


Validation report form for post-registration changes for CDM project activities
(Version 01.0)

Complete this form in accordance with the "Attachment: Instructions for filling out the validation report form for post-registration changes for CDM project activities" at the end of this form.

VALIDATION REPORT ON POST-REGISTRATION CHANGES (PRCs)

Title and reference number of the project activity	Ishasha 6.6 MW Small Hydropower Project
Process track	<input type="checkbox"/> Prior approval <input checked="" type="checkbox"/> Issuance <input type="checkbox"/> Renewal of crediting period
Version number of the validation report on PRCs	01
Completion date of the validation report on PRCs	06/12/2016
Type(s) of PRCs	<input type="checkbox"/> Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline <input checked="" type="checkbox"/> Corrections <input type="checkbox"/> Changes to the start date of the crediting period <input type="checkbox"/> Inclusion of a monitoring plan to a registered project activity <input type="checkbox"/> Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline <input type="checkbox"/> Changes to the project design of a registered project activity <input type="checkbox"/> Types of changes specific to afforestation and reforestation project activities
Version number of PDD to which this report applies	10.0
Project participant(s)	Eco Power Uganda Ltd; C-Quest Capital LLC
Host Party	Uganda
Sectoral scope(s), selected methodology(ies), and where applicable, selected standardized baseline(s)	Sectoral Scope: 1, Energy industries (renewable - / non-renewable sources); Methodology: AMS-I.D, version 17, "Grid connected renewable electricity generation"
Name of DOE	Earthood Services Private Limited

Name, position and signature of the
approver of the validation report on PRCs



Dr. Kaviraj Singh
Managing Director

SECTION A. Executive summary

Brief summary:

Earthood has performed the validation of the correction to the registered PDD of CDM project "Ishasha 6.6 MW Small Hydropower Project" having UNFCCC ref. number 6381. The purpose of the project activity is generation of energy by utilizing hydropower energy. The project activity is located at Kanungu District of South-Western Uganda. The energy generated is supplied to the Uganda Electricity Transmission Company Limited (UETCL), which operates the national grid system. The project activity leads to reduction of greenhouse gas (GHG), as the energy is generated from renewable source.

Scope of validation:

This validation is an independent and objective review of the post registration changes from registered PDD. The scope of the validation of post registration changes is to determine whether there are proposed or actual changes to the project design of the registered CDM project activity or any deviation from the registered monitoring plan. Earthood also determined whether the description in the MR submitted by project participants, which describe the nature and extent of the actual deviation, is inline to the scope of registered monitoring plan, applied methodology and latest versions of standards (PS and VVS). The validation of correction tests the appropriateness, compliance and conservativeness based on the following:

- Approved methodology AMS-I.D. Version 17 /05/ and applied tools, applied in the PDD
- UNFCCC criteria referred to in the Kyoto Protocol criteria and the CDM modalities and procedures as agreed in the Bonn Agreement and the Marrakech Accords
- CDM Validation and Verification Standard (Version 09) /08/
- CDM Project Standard (Version 09) and /06/
- CDM Project Cycle Procedure (Version 09) /07/
- Relevant decisions, guidance and clarifications of the CMP and CDM Executive Board and any other information and references relevant to the PA's reported emission reductions

Validation process:

The validation process, for correction to registered PDD, is conducted as per internal CDM Quality Manual, which includes the following steps;

- a) Contract with project participants and appointment of validation team and technical review team
- b) Desk review of the registered PDD and annexures by validation team and planning of onsite audit
- c) On site audit by validation team consisting of Team Leader and all Technical Experts, as a minimum
- d) Follow up activities e.g., interviews
- e) Reporting and closure of findings (CARs/CLs/FARs) and preparation of draft validation report
- f) Independent technical review of the draft validation report and final/revised documentation (e.g., revised PDD, corresponding ER sheet and evidences)
- g) Reporting and closure of TR comments/findings (CARs/CLs/FARs) and final approval for the decision made
- h) Issuance of final validation report to contracted PP (or authorized representatives) and submission to UNFCCC for approval of post registration changes as appropriate.

