


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	75MW Yunnan Nuozu 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	Version 01
Completion date of the validation report on PRCs	08/02/2017
Type(s) of PRCs	<input type="checkbox"/> Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline <input 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 checked="" 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	Version 03.0
Project participant(s)	Yunnan Nanpan River Nuozu Electric Development Co., Ltd. Citigroup Global Markets Ltd
Host Party	P. R. China
Sectoral scope(s), selected methodology(ies), and where applicable, selected standardized baseline(s)	Sectoral scope 1: Energy industries (renewable-/non-renewable resources) ACM0002: "Consolidated methodology for grid-connected electricity generation from renewable sources", Version 12.3.0
Name of DOE	China Certification Center, Inc. (CCCI)
Name, position and signature of the approver of the validation report on PRCs	Mr. Zhou Hong, Director of GHG Department

SECTION A. Executive summary

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CCCI has performed the validation on post-registration changes for 75MW Yunnan Nuozu Hydropower Project, CDM Registration Reference Number 8785. The project is located between Huaning County, Yuxi City and Mile county, Honghe Prefecture, Yunnan Province, China with the geo-coordinates of dam of north latitude 24.4749° and east longitude 103.1048° and powerhouse of north latitude 24.4673° and east longitude 103.1009°. The project activity is a hydro power project with a total installed capacity of 75MW, including three sets of 25MW turbine-generator unit for power generation, and supplied to the South China Power Grid (SCPG).

The objective of the validation is to provide a through and independent third party assessment of the post registration changes. In particular, the changes' compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the changes meet the applicable CDM requirements and the identified criteria.

The validation consisted of the following three phases: i) desk review of the project design documents and additional background documents; ii) on site inspection and follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion.

CCCI assessed the post registration changes described in the monitoring plan of the revised PDD version 03.0. Based on the validation activities undertaken, CCCI confirms that the permanent changes in the monitoring plan do not impact either:

- a) The compliance of the monitoring plan with applied monitoring methodology; or
- b) The level of accuracy of the monitoring and calculation of emission reductions compared with the requirements contained in the registered monitoring plan.

The permanent change to the monitoring plan is of a type that change of location of meters as per a PPA. According to the Clause 5 (c) in Appendix 1 of CDM Project Standard version 09.0 /1/, this type of change does not need prior approval.

CCCI therefore requests approval of the post registration changes concurrent with the submission of the Request for Issuance for the monitoring period 01/01/2013 -31/12/2013, 01/01/2014-31/12/2014 and 01/01/2015-31/12/2015.

SECTION B. Validation team, technical reviewer and approver

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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			
						Desk review	On-site inspection	Interview(s)	Validation findings
1.	Team Leader	IR	Li	Yiting	Central office of CCCI	Yes	Yes	Yes	Yes

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	Liang	Stefan	Central office of CCCI
2.	Approver	IR	Zhou	Hong	Central office of CCCI

SECTION C. Means of validation**C.1. Desk review**

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CCCI received the revised PDD (version 03.0, dated 04/02/2017) from the project participants on 10/09/2015.

The validation team conducted a desk review of revised PDD (Version 03.0)/2/, the registered PDD (Version 02.0)/3/ and supporting documents, to verify whether the revised PDD was completed using the valid version of the applicable PDD form and the information presented is materially the same as that in the registered PDD, and whether the changes to the registered monitoring plan described in the revised PDD is in compliance with the applied methodology. Particular attention was given to the accuracy of monitoring.

In addition to the project design documentation provided by the project participants, the validation reviews:

- ✓ The registered PDD and the monitoring plan /3/;
- ✓ The project design document form (version 08.0) /4/;
- ✓ The applied monitoring methodology, i.e. ACