines to SSC Methodologies.	OK	OK
u. Are the following 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:	VVM	123	The monitoring plan presented in section E.7.2 of the PoA DD (description of the monitoring plan for SSC CPA) does not indicate the procedures set out by the CME for the data uncertainty.	CAR 8 (b)	OK
i. data management procedures?	VVM	123	Refer to 7.u. above	-	-
ii. quality assurance procedures?	VVM	123	Refer to 7.u. above	-	-
iii. quality control procedures?	VVM	123	Refer to 7.u. above	-	-
8. Sustainable development					
a. Does the CDM project activity assists Parties not	VV	125	The project participant to provide the host country	(CL 1)	

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
included in Annex I to the Convention in achieving sustainable development?	M		approval letter from the Indian DNA for the proposed PoA.		
b. Does the letter of approval by the DNA of the host Party confirm the contribution of the proposed CDM project activity to the sustainable development of the host Party?	VV M	126	The project participant to provide the host country approval letter from the Indian DNA for the proposed PoA.	(CL 1)	OK
9. Local stakeholder consultation					
a. Were local stakeholders (public, including individuals, groups or communities affected, of likely to be affected, by the proposed CDM project activity or actions leading to the implementation of such an activity) invited by the PPs to comment on the proposed CDM project activity prior to the publication of the PDD on the UNFCCC website?	VV M	128	This is a PoA activity. The project participant has selected the local stakeholder consultation at the individual CPA level. Hence, this is not applicable to the PoA level.	OK	OK
b. Have comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity been invited?	VV M	129	This is a PoA activity. The project participant has selected the local stakeholder consultation at the individual CPA level. Hence, this is not applicable to the PoA level.	OK	OK
c. Is the summary of the comments received as provided in the PDD complete?	VV M	129	This is a PoA activity. The project participant has selected the local stakeholder consultation at the individual CPA level. Hence, this is not applicable to the PoA level.	OK	OK
d. Have the project participants taken due account of any comments received and described this process in the PDD?	VV M	129	This is a PoA activity. The project participant has selected the local stakeholder consultation at the individual CPA level. Hence, this is not applicable to the PoA level.	OK	OK
10. Environmental impacts					
a. Have the project participants submitted documentation on the analysis of the environmental impacts of the	VV M	131	The PoA covers the grid connected solar PV/thermal power plants upto 15 MW capacity. In accordance with	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
project activity?			local environmental regulations of the host country, EIA is not required for such project. Hence, it is not applicable.		
b. Have the project participants undertaken an analysis of environmental impacts?	VVM	132	The PoA covers the grid connected solar PV/thermal power plants upto 15 MW capacity. In accordance with local environmental regulations of the host country, EIA is not required for such project. Hence, it is not applicable.	OK	OK
c. Does the host Party require an environmental impact assessment?	VVM	132	The PoA covers the grid connected solar PV/thermal power plants upto 15 MW capacity. In accordance with local environmental regulations of the host country, EIA is not required for such project. Hence, it is not applicable.	OK	OK
d. If yes, have the project participants undertaken an environmental impact assessment?	VVM	132	The PoA covers the grid connected solar PV/thermal power plants upto 15 MW capacity. In accordance with local environmental regulations of the host country, EIA is not required for such project. Hence, it is not applicable.	OK	OK

TABLE 2 SPECIFIC VALIDATION ACTIVITIES

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
1. Project design of small-scale clean development mechanism project activities					
a. Does the proposed small-scale PoA-DD meet the requirements of the simplified modalities and procedures for small-scale CDM project activities?	VVM	133	The proposed CDM PoADD involves grid connected solar PV/thermal power plant upto capacity of 15 MW, which is the defined limit of the type 1 small scale project activity. Hence it meets the requirement of the simplified M & P of the SSC project activities.	OK	OK
b. Does the PoADD qualify within the thresholds of the three possible types of small scale project activities? [Type (i) project activities: renewable energy project activities with a maximum output capacity equivalent to up to 15 megawatts; Type (ii) project activities: energy efficiency improvement project activities which reduce energy consumption, on the supply and/or demand side, by up to the equivalent of 15 gigawatt hours per year; Type (iii) project activities: other project activities that both reduce anthropogenic emissions by sources and directly emit less than 15 kilotonnesof carbon dixide equivalent annually.]	VVM	134	The PoADD qualifies the thresholds of the 15 $MW_{electrical}$, as all the CPAs to be included in the PoADD will have the rated capacity upto 15 MW..	OK	OK
c. Does the PoADD conform to one of the approved small-scale categories?	VVM	134	The project activity conforms to the approved small-scale category of “Grid connected renewable electricity generation”.	OK	OK
d. Does the project activity apply the relevant tool and methodology?	VVM	134	The PoADD applies relevant methodology AMS I D, version 17 and “Tool to calculate emission factor for an electricity system”.	OK	OK
e. Are the small-scale methodologies applied in conjunction with the general guidance to the	VVM	134	The SSC methodology applied in the PoADD is found to be in conjunction with General Guidance to the SSC	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
methodologies, which provides guidance on equipment capactiy, equipment performance, sampling and other monitoring-related issues?			methodologies. Sampling is not applicable in the PoADD, instead 100% CPA sites to be covered.		
f. Is and assessment of the environmental impacts of the proposed CDM project activity required by the host Party?	VVM	134	The host party does not require assessment of environment impact of the solar PV/thermal project activities.	OK	OK
g. Is the project additional?	VVM	135	The project is additional in accordance with Attachment A to Appendix B, version 8 as it is covered under positive list of technologies	OK	OK
h. The DOE shall assess the operational and management arrangements which have been established by the coordinating/managing entity in order to determine whether these arrangements are suitable for the PoA being validated. The arrangements shall be sufficient to ensure that the coordinating/managing entity will have control of all records and information related to the implementation of individual CPAs and will be in a position to ensure each CPA is being operated in accordance with the specific requirements of the programme. Where the DOE considers the arrangements to be unsatisfactory or insufficient a CAR shall be raised and a request for registration shall not be submitted until the CAR has been resolved to the satisfaction of the DOE.	VVM	166	The CME involved in the programme of activities has provided PoA Manual which provides details of the operational and management arrangements established by the CME. Please refer to below sections for the assessment of the validation team:	-	-
i. A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies;	EB 65	Annex 3 (Para 17)	The project participant to provide a copy of the management system and procedures developed by the CME in accordance with para 9 of the CDM Executive Board meeting report 63, Annex 3.	(CL 4)	OK
ii. Records of arrangements for training and	EB 65	Anne	The project participant to provide a copy of the	(CL 4)	OK

CHECKLIST QUESTION		Ref.	§	COMMENTS	Draft Concl	Final Concl
	capacity development for personnel;		x 3 (Para 17)	management system and procedures developed by the CME in accordance with para 9 of the CDM Executive Board meeting report 63, Annex 3.		
iii.	Procedures for technical review of inclusion of CPAs;	EB 65	Annex 3 (Para 17)	The project participant to provide a copy of the management system and procedures developed by the CME in accordance with para 9 of the CDM Executive Board meeting report 63, Annex 3.	(CL 4)	OK
iv.	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)	EB 65	Annex 3 (Para 17)	a) In section A.4.4 of the PoADD, the project participant has stated the system/procedure to avoid double accounting e.g. 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 and The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity. The project participant to provide copy of the related supporting documents and control procedures adopted by the CME. b) The scenarios related to inclusion/exclusion of withdrawn CDM project activity, etc. are not clear from the description presented. c) It is not clear from the description as how CME will ensure through verifiable evidence that the CPAs included under the proposed PoA does not fall within one km boundary of the proposed CPA.	(CL 6)	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
v. Records and documentation control process for each CPA under the PoA;	EB 65	Annex 3 (Para 17)	The project participant to provide a copy of the management system and procedures developed by the CME in accordance with para 9 of the CDM Executive Board meeting report 63, Annex 3.	(CL 4)	OK
vi. Measures for continuous improvements of the PoA management system;	EB 65	Annex 3 (Para 17)	The project participant to provide a copy of the management system and procedures developed by the CME in accordance with para 9 of the CDM Executive Board meeting report 63, Annex 3.	(CL 4)	OK
vii. Any other relevant elements.	EB 65	Annex 3 (Para 17)	The project participant to provide a copy of the management system and procedures developed by the CME in accordance with para 9 of the CDM Executive Board meeting report 63, Annex 3.	(CL 4)	OK
i. Has the CME developed the eligibility criteria for consideration of any SSC-CPA under the proposed PoA covering at least following conditions:	EB 65	Annex 3 (Para 14)	In section A.4.2.2, of the PoADD, the project participant has provided the eligibility criteria for the inclusions of SSC-CPA to the PoA. However, some of the eligibility criteria are not sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA in accordance with Para 13 of the CDM Executive Board meeting report 63, Annex 3.	(CAR 2)	OK
i. The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA; Note: For example, an emission factor for electricity generation is dependent on the boundaries of regional or state or sub-regional grids.	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK

CHECKLIST QUESTION		Ref.	§	COMMENTS	Draft Concl	Final Concl
ii.	Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
iii.	The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
iv.	Conditions to check the start date of the CPA through documentary evidence;	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
v.	Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
vi.	The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified in Section A above;	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
vii.	The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
viii.	Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development	EB 65	Annex 3 (Para	Please refer to Table 2, i. above.	(CAR 2)	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
assistance;		14)			
ix. Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation);	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
x. 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;	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
xi. 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;	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
xii. Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories.	EB 65	Annex 3 (Para 14)	Please refer to Table 2, i. above.	(CAR 2)	OK
j. Are the eligibility criteria defined by the entiity verifiable?	EB 65	Annex 3 (Para 15)	Please refer to Table 2, i. above.	(CAR 2)	OK
k. The validating DOE shall determine whether the eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA.	EB 65	Annex 3 (Para 16)	Please refer to Table 2, i. above.	(CAR 2)	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
l. Has the guidance related to application of multiple methodologies been followed (if applicable) for the following scenarios: a) General requirements; b) Application of multiple small-scale CDM methodologies; c) Application of multiple large scale CDM methodologies; d) Application of combination of multiple large scale and small-scale CDM methodologies	EB 65	Annex 3 (Para 26-33)	The proposed PoA only intends to apply small-scale methodology AMS-I.D and covers the CPAs of solar thermal and solar PV technologies only upto 15 MW capacity. Thus, any guidance related to application of the multiple methodologies in a single PoA and cross-effects are not applicable.	OK	OK
m. In accordance with EB 65, Annex 2, CDM PDDs or CDM Programme of Activities Design Documents (CDM-PoA-DDs, CDM-CPA2-DDs) utilizing sampling for the determination of parameter values for calculating emission reductions shall include a sampling plan with a description of the sampling approach, important assumptions, and justification for the selection of the chosen approach. Has the guidance been followed by the PP?	EB 65	Annex 2 (Para 6)	Standard for sampling and surveys for CDM project activities and programme of activities (EB 65, Annex 2) is not applicable to the proposed PoA as 100% data monitoring has been proposed under the each CPA that will be included in the proposed CPA. The proposed PoA only intends to apply small-scale methodology AMS-I.D and covers the CPAs of solar thermal and solar PV technologies only upto 15 MW capacity. The essential data for the emission reduction calculations, such as net electricity supplied to the grid and project emissions from fossil fuel consumption (if applicable to any specific CPA) to be carried out on each CPA basis and will not be depended on sampling.	OK	OK

Table 3 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
CL 1 The project participant to provide the host country approval letter from the Indian DNA for the proposed PoA.	Table 1 1.a.	**Reply 1:** The CME of the PoA had applied for the host country approval letter with the Indian DNA. The PoA was later considered for the meeting with Indian DNA scheduled on 17/01/2012 and subsequently issued the HCA on 03rd April 2012 with reference no: 4/2/2012-CCC. The meeting invitation and the HCA letter are submitted to the DOE.	The project participant has provided the host country approval letter from the National CDM Authority of India. The letter issued from the Ministry of Environment and Forest, Government of India dated 03/04/2012 bearing reference no. 4/2/2012-CCC approves the CME Emergent Ventures India Pvt. Ltd. and refers to the precise PoA title web-hosted and being submitted for the registration. The letter of the approval is unconditionally confirm that Government of India has ratified the Kyoto Protocol in Aug. 2002, approval of the voluntary participation in the proposed PoA and contribution of the PoA to the sustainable development in India. The letter of approval has been issued on the official letterhead of the Ministry of Environment and Forest and signed by the deputy secretary climate change. CL 1 has been closed by the validation team.

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
CAR 1 The sustainable development indicators, stipulated by the National CDM Authority of India (NCDMA) have not been discussed in section A.2 of the PoA DD.	Table 1 3.e.	**Reply 1:** The implementation of the PoA as a whole would contribute to the sustainable development of the host country (India) as stipulated by the *Ministry of Environment and Forest, Government of India*[8]. The explanation pertaining to the same is incorporated in section A.2 of the revised PoA-DD.	The project participant has provided the description on contribution of the PoA to the sustainable development of the host country as per the criteria specified by the host country (social well being, technological well being, environmental well being and economical well being). Hence, CAR 1 has been closed.
CL 2 Please clarify the following with supporting evidence: “It has been specified in the section A.2 of the PoA DD that Each SSC-CPA(s) under the PoA is expected to generate approximately 1500 MWh of net electricity/annum/MW installed capacity which corresponds to an emission reduction of approximately 1200 tCO2/annum”. The project participant to justify the same.	Table 1 3.e.	**Reply 1:** The CME would like to clarify that the explanation pertaining to net electricity generation and the emission reduction that can be achieved was given based on the approximate estimations. This would vary with respect to different project locations and solar systems with-in the host country. However, in the revised PoA-DD, the net electricity generated/MW and the corresponding emission reduction achieved is given as per the first SSC-CPA included under the PoA. The emission reduction spread sheet for the	The project participant has provided the revised PoA DD. In the revised PoADD the project participant has removed the sentence as “It has been specified in the section A.2 of the PoA DD that Each SSC-CPA(s) under the PoA is expected to generate approximately 1500 MWh of net electricity/annum/MW installed capacity which corresponds to an emission reduction of approximately 1200 tCO2/annum”. Instead the project participant has provided likely emission reductions to be achieved by the first CPA included in the project activity. Since this is specific and verifiable information, the revision has been accepted by the validation team. Hence, CL 2 has been closed.

[8] http://envfor.nic.in/divisions/ccd/cdm_iac.html

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
		same is submitted to the DOE.	
CL 3 In section A.4.2.1 the project participant has provided the technology description of the Solar PV technology. In page number 6 of the PoADD, the project participant has provided the diagrammatic representation of the technology. Please clarify whether Batteries will be used to store DC energy generated by the solar panels.	Table 1 3.i.	**Reply 1:** Electricity (DC current) is generated in solar PV system when the solar radiation strikes the modules. The CME of the PoA has presented the batteries in the line diagram reckoning that some sort of storage device might be needed to run the system during night or low sunshine hours. However, the PP would like to clarify here that there shall be no batteries used for storing the DC energy since the PV systems under the PoA are only grid connected. The diagrammatic representation in section A.4.2.1 of the PoA-DD is revised accordingly.	The project participant has revised the solar PV technology diagram presented in section A.4.2.1 of the PoA DD. Since only grid connected PV systems are allowed under the PoA, the validation team accepted the response of the project participant as grid connected PV system, usually, does not have DC storage. The same has also been verified by the validation team during the site visit of the associated grid connected solar PV project (CPA). Hence, CL 3 has been closed.
CAR 2 In section A.4.2.2, of the PoADD, the project participant has provided the eligibility criteria for the inclusions of SSC-CPA to the PoA. However, some of the eligibility criteria are not sufficiently objective and comprehensive	Table 1 3.j.	**Reply 1:** The eligibility criteria's for the inclusion of SSC-CPA under the PoA in section A.4.2.2 of the PoA-DD is revised in accordance with para 13 of Annex 3, EB 63 guidelines.	The project participant has provided the revised PoA DD. The same in section A.4.2.2 provides details of the eligibility criteria for inclusion of SSC-CPA under the proposed SSC-PoA. In addition to the eligibility criteria specified in accordance with the PoA Standard (version 1), the project participant has also

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
to permit the assessment of the inclusion of CPAs in the PoA in accordance with Para 13 of the CDM Executive Board meeting report 63, Annex 3.		The compliance of the SSC-CPA(s) to the eligibility criteria defined herein is provided under section B.2 of the respective SSC-CPA-DD. **Reply 2:** The explanation pertaining to how the CME will verify the SSC-CPA(s) at the time of inclusion to the PoA is now provided in both the revised PoA-DD and the Manual. It is now made clear that the SSC-CPA(s) shall be assessed / cross-checked by the CME against the list of eligibility criterions by means of documentary proof / written justification from the project developer. Further to this it is also given that the justification to the compliance of SSC-CPA(s) to the eligibility criterions is provided in section B.2 of the respective SSC-CPA-DD's. Thus the above procedure is adopted	included additional eligibility criteria to ensure that the proposed CPA meets the legal requirements (clearances/ NoCs from the pollution control board, etc.) of the host country. Hence, CAR 2 has been closed.

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
		by the CME to evaluate the inclusion of SSC-CPA(s) under the PoA. Also the requirement of legal clearances is now included in the eligibility criteria's defined.	
CL 4 The project participant to provide a copy of the management system and procedures developed by the CME in accordance with para 9 of the CDM Executive Board meeting report 63, Annex 3.	Table 1 3.j.i.	**Reply 1:** The CMD PoA manual developed by the CME containing the management system and procedures in accordance with Annex 3, EB 63 guidelines is submitted to the DOE. **Reply 2:** The description on how the eligibility criteria defined will be verified by the CME is now included in both revised PoA-DD and the PoA manual. a) The roles & responsibilities of the personnel involved in inclusion of SSC-CPA is provided in section 4.1 of the PoA Manual	The project participant has provided the revised CDM PoA manual developed by the CME which contains the details of the management system adopted and procedures defined by the CME for the proposed PoA activity. In the revised PoA manual and the revised PoADD, the project participant has provided detailed eligibility criteria of inclusion of the CPAs under the proposed PoA. In addition, the project participant has also revised section 4.0 of the PoA Manual and provided clear roles and responsibilities of the personnel involved in the process of inclusion of the CPAs. The process of technical review of the CPAs has also been incorporated in section 4.2 of the PoA Manual. The PoA Manual also provides the details of the measures for the continual improvement under section 6.3 of the PoA Manual.

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
		b) The procedure for technical review is included in section 4.2 of the PoA manual c) The measures adopted by the CME to improve the PoA management system are now clearly defined in section 6.3 of the PoA manual. **Reply 3:** EVI is the CME of the PoA. The competency of the CME for the SSC-CPA inclusion under PoA is given in detail in section 4.1 of the revised PoA-Manual.	The PoA Manual also provide the details of the review procedure for competencies as per Para 17 (a) of the PoA Standard. Hence, CL 4 has been closed.
CAR 3 In section A.4.3 of the PoADD, the project participant has referred to the Attachment A to Appendix B for the demonstration of the additionality. However, the project participant has not provided the version number of the Attachment A to Appendix B. Also, the project participant to clarify how the	Table 1 3.k.ii.	**Reply 1:** The demonstration of additionality of PoA is done in-line with "**Attachment A of Appendix B, Version 08, EB 63, Annex 24**[9] of the simplified modalities and procedures for small scale CDM project activities". The explanation of	The project participant has revised section A.4.3 of the PoADD. It has been observed by the validation team that the PoA only allows the implementation of the grid connected solar PV or CSP based technology upto 15 MW capacities which can apply the Attachment A to Appendix B for the additionality

9 https://cdm.unfccc.int/Reference/Guidclarif/ssc/methSSC_guid05.pdf

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
additionality demonstration provided by the project participant in the section A.4.3 of the PoADD meets the requirements of the Annexure 2 of the CDM Executive Board meeting report 63.		same is now made clear in section A.4.3 of the revised PoA-DD. Further as per paragraph 8 of **"Standard for demonstration of additionality of GHG emission reductions achieved by a programme of activities, Annex 2, EB 63"** guidelines which states "*PoAs that will include one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of Attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities*". In-line with the above guidelines, the present PoA having small scale CPA(s), and hence the use of **Attachment A of Appendix B** guidelines to prove the PoA additionality is justified.	demonstration. In accordance with the latest PoA standard also (version 1.0 approved in EB Board meeting report 65), specify in Para 9 that "PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities". Further the validation team also reviewed the latest approved version of the Attachment A to Appendix B (version 8, approved in EB 63). As per the guidance provided in Attachment A to Appendix B, the CPAs to be included in the POA fall under positive list of technologies (Solar CSP or PV upto 15 MW capacities) and do not require demonstration of any barrier for additionality and automatically deemed additional projects. The project participant has revised the description in the PoA DD accordingly and the same has been accepted by the validation team. CAR 3 has been closed.
CL 5 In section A.4.3 of the PoADD, the project participant has also presented the	Table 1 3.k.v.	**<u>Reply 1:</u>** As per the justification provided	The project participant has revised section A.4.3 of the PoADD. It has been observed by

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
"Institutional barrier or limited information", "Organizational Capacity" and "land scarcity". Please clarify how this is in accordance with Annexure 2 of CDM Executive Board meeting report 63.		above, in-line with the paragraph 8 of **"Standard for demonstration of additionality of GHG emission reductions achieved by a programme of activities, Annex 2, EB 63"** guidelines, the CME of the PoA has used "**Attachment A of Appendix B, Version 08, EB 63, Annex 24** of the simplified modalities and procedures for small scale CDM project activities" for additionality demonstration. As per para 2 of **Attachment A of Appendix B**, the grid connected solar technologies (photovoltaic and solar thermal) having installed capacity upto 15 MW are automatically defined as **additional** as they fall under the positive list of grid connected renewable electricity generation technologies. Thus the explanation pertaining to PoA additionality has been modified accordingly in section A.4.3 of the revised PoA-DD.	the validation team that the PoA only allows the implementation of the grid connected solar PV or CSP based technology upto 15 MW capacities which can apply the Attachment A to Appendix B for the additionality demonstration. In accordance with the latest PoA standard also (version 1.0 approved in EB Board meeting report 65), specify in Para 9 that "PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of attachment A of Appendix B of the Simplified modalities and procedures for small-scale CDM project activities". Further the validation team also reviewed the latest approved version of the Attachment A to Appendix B (version 8, approved in EB 63). As per the guidance provided in Attachment A to Appendix B, the CPAs to be included in the POA fall under positive list of technologies (Solar CSP or PV upto 15 MW capacities) and do not require demonstration of any barrier for additionality and automatically deemed additional projects. The project participant has revised the description in the PoA DD accordingly and the same has been accepted by the validation team.

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
			CL 5 has been closed.
CL 6 a) In section A.4.4 of the PoADD, the project participant has stated the system/procedure to avoid double accounting e.g. 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 and The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity. The project participant to provide copy of the related supporting documents and control procedures adopted by the CME. b) The scenarios related to inclusion/exclusion of withdrawn CDM project activity, etc. are not clear from the description presented. c) It is not clear from the description as how CME will ensure through verifiable evidence that the CPAs	Table 1 3.l.ii.	**Reply 1:** a) The supporting documents i.e. the undertaking from the SSC-CPA project developer as specified in section A.4.4 of PoA-DD is submitted to the DOE. b) At the time of inclusion of a new SSC-CPA under the PoA, the CME shall compare the data submitted by the project developer against the CME monitoring database and the list of project activities that are under validation, registered, rejected or withdrawn available in the UNFCCC website. The explanation of same is included in section A.4.4 of the revised PoA-DD. c) As explained above, the CME shall verify the location and geographical co-ordinate details of the SSC-CPA project site with the already existing CME monitoring database. It will	a) The project participant has provided a copy of undertaking from M/s. Surana Telecom and Power Ltd for their proposed CPA under the proposed PoA project activity. The undertaking provides the details of the location of the project and the information that CPA is not a de-bundled component of any other PoA or CDM project. The CME has also provided the PoA Manual adopted for the proposed PoA. In addition, the CME has also taken additional steps to ensure the avoidance of the double counting by cross-checking the information from the UNFCCC website and the existing database of the CME. The same has been detailed in section A.4.4 of the PoADD. Hence, CL 6 (a) has been closed. b) The project participant has revised the section A.4.4 of the PoADD. The project participant has provided details in the revised PoADD

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
included under the proposed PoA does not fall within one km boundary of the proposed CPA.		also be cross checked against the CDM projects available in UNFCCC website. Moreover, the SSC-CPA location details and the geo-coordinate details (latitude and longitude) are clearly defined in section A.4.1.2 of the respective CPA-DD. The CME of NSPDP shall assign the Unique Identification Number to each SSC-CPA only after verifying these details. Further to this, the project developer of the SSC-CPA also shall provide a undertaking in this regard as mentioned in section A.4.4 of the PoA-DD. The same is submitted to the DOE. **Reply 2:** a) Every new SSC-CPA will be compared to the already existing CME database and the list of	specifying that double accounting of the CPAs will also be checked with respect to the CDM database on the projects under validation, registered, rejected or withdrawn available from the UNFCCC website. The same has also been considered by the project participant under section 6.3 of the PoA Manual provided by the project participant. Hence. CL 6 (b) has been closed. c) The CME has provided the details of the assessment of the de-bundling conditions, and apart from the undertaking from the project participant, the verification procedure of the CME has also been specified to ensure that CPA does not fall within one km Boundary of the existing CPA. The revised PoA Manual also provides details of the procedure. Hence, CL 6 (c) has been closed. CL 6 has been closed.

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
		project activities that are under validation, registered, rejected or withdrawn available in the UNFCCC website. Further the SSC-CPA project developers shall provide the land master plan along with clear definition of project site survey numbers and geo co-ordinates details. The control procedure adopted, in detail is provided in section A.4.4 of the revised PoA-DD. Further the supporting document (undertaking from the PP) related to the same is also submitted to the DOE. c) The CME shall, apart from the undertaking, shall verify the below sources to ensure that there is no other project activity by the same project developer within 1 km of the boundary of the proposed SSC-CPA • Project land master plan with	

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
		site survey numbers • Cross checking with the existing CME monitoring database • Cross checking with CDM projects available in UNFCCC website • Project site latitude & longitude details etc. The explanation in detail of the above is provided in the revised PoA Manual.	
CAR 4 In section B.2 the length of the PoA activity has not been specified in the years and months.	Table 1 3.p.	**Reply 1:** The length of the PoA in section B.2 of the revised PoA-DD is now specified in years and months.	The project participant has revised the PoADD where the length of the PoA activity has not been specified in the years and months. Hence, CAR 4 has been closed.
CAR 5 In section E.2 of the webhosted PoADD, the project participant has demonstrated the applicability of the methodology AMS ID version 17 for the proposed PoA. However, some of the applicability conditions are not justified explicitly.	Table 1 3.s.ii.	**Reply 1:** The justification of applicability of the methodology AMS.1.D version 17 is now provided in a clear and transparent manner under section E.2 of the revised PoA-DD.	The project participant has specified the following in one of the applicability conditions under the revised PoADD “If the SSC-CPA(s) under the PoA involves the addition of solar power generating units to the existing solar power generation facility, the added capacity of units to the SSC-CPA shall be lower than 15 MW and will be physically

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		Reply 2: As raised by the DOE, in situation where-in there is addition of capacity to the existing solar power generation facility, the de-bundling check will be done with either of the following measures: • Cross checking of the investment decision date of the new capacity addition. Also the purchase order and EPC contracting dates. • Whether the new capacity addition is by the same implementing entity as the proposed SSC-CPA • Whether the new capacity addition is within 1 km of the boundary of the proposed SSC-CPA • Does the total size of the proposed SSC-CPA combined with the capacity addition exceeds the limit for small scale project activities If the combined capacity of the existing SSC-CPA does not confirm to	distinct from the existing units". The revised PoA manual provided by the project participant also addresses the same. Hence, CAR 5 has been closed.

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
		any one of the above conditions, then the SSC-CPA is not deemed to be a debundled component of large scale activity, and therefore is eligible to use the simplified procedures and modalities for small scale project activities. **Reply 3:** The procedure as explained above is given under section 6.5 of the revised PoA manual.	
CAR 6 In section E.3 of the PoADD, the project participant has not provided justifications for the exclusions of the gases and sources during the project activity.	Table 1 3.s.iii.	**Reply 1:** The SSC-CPA(s) under the PoA is the implementation of solar power generation projects. Generation of power through solar is a clean technology, as no fossil fuel is fired or no GHG gases are emitted during the process. Hence there would be no emission associated with the project activity. The justification of same is provided in section E.3 of revised PoA-DD.	The project participant provided in the web-hosted PoADD that there will be no CO_2 emissions from the project activity. However, the PoADD also covers the CSP technology power plants which can be used in a hybrid mode with steam turbines and fossil fuels can also be used. The project technology diagram of CSP presented in section A.4.2.1 of the PoADD also justifies the hybrid mode of the electricity generation. With respect to the same, the PP provided the revised PoADD wherein, the procedures for the calculations of project emissions from the

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
		Reply 2: As depicted in the project technology diagram, the CSP technology includes fossil fuel fired boilers which might be used as hybrid or for back-up or emergency situations. This leads to project emissions and the same is now accounted and monitored. The procedure for monitoring and calculations of project emissions is now defined clearly in section E.6 of the revised PoA-DD.	fossil fuel consumption (if, any on the account of the CSP Technology) have been discussed. The PP has also include the fossil fuel consumption as a monitoring parameter in the revised PoADD. Hence, CAR 6 has been closed.
CAR 7 In section E.5.2 of the PoADD, the project participant has stated one of the additionality demonstrations of the CPAs based on the condition that the geographic location of the project activity is in LDCs/SIDs or in a special underdeveloped zone of the host country identified by the Government before 28 May 2010. However, as evident and understood from the PoADD, all the CPAs to be included in the PoA will be grid connected solar PV or CSP projects. The Project participant to justify the additionality	Table 1 3.t.ii.	**Reply 1:** The additionality argument in the revised PoA-DD is now modified with respect to "**Attachment A of Appendix B, Version 08, EB 63, Annex 24** of the simplified modalities and procedures for small scale CDM project activities". In-line with the guidelines, the PoA being grid-connected solar power projects and having a installed capacity	The project participant has demonstrated the additionality of the project activity at the PoA level in accordance with Attachment A to Appendix B version 8.0. The eligibility criteria of the CPA provided in section E.5.2 of the PoA DD sufficiently justify the additionality of the CPAs included in the PoA as the PoA will only allow grid connected solar PV or CSP technologies with maximum capacity of 15 MW which are automatically deemed additional as per the Appendix A to Attachment B (version 8.0). This is also in accordance with the paragraph 4 of the Annex

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
demonstration of the CPAs under the condition of underdeveloped zone of the host country identified by the Government before 28 May 2010 in accordance with SSC clarification 449.		upto 15 MW is automatically defined as **additional** as they fall under the positive list of grid connected renewable electricity generation technologies. Hence accordingly, the eligibility criteria and the data for assessing the additionality of SSC-CPA(s) under the PoA is modified in section E.5.2 of the revised PoA-DD.	26 of EB 60. Hence, the revisions made under section E.5.2 of the PoADD were accepted by the validation team. And CAR 7 has been closed.
CAR 8 (a) The PoA also covers the grid connected solar thermal project activities which can also run in the hybrid mode with fossil fuels. However, the monitoring plan contained in section E.7.1 of the PoADD does not cover the monitoring parameters related to the fossil fuel (CO_2 emission factor of the fossil fuel, quantity of fossil fuel consumed and net calorific value of the fossil fuel)	Table 1 7.d.	**Reply 1:** As raised by the DOE, the solar project activities under the PoA may run in hybrid mode. Thus in order to account for the fossil fuel if consumed, the parameters viz., CO_2 emission factor of the fossil fuel, quantity of fossil fuel consumed and net calorific value of the fossil fuel will be monitored and the same is included under the monitoring plan contained in section E.7.1 of the revised PoA-DD.	The CME has provided the revised PoADD wherein the procedures related to the accounting of the fossil fuel consumption in accordance with the Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion have been incorporated by the CME. In addition, the CME has also included the monitoring parameters of CO_2 emission factor of the fossil fuel, quantity of fossil fuel consumed and net calorific value of the fossil fuel in accordance with the applied methodology AMS-I.D. Version 17 and the guidance provided in the Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion. Hence, CAR 8 (a) has been closed by the

Draft report clarifications and corrective action requests by validation team	Ref. To checklist question in Table 1	Summary of project owner response	Validation team conclusion
			validation team.
CAR 8 (b) The monitoring plan presented in section E.7.2 of the PoA DD (description of the monitoring plan for SSC CPA) does not indicate the procedures set out by the CME for the data uncertainty.	Table 1 7.u.	**Reply 1:** The explanation pertaining to handling data uncertainty is now included in section E.7.2 of the revised PoA-DD. **Reply 2:** Under the PoA, the data uncertainty procedure for handling the metering system varies each SSC-CPA and the PPA signing within the host country. Hence the CME finds it appropriate to address the same at the SSC-CPA level. Thus the explanation pertaining to data uncertainty procedure related to metering of electricity shall be included in section B.6.1 of the respective SSC-CPA-DD. Further the provision for monitoring of the project emissions and fossil fuel consumption arising from operation of the CSP technology have now been incorporated in section E.6 of the	The project participant has provided the details of the data uncertainty procedures under E.7.2 of the PoADD. The PP has provided the response that data uncertainty related to metering of electricity will be provided in the CPA-DD. The same has been described under section E.7.2 of the PDD. The validation team accepted the response of the project participant as the project boundary of the PoA is whole country (India) and uncertainty procedures related to metering may very from region to region and CPA to CPA in accordance with the power purchase agreement requirements. In addition, the PP has also incorporated the additional monitoring parameters to account the fossil fuel consumptions. Hence, CAR -8 (b) has been closed.

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		revised PoA-DD.	