Conclusion:

The conclusion of the validation which includes the summary of proposed and assess changes is as under;

- a) There is one correction to the registered PDD. The proposed correction falls under Appendix 1 of CDM PS Version 9. Therefore, prior approval by Board is not required and the changes to the revised PDD can be submitted with the issuance request.

Considering the validation of correction to the registered PDD has been made during the verification process and considering the proposed correction falls under Appendix 1 of CDM PS Version version 9, therefore, this would not require prior approval from CDM EB. The validation confirms that the correction is in line with the applied methodology and all other applicable tools and guidance.

SECTION B. Validation team, technical reviewer and approver

B.1. Validation team member

No.	Role	Signature	Last name	First name	Affiliation	Involvement in
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					(e.g. name of central or other office of DOE or outsourced entity)	Desk review	On-site inspection	Interview(s)	Validation findings
1.	Team Leader	IR	Deka	Nayan	Central Office	Y	Y	Y	Y
2.	Methodological Expert	IR	Deka	Nayan	Central Office	Y	Y	Y	Y
3.	Technical Expert (TA 1.2)	IR	Deka	Nayan	Central Office	Y	Y	Y	Y
4.	Verifier	IR	Mahala	Deepika	Central Office	Y	N	N	Y
5.	Local Expert	EI	Khaukha	Julius	Central Office	Y	N	N	N

B.2. Technical reviewer and approver of the validation report on 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	Mahawar	Abhishek	Central Office
2.	Technical expert to TR	IR	Mahawar	Abhishek	Central Office
3.	Approver	IR	Singh	Kaviraj	Central Office

SECTION C. Means of validation

C.1. Desk review

The validation is performed primarily as a document review of the available PDD version initially submitted by client and all other subsequent versions, if any, including final version. The desk review assessment is performed by an assessment team using a validation protocol and the submitted documents are revised against the applicable requirements. The non-conformities identified at this stage are clubbed with the findings on site, during the site visit, and issued to client. The list of all documents reviewed or referenced during the validation are mentioned in Appendix 3 of the report.

C.2. On-site inspection

Duration of on-site inspection: 29/07/2016				
No.	Activity performed on-site	Site location	Date	Team member
1	An assessment of the implementation and operation of the registered CDM project activity as per the registered PDD or any approved revised PDD;	Kanungu District of South-Western Uganda	29/07/2016	Nayan J Deka
2	A review of information flows for generating, aggregating and reporting the monitoring parameters;	Kanungu District of South-Western Uganda	29/07/2016	Nayan J Deka
3	Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the registered monitoring plan;	Kanungu District of South-Western Uganda	29/07/2016	Nayan J Deka
4	A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources;	Kanungu District of South-Western Uganda	29/07/2016	Nayan J Deka
5	A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PDD, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline;	Kanungu District of South-Western Uganda	29/07/2016	Nayan J Deka
6	A review of calculations and assumptions made in determining the GHG data and emission reductions;	Kanungu District of South-Western Uganda	29/07/2016	Nayan J Deka
7	An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters;	Kanungu District of South-Western Uganda	29/07/2016	Nayan J Deka

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Samaratunga	Nihal	EPUL	29/07/2016	Project description, Monitoring plan	Nayan J Deka
2.	Wisidagama	W.C.	EPUL	29/07/2016	Implementation of monitoring plan, data recording	Nayan J Deka
3.	Welikala	D.L.K.	EPUL	29/07/2016	Implementation of monitoring plan	Nayan J Deka
4.	Tugume	Emma B.	EPUL	29/07/2016	Implementation of monitoring plan	Nayan J Deka

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 PDD form	-	-	-
Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline	-	-	-
Corrections	-	-	-
Changes to the start date of the crediting period	-	-	-

Inclusion of a monitoring plan to a registered project activity	-	-	-
Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline	-	-	-
Changes to the project design of a registered project activity	-	-	-
Types of changes specific to afforestation and reforestation project activities	-	-	-
Others (please specify)	-	-	-
Total	0	0	0

SECTION D. Validation findings

D.1. Compliance with PDD form

Means of validation	The PP has used Version 08 of CDM Project Design Document Form. The version of PDD form was applicable and appropriate at the time of validation of project activity/01/. The correction proposed under this PRC, requires a revision of PDD, thus latest version 8.0 of PDD template has been used to prepare revised PDD and the same has been submitted to the DOE by the PP. The revised PDD version 10.0 shall be considered for all future assessments.
Findings	None
Conclusion	The used PDD form is in compliance with the requirements.

D.2. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline

Means of validation	None
Findings	None
Conclusion	None

D.3. Corrections

Means of validation	<p>As per the paragraph 247 of PS version 9.0, PP shall provide all the parameter used to calculate baseline, project and leakage GHG emissions. Parameter $EF_{CO_2,grid,y}$ (CO_2 emission factor of the grid) is used for calculation of baseline emissions/06/ and the parameter was determined ex –ante and was correctly validated by the validating DOE during the validation stage. However, it was not included in the registered PDD/01/ as an ex ante parameter. Therefore, PP has made a correction in the current monitoring period. The correction is to include the details of parameter in the PDD under section B.6.2.</p> <p>The value of the parameter is 0.6673 tCO₂/MWh /01/. The value has already been corroborated at the time of validation/02/. The same value has been used in the current monitoring period for the calculation of emission reduction.</p> <p>This correction is valid for the current verification and the subsequent verifications. The assessment team confirms that the parameter added as correction is in accordance with the applied methodology/05/, the registered monitoring plan/01/.</p> <p>As per Appendix1. of the project standard version 9, any correction that does not affect the design of the project activity does not require prior approval/06/. Therefore, the validation opinion on the correction would be submitted along with the verification report during the request for issuance process.</p>
Findings	None
Conclusion	The correction complies with the relevant requirements related to the correction in latest version of project standard and VVS/01/.

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

Means of validation	None
Findings	None
Conclusion	None

D.5. Inclusion of a monitoring plan to a registered project activity

Means of validation	None
Findings	None
Conclusion	None

D.6. Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline

Means of validation	None
Findings	None
Conclusion	None

D.7. Changes to the project design of a registered project activity

Means of validation	None
Findings	None
Conclusion	None

D.8. Types of changes specific to afforestation and reforestation project activities

Means of validation	None
Findings	None
Conclusion	None

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 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 needs 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 project activity "Ishasha 6.6 MW Small Hydropower Project" by 'C-Quest Capital LLC'.

The validation was performed on the basis of rules and requirements defined by UNFCCC for the CDM project activities. The review of the registered PDD, applied methodology, supporting documentation and subsequent follow-up actions (including onsite visit and interviews), have provided Earthood with sufficient evidence to determine the fulfilment of stated criteria.

It is Earthood's opinion that the correction to the ex ante parameter has been made in the revised PDD for the parameter $EF_{CO_2, grid, y}$ (CO_2 emission factor of the grid) during the monitoring period 01/11/2013 to 31/12/2014 (inclusive of both days). The proposed correction is covered under the appendix 1 of CDM PS version 9, therefore, does not require prior approval from CDM EB.

We would like to confirm that the assessment opinion is complete in this regard. The application of correction will not affect the estimation of emission reductions.

