




**Validation report form for post-registration changes for  
component project activities**

**(Version 02.0)**

BASIC INFORMATION	
<b>Title and UNFCCC reference number of the component project activity (CPA)</b>	Title: MicroEnergy Credits PoA- CPA 15 UNFCCC ref: 9181-P1-0015-CP1
<b>Version number of the validation report</b>	2.0
<b>Completion date of the validation report</b>	17/05/2021
<b>Version number of PoA-DD and CPA-DD applicable to this validation report</b>	PoA-DD ver. 5 CPA-DD ver. 3
<b>Title and UNFCCC ref. no. of the registered PoA into which the CPA is included</b>	MicroEnergy Credits – Microfinance for Clean Energy Product Lines – India UNFCCC ref: 9181
<b>Type(s) of CPA PRCs</b>	<input checked="" type="checkbox"/> Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents <input type="checkbox"/> Corrections <input type="checkbox"/> Changes to the start date of the crediting period <input type="checkbox"/> Inclusion of monitoring plan <input type="checkbox"/> Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents <input type="checkbox"/> Changes to the project design <input type="checkbox"/> Changes specific to afforestation and reforestation activities
<b>Coordinating/managing entity (CME)</b>	Micro Energy Credits Corporation Private Limited
<b>Host Parties</b>	India
<b>Applied methodologies and standardized baselines</b>	Applied methodologies: AMS-I.A: Electricity generation by the user” (Version 14) AMS-II.G: Energy efficiency measures in thermal applications of non-renewable biomass” (Version 03) AMS III.AV: Low greenhouse gas emitting water purification systems” (Version 02) Standardized baseline: Nil
<b>Mandatory sectoral scopes</b>	1 : Energy industries (renewable - / non-renewable sources) 3 : Energy demand
<b>Conditional sectoral scopes, if applicable</b>	None
<b>Name and UNFCCC reference number of the</b>	Earthood Services Private Limited: E0066

DOE	
<b>Name, position and signature of the approver of the validation report</b>	 Dr. Kaviraj Singh Managing Director

## SECTION A. Executive summary

The PoA under verification involves the disbursement of Clean Energy Products (CEP). The CEPs distributed are; Improved Cook Stoves (ICS), Water Purifiers and Solar Lighting Systems. This distribution takes place with the help of Partner Organisations (PO), which work on the grass-root level. The CEP's distribution results in reduction of GHG emission that would have been generated in the absence of implementation of this PoA.

The areas (majorly rural and semi-urban) where the PoA implementation has taken place use the inefficient traditional stoves (three-stone fired using woody biomass and equivalent). It has been replaced with the efficient improved cook stoves (ICS) which combust the fuel (wood) far more efficiently resulting in generation of much lesser GHG and particulate matter. Additionally, it enhances the flow of thermal energy to cooking pots reducing the fuel usage and thus reduced GHG emissions and better livelihood prospects due to reduced expenses on fuel. These effects further result in improved health of women and children in the household.

The PoA also includes distribution of water purifiers and solar lighting systems for access to safe drinking water and for fulfilment of lighting needs respectively. However, the focus of this validation report is an assessment of post-registration changes proposed due to a deviation from registered monitoring plan of installed improved cookstoves only.

This validation report for PRC covers implemented CPA 9181-P1-0015-CP1 included in the registered PoA-DD.

CPA reference number	Date of inclusion	Version of registered CPA-DD
9181-P1-0015-CP1	24/08/2018	Version 3.0

### Scope of validation

Earthood Services Private Limited is contracted by the CME to perform the validation of the post-registration changes proposed to the CPA under verification. The scope of validation includes the assessment of the proposed PRC primarily identified by CME as a temporary deviation from the monitoring plan as part of verification assessment. This validation is an independent and objective review of all the post-registration changes proposed from revised CPA DD against criteria stipulated in latest valid versions of CDM VVS for PoA /4/, CDM PS for PoA /2/, CDM PCP for PoA /3/ and other related and relevant requirements, as appropriate.

### Validation process

The validation process is undertaken by a qualified and competent validation team, involving a desk review of proposed post-registration changes as proposed in the Monitoring Report Version 3 /5/ provided by CME, interview or interactions with the representatives of CME, reporting and closure of findings, as appropriate and preparing a draft validation report complying with the relevant CDM requirements. The validation report prepared by the validation team is reviewed by an independent Technical Review team. The final validation report that is accepted by Technical Reviewer is then approved on behalf of Earthood Services Private Limited and processed further as per CDM procedures.

### Conclusion

The review of the revised MR, supporting documentation and subsequent follow-up actions (interviews) have provided ESPL with sufficient evidence to determine the fulfilment of stated criteria.

ESPL has performed the validation of the post registration changes of the CDM PoA "MicroEnergy Credits – Microfinance for Clean Energy Product Lines – India" having UNFCCC Ref. Number 9181. The post registration change was identified during the verification for the 10<sup>th</sup> monitoring period **26/07/2019 – 26/12/2019** of the PoA.

The proposed post registration change includes the following:

a) During this monitoring period a temporary deviation from the registered monitoring plan occurred as CME was unable to comply with sampling plan for ICS monitored parameters listed below in accordance with approved monitoring plan as per PoA-DD and CPA-DD:

Parameter	Description
$\eta_{new}$	Efficiency of the new efficient stoves
$U_{old}$	Quantity of woody biomass used in the project activity by traditional stoves per household
POF	Product Operation Fraction

The validation of post registration changes concluded that the type of changes proposed in the revised MR Version 3, dated 23/04/2021 /5/ can be submitted as notification of changes to a CPA to secretariat in-line to para 168 (a) of the PCP for PoA, and in line with para 169 of PCP for PoA it requires no submission of revised CPA-DD. The validation confirms that the proposed post registration changes comply with all the relevant CDM requirements of the applied methodology and all other applicable tools and guidance. This report is the combined assessment opinion for all the changes from the public MR and request is hereby submitted with issuance request to CDM EB.

## **SECTION B. Validation team, technical reviewer and approver**

### **B.1. Validation team member**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Document review	On-site inspection	Interviews	Validation findings
1	Team Leader	IR	Guleria	Shifali	Central Office	Y	N	Y	Y
2	Methodological expert	IR	Guleria	Shifali	Central Office	Y	N	Y	Y
3	Technical Expert (TA1.2, TA3.1)	IR	Guleria	Shifali	Central Office	Y	N	Y	Y
4	Local expert	IR	Guleria	Shifali	Central Office	Y	N	Y	Y

### **B.2. Technical reviewer and approver of the validation report on CPA PRCs**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Gautam	Ashok	Central office
2.	Expert (TA1.2 and TA3.1) to TR	IR	Gautam	Ashok	Central office
3.	Approver	IR	Singh	Kaviraj	Central office

## **SECTION C. Means of validation**

### **C.1. Document review**

The complete list of documents/evidences reviewed or referenced during the validation is provided in the Appendix 3.

**C.2. On-site inspection**

Duration of on-site inspection: NA				
No.	Activity performed on-site	Site location	Date	Team member

The temporary deviation was identified at the time of Desk-review as CME was unable to demonstrate the compliance of monitoring activities and sampling plan for determination of monitored parameters “**n<sub>new</sub>**”, “**u<sub>old</sub>**” and “**POF**” in line with approved monitoring plan in PoA-DD/1/ and CPA-DD/7/ during the current monitoring period (26/07/2019 – 26/12/2019) for one of the technology distributed i.e. Improved cookstoves. Following para 231 of the PS for PoA Version 2, temporary deviation is proposed during the current monitoring period. No site-visit was conducted for the scope of validation of PRC. Since, the temporary deviation was identified during verification and the scope is not complete validation of the PoA and in accordance with paras 279 and 184 of the VVS for PoA/4/, it is optional for the DOE to conduct on-site assessment. However, remote interviews with CME representatives were conducted during verification as explained in verification report/6/ as well. A thorough desk review along with remote interviews & surveys conducted by the validation team was used as an alternative means to validate the temporary deviation.

**C.3. Interviews**

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Jena	Ankita	CME representative	22/02/2021	CPA implementation, ER sheet, PRC	Shifali Guleria
2.	Verma	Richa	CME representative	22/02/2021	CPA implementation, ER sheet, database management	Shifali Guleria

**C.4. Clarification requests, corrective action requests and forward action requests raised**

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance with CPA-DD form	-	-	-
Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents	CL#01	-	-
Corrections	-	-	-
Changes to the start date of the crediting period	-	-	-
Inclusion of monitoring plan	-	-	-
Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents	-	-	-
Changes to the project design	-	-	-
Changes specific to afforestation and reforestation activities	-	-	-
Others (please specify)	-	-	-
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>

**SECTION D. Validation findings****D.1. Compliance with CPA-DD form**

<b>Means of validation</b>	This PRC proposes only temporary deviation. Thus, as per para 168 of PCP for PoA /3/ the changes were required to be reflected only in the MR and does not require any revision in the CPA-DD/7/.
<b>Findings</b>	No findings were raised
<b>Conclusion</b>	Not Applicable

**D.2. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents**

<b>Means of validation</b>	<b>Proposed Post-registration change:</b>
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Deviation from the monitoring plan in revised approved PoA-DD/1/ and CPA-DD/7/ to determine the sample size for monitoring of parameters " $n_{new}$ ", " $u_{old}$ " and "POF". The deviation is sought for one of the two technologies (Improved cookstoves) disseminated under the CPA 9181-P1-0015-CP1.

*Parameters not monitored in compliance with PoA-DD and CPA-DD:*

1. Efficiency of the new efficient stoves ( $\eta_{new}$ )
2. Product Operation Fraction (POF)
3. Quantity of woody biomass used in the project activity by traditional stoves per household ( $\mu_{old}$ )

#### Reason for Deviation:

As part of the verification of the 10<sup>th</sup> monitoring period covering duration from 26/07/2019 to 26/12/2019, wherein the monitoring report /5/ consists of one CPA being verified, it was noted that for improved cookstoves distributed, the method used for determining the sample size for monitoring of three ex-post parameters for ICS was not in line with sampling plan and monitoring plan prescribed in revised accepted PoA-DD/1/ and included CPA-DD/7/.

According to revised approved PoA-DD page 110/1/, steps 1 and 2 specified in the multistage sampling are to be followed by the simple random sampling, and step 2 has the provision that in order to reflect the different age of the appliances, the relative share of appliance vintages within the total population of appliances deployed under the CPAs shall be established and then the final selection shall also represent that share.

As notified by CME, results of monitoring survey conducted for the previous monitoring period (MP9) were applied to this monitoring period (MP10) as well. This was found appropriate by CME since the results were applicable for a duration of one year, which covers the entire 10<sup>th</sup> monitoring period. Since no new ICS were reported to be installed during this monitoring period, the application of these monitoring results was found appropriate, as demonstrated below:

Technology	Monitoring survey dates for previous MP	Validity of previous monitoring survey results
ICS	02/07/2019 to 25/07/2019	27/12/2018 to 26/12/2019

However, during assessment it was found that the proportion of stoves per each vintage was not in line with the vintage requirement for this monitoring period, i.e. the number of stoves distributed in each vintage of the entire population is not reflected proportionally in the sample selection for monitoring survey. The same has been demonstrated below as an example, for Smart Stoves distributed in Tamil Nadu for parameters POF and uold and sample size requirement of 96:

Vintage period	Total ICS population	Proportion in distribution	Required number of samples based on proportion in distribution for POF and uold	Number of samples monitored for POF and uold
0-1 (27/12/2018 to 26/12/2019)	0	0%	0	0
1-2 (27/12/2017 to 26/12/2018)	972	3%	3	2
2-3 (27/12/2016 to 26/12/2017)	5,927	16%	15	15
3-4 (27/12/2015 to 26/12/2016)	12,278	33%	32	37
4-5 (27/12/2014 to 26/12/2015)	13,111	36%	34	29
5-6 (27/12/2012 to 26/12/2013)	4,479	12%	12	13

Therefore, the monitoring activities are not found to be in line with monitoring plan

	<p>described in approved PoA-DD/1/ and CPA-DD/7/.</p> <p>The CME further stated its inability to conduct a new monitoring for this monitoring period due to current community spread of pandemic Covid-19 in the host country (India).</p> <p>Thus, CME has sought temporary deviation for this non-conforming monitoring period in line with para 228 of PS for PoA version 2.0/2/. The temporary deviation is applicable on the entire duration of tenth monitoring period i.e. from 26/07/2019 to 26/12/2019.</p> <p><b>Alternative approach proposed:</b></p> <p>To ensure that the non-compliance of monitoring activities with registered monitoring plan does not result in over-estimation of CERs, the CME has claimed zero CERs, thus not claiming any CERs that would have been achieved from Improved cookstoves for this monitoring period. The ERs calculated from ICS in ER calculation sheet are 7,527 tCO<sub>2</sub>e from Smart Stove installations and 1,834 tCO<sub>2</sub>e from Jumbo stove installations; however, 0 tCO<sub>2</sub>e CERs have been claimed from ICS installations in the final MR and ER sheet calculations.</p> <p><b>Assessment of Deviation:</b></p> <p>CME is unable to demonstrate compliance of monitoring survey sample selection with registered monitoring plan for parameters “n<sub>new</sub>”, “u<sub>old</sub>” and “POF” as explained above. Therefore, to ensure that GHG emission reductions or net anthropogenic GHG removals from this issuance are not over estimated due to deviation from the approved monitoring plan and to also ensure that the conservativeness in determination of emission reductions is not compromised, CME has decided to claim zero CERs from current monitoring period calculated for improved cookstoves. As mentioned above, the calculated ERs from ICS were 7,527 tCO<sub>2</sub>e from Smart Stove installations and 1,834 tCO<sub>2</sub>e from Jumbo stoves, whereas no ERs have been claimed in the final MR and ER sheet for ICS installations.</p> <p>The approach is in-line with para 228(b) of PS for PoA Version 2.0/2/. Since the applied methodology/8/ only prescribes calculation for baseline emissions for determination of carbon emission reductions, the approach of considering baseline emissions from all ICS installations as 0 tCO<sub>2</sub>e is found appropriate and in line with PS for PoA requirements by the validation team. It is confirmed that there are no separate project emissions or leakages calculations prescribed in the applied methodology/8/ (other than parameter LAF, which is an adjustment factor already accounted as a fraction of baseline emissions). The project design too, does not indicate any source of project emissions.</p> <p>Thus, the temporary deviation approach was accepted by the validation team. The temporary deviation has been sought for the entire current monitoring period. The type of deviation indicates that it is temporary in nature, since vintages of ICS population installation were not proportionally represented in the sampling plan for only this monitoring period. CME shall be able to monitor all ex-post parameters in line with the registered monitoring plan in future. Therefore, the temporary deviation is only applicable for a defined period of time i.e. 26/07/2019 to 26/12/2019, or 10<sup>th</sup> monitoring period. The CME is required to continue to monitor all data required for calculation of emission reductions as per the approved monitoring plan in future.</p> <p>Since, it is established that temporary deviation proposed for the current monitoring period for the CPA under consideration is in line with PS for PoA ver 2.0 (para 228), therefore, this request will be sent as notification of changes to CPA to the secretariat in-line to para 168(a) of PCP for PoA.</p>
<b>Findings</b>	CL#01 raised and resolved satisfactorily.
<b>Conclusion</b>	<p>The DOE confirms that</p> <ul style="list-style-type: none"> <li>• The deviation applies for the monitoring period from 26/07/2019 to 26/12/2019 in line with para 251 of CDM VVS PoA Version 2 /4/.</li> <li>• There will be no over-estimation of emission reductions due to deviation as the most conservative values approach has been applied for non-conforming</li> </ul>

	period in line with PS for PoA requirements. The deviation complies with the relevant requirements related to the temporary deviation from the registered monitoring plan as prescribed in the PS for PoA/2/ and VVS for PoA/4/.
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**D.3. Corrections**

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.4. Changes to the start date of the crediting period**

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.5. Inclusion of monitoring plan**

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.6. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents**

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.7. Changes to the project design**

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.8. Changes specific to afforestation and reforestation activities**

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**SECTION E. Internal quality control**

A draft validation report that is prepared by assessment team is reviewed by an independent technical review team (one or more members) to confirm if the internal procedures established and implemented by Earthood were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable CDM rules/requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of the technical review team are independent of the assessment team.

During the technical review process additional findings may be identified or the closed-out findings may be opened, which needs to be satisfactorily resolved before the request for registration is submitted to UNFCCC. The independent technical reviewer may either approve the report as such or reject/return the same in such case providing the comments/findings/issues that need to be resolved by the assessment team. The decision taken by the Technical Reviewer is final and authorized on behalf of Earthood Services Private Limited.

**SECTION F. Validation opinion**

Earthood Services Private Limited (Earthood) has performed a validation of the post-registration changes of the CPA 9181-P1-0015-CP1, project activity included under the PoA titled "MicroEnergy Credits – Microfinance for Clean Energy Product Lines – India". Earthood is accredited for the validation function for specific sectoral scopes the CDM programme of activity falls into.

The validation was performed on the basis of rules and requirements defined by UNFCCC for the CDM project activities. The review of the registered CPA-DD/7/, applied methodology/8/, supporting



documentation and subsequent follow-up actions (including interviews), have provided Earthood with sufficient evidence to determine the fulfilment of stated criteria.

It is Earthood's opinion that the temporary deviation proposed in the monitoring report do not raise any concern with regards to the applicability of established baseline, additionality or scale of the project activity. The changes are only applicable for the current monitoring period and do not have any impact on the registered CPA-DD.

The changes are only in the Monitoring Report of the current monitoring period. Therefore, the PRC request is being submitted along the issuance as per Appendix 1 of PS for PoA version 2.0/2/.

## Appendix 1. Abbreviations

Abbreviations	Full texts
AMS	Approved Methodology for Small-scale
BE	Baseline Emission
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CH <sub>4</sub>	Methane
CL	Clarification Request
CME	Coordinating and Managing Entity
CO <sub>2</sub>	Carbon di oxide
CPA	Component Project Activity
CP	Crediting Period
DOE	Designated Operational Entity
EB	Executive Board
ER	Emission Reduction
ESPL	Earthood Services Private Limited
FAR	Forward Action Request
GHG	Green House Gas
GSC/GSP	Global Stakeholder Consultation Process
GWh	Giga Watt hour
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
MoV	Means of Validation
MP	Monitoring Plan
N <sub>2</sub> O	Nitrous Oxide
PCP	Project Cycle Procedure
PE	Project Emission
PoA-DD	Programme of Activities Design Document
PP	Project Participant
PRC	Post Registration Changes
PS	Project Standard
QA/QC	Quality Assurance/Quality Control
tCO <sub>2</sub> e	tonnes of Carbon di Oxide equivalent
UID	Unique Identification
UNFCCC	United Nations Framework Convention on Climate Change
Ver	Version
VVS	Validation and Verification Standard

## Appendix 2. Competence of team members and technical reviewers

Competence Statement	
<b>Name</b>	Shifali Guleria
<b>Education</b>	M.Sc. (Environmental Studies and Resource Management), TERI University
<b>Experience</b>	1+ year
<b>Field</b>	Climate Change
Approved Roles	

Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	YES (AMS-I.A., AMS-II.G., AMS-III.A.V., AMS-I.D, ACM0002)		
Local expert	YES		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (1.2, 3.1)		
Reviewed by	Shreya Garg	Date	09/07/2020
Approved by	Ashok Gautam	Date	09/07/2020

Competence Statement			
Name	Ashok Gautam		
Country	India		
Education	M. Sc. (Environmental Sciences) M. Tech. (Energy & Environmental Management)		
Experience	16 Years +		
Field	Energy, Climate Change & Environment		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS-I.D., AMS-I.A., AMS-I.C., AMS-I.E, AMS-II.D., AMS-II.G., AMS-III.E., AMS-III.H., AMS-III.Q, AMS-III.Z., AMS-III.AV., AMS III.AR, AM0029, AM0025, AM0056, ACM0001, ACM0002, ACM0004, ACM0012, ACM0006, AM0018, ACM0009, AM0034, AMS.I.B, ACM0003		
Local expert	YES (India)		
Financial Expert	YES		
Technical Reviewer	YES		
TA Expert	YES (TA 1.1, TA 1.2, TA 3.1, TA 13.1)		
Reviewed by	Shreya Garg	Date	25/05/2020
Approved by	Kaviraj Singh	Date	25/05/2020

### Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	MEC	Registered PoA-DD Revised accepted PoA-DD	Version 2.2, 17/10/2012 Version 5, 06/01/2016	Others
2	UNFCCC	PS for PoA	Version 2.0	Others
3	UNFCCC	PCP for PoA	Version 2.0	Others
4	UNFCCC	VVS for PoA	Version 2.0	Others
5	MEC	Monitoring Report (final)	Version 3, Dated 23/04/2021	CME
6	ESPL	Verification Report	Version 2.0, Dated 17/05/2021	Others
7	MEC	Revised and approved CPA-DD (9181-P1-0015-CP1)	Version 3	Other
8	UNFCCC	Applied Methodology: AMS-II.G	Version 3.0	Others

9	MEC	ER sheet corresponding to final Monitoring report	-	Others
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## Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CLs from this validation

CL ID	01	Section no.	D.2	Date : 09/03/2021
<b>Description of CL</b>				
<p>PoA DD page 110 requires that steps 1 and 2 specified in the multistage sampling are to be followed by the simple random sampling, and step 2 has the provision that in order to reflect the different age of the appliances, the relative share of appliance vintages within the total population of appliances deployed under the CPAs shall be established and then the final selection shall also represent that share.</p> <p>Although the applicable vintages and different age-groups have been provided in MR for each technology, the MR does not detail the relative share of appliance vintages within the total population of appliances deployed.</p> <p>CME is requested to elaborate whether and how the required step 2 provision has been applied for both technologies- Improved cookstoves and Solar lighting systems.</p>				
<b>Project participant response</b>				<b>Date : 18/03/2021</b>
<b>Solar Lighting System</b>				
<p>The vintage requirement for solar samples has been met as per the vintage split. The samples selected are representative of the sales in different vintages. This is explained in detail in the table below with an example of Arohan d.light S100 from Odisha with a sample requirement of 30:</p>				
Vintage period	Sales population	Percentage to Total sales	Requirement (as per vintage)	Actual monitored samples
0-1 (27/12/2018 to 26/12/2019)	1,337	62%	19	19
1-2 (27/12/2017 to 26/12/2018)	826	38%	11	11
<p>CME has also submitted a separate excel file which has vintage calculation for solar samples across all sub-groups which clearly shows that samples are representative of the different vintage of solar.</p>				
<b>Improved Cookstoves</b>				
<p>CME applied monitoring results from the previous monitoring period i.e. MP9 for improved cookstoves as the results were valid for period of 27<sup>th</sup> December 2018 to 26<sup>th</sup> December 2019 which covers the entire 10<sup>th</sup> monitoring period (26<sup>th</sup> July 2019 to 26<sup>th</sup> December 2019). However, the proportion of stoves per each vintage was not in line with the vintage requirement. The table below explains the vintage split of Smart Stove (Tamil Nadu) for the parameters "Product Operation Fraction (POF)" and "Quantity of woody biomass used in the project activity by traditional stoves per household (uold)" for sample requirement of 96 (32 samples from 3 branches) as an example:</p>				
Vintage period	Sales population	Percentage to Total sales	Requirement (as per vintage)	Actual monitored samples
Vin 0-1 (27/12/2018 to 26/12/2019)	0	0%	0	0
Vin 1-2 (27/12/2017 to 26/12/2018)	972	3%	3	2
Vin 2-3 (27/12/2016 to 26/12/2017)	5,927	16%	15	15
Vin 3-4 (27/12/2015 to 26/12/2016)	12,278	33%	32	37
Vin 4-5 (27/12/2014 to 26/12/2015)	13,111	36%	34	29

Vin 5-6 (27/12/2012 to 26/12/2013)	4,479	12%	12	13
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Due to temporary shut-down of PO's operation in the state of Tamil Nadu because of COVID-19 pandemic, PO would not be able to provide any on-ground support for CME to conduct fresh monitoring of this CPA for the current monitoring period. As alternative monitoring arrangement could not be proposed for the current monitoring period, CME would like to propose a temporary deviation and claim zero emission reduction for improved cookstoves in accordance with para 228 (b) of PS for PoA which states that zero baseline GHG emissions must be claimed for the entire non-conforming monitoring period as a conservative measure. Revised emission reduction sheet and monitoring report is submitted to DOE.

**Documentation provided by project participant**

Excel sheet with vintage calculation for solar and ICS  
Revised emission reduction sheet  
Revised monitoring report

**DOE assessment** **Date:** 25/03/2021

1. SLS: The vintage analysis sheet shared by the CME has been reviewed. It is found that the SLS sample selection is representative of all vintages proportionally to the actual distributions. It is evident from the data that both SLS population and SLS sample set for monitored parameter have 62% of SLS distribution from vintage 0-1 (SLS installed done from 27/12/2018 to 26/12/2019) and 38% of distributions in vintage 1-2 (installations done from 27/12/2017 to 26/12/2018). The analysis were found to be using the entire population data consistently with credit tracker and the calculation was found appropriate. The information is found to be consistently reported in revised MR as well.
2. ICS: CME has demonstrated that the sample selection done for last valid monitoring survey for ICSs of CPA 9181-P1-0015-CP1 does not follow the proportions of the ICS population in each vintage. The monitoring survey sample selection is not found in compliance with para 110 of PoA-DD. Further, CME has stated inability to conduct new monitoring survey for this monitoring period due to shut down of PO branches following Covid-19 pandemic. Therefore, CME has decided to not claim any emission reductions from the ICS distribution under the CPA. Since there are no separate project emissions from installation of the improved cookstoves and leakages are already accounted as a fraction of baseline emissions under AMS.II-G, therefore, the approach is found to be appropriate and also in line with para 228 (b) of PS for PoA.

CL#01 closed.

Table 2. CARs from this validation

<b>CAR ID</b>	xx	<b>Section no.</b>		<b>Date:</b> DD/MM/YYYY
<b>Description of CAR</b>				
There are no CARs from this validation				
<b>CME's response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				
<b>Date:</b> DD/MM/YYYY				

Table 3. FARs from this validation

<b>FAR ID</b>	xx	<b>Section no.</b>		<b>Date:</b> DD/MM/YYYY
<b>Description of FAR</b>				
There are no FARs from this validation				
<b>CME's response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by CME</b>				
<b>DOE assessment</b>				
<b>Date:</b> DD/MM/YYYY				

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**Document information**

<i>Version</i>	<i>Date</i>	<i>Description</i>
02.0	31 May 2019	Revision to: <ul style="list-style-type: none"><li>• Ensure consistency with version 02.0 of the “CDM validation and verification standard for programmes of activities” (CDM-EB93-A08-STAN);</li><li>• Make editorial improvements.</li></ul>
01.0	29 December 2017	Initial publication.

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Decision Class: Regulatory  
Document Type: Form  
Business Function: Registration  
Keywords: post-registration change, component project activity, validation report

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