Appendix 1. Abbreviations

Abbreviations	Full texts
ACM	Approved Consolidated Methodology
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM PCP	Clean Development Mechanism Project Cycle Procedure
CDM PS	Clean Development Mechanism Project Standard
CDM VVS	Clean Development Mechanism Validation and Verification Standard
CER	Certified Emission Reduction
CL	Clarification Request
DOE	Designated Operational Entity
DNA	Designated National Authority
EB	Executive Board
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
MoV	Means of Verification
PDD	Project Design Document
PP	Project Participant
PRC	Project Registration Changes
QA/QC	Quality Assurance / Quality Control
RMP	Revised Monitoring Plan
TA	Technical Area
UNFCCC	United Nations Framework Convention on Climate Change

Appendix 2. Competence of team members and technical reviewers

Competence Statement			
Name	Nayan Jyoti Deka		
Country	India		
Education	M.Tech. (Energy Technology), Tezpur University		
Experience	8 Years +		
Field	Climate Change & Energy Management		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	AMS-I.D., AMS-III.H., AMS-I.C., ACM0006, ACM0002		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert (1.1, 1.2, 3.1, 13.1)	YES		
Reviewed by	Abhishek Mahawar	Date	08/09/2016

Approved by	Ashok Kumar Gautam	Date	08/09/2016
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Competence Statement			
Name	Deepika Mahala		
Country	India		
Education	M. Sc. (Environmental Mgmt), GGSIP University B.Sc. Honour (Chemistry), Sri Venkateshwar College, DU		
Experience	1.5 Year		
Field	Climate Change		
Approved Roles			
Team Leader	NO		
Validator	NO		
Verifier	NO		
Methodology Expert	NO		
Local expert	YES (India)		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert	NO		
Trainee (Validator/Verifier)	YES		
Reviewed by	Abhishek Mahawar	Date	08/09/2016
Approved by	Ashok Kumar Gautam	Date	08/09/2016

Competence Statement			
Name	Julius Sam Khaukha		
Country	Uganda		
Education	Bachelors in Social Administration		
Experience	More than 20 Years		
Field	Education and Social Work		
Approved Roles			
Team Leader	NO		
Validator	NO		
Verifier	NO		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert	NO		
Local Expert	YES (Uganda)		
Reviewed by	Abhishek Mahawar	Date	06/04/2016
Approved by	Ashok Kumar Gautam	Date	06/04/2016

Competence Statement	
Name	Abhishek Mahawar
Country	India
Education	B. Tech. (Chemical Engineering) MBA (Finance)
Experience	7 Years +
Field	Climate Change & Environment
Approved Roles	
Team Leader	YES

Validator	YES		
Verifier	YES		
Methodology Expert	AMS-I.D., AMS.I.F. and ACM0002		
Local expert	YES (India)		
Financial Expert	YES		
Technical Reviewer	YES		
TA Expert (1.2)	YES		
Reviewed by	Ashok Gautam	Date	07/09/2016
Approved by	Kaviraj Singh	Date	07/09/2016

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	PP	Registered CDM PDD, Version 09	Dated 08/10/2014	PP
2	AENOR	CDM Validation Report, Version 02	Dated 25/05/2012	PP
3	PP	Monitoring Report, Version 2.2	Dated 26/09/2016	PP
4	PP	Emission reduction spreadsheet	-	PP
5	UNFCCC	AMS-I.D. ver.17.0	-	Other
6	UNFCCC	CDM PS Ver. 9	Dated 20/02/2015	Other
7	UNFCCC	CDM PCP Ver. 9	Dated 20/02/2015	Other
8	UNFCCC	CDM VVS Ver. 9	Dated 20/02/2015	Other

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CL from this validation

CL ID	Section no.	Date: DD/MM/YYYY
Description of CL		
None		
Project participant response		Date: DD/MM/YYYY
Documentation provided by project participant		
DOE assessment		Date: DD/MM/YYYY

Table 2. CAR from this validation

CAR ID	Section no.	Date: DD/MM/YYYY
Description of CAR		
None		
Project participant response		Date: DD/MM/YYYY
Documentation provided by project participant		
DOE assessment		Date: DD/MM/YYYY

Table 3. FAR from this validation

FAR ID	Section no.	Date: DD/MM/YYYY
Description of FAR		
<i>None</i>		
Project participant response		Date: DD/MM/YYYY
Documentation provided by project participant		
DOE assessment		Date: DD/MM/YYYY

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Document information

Version	Date	Description
01.0	23 March 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Registration Keywords: post-registration change, project activities, validation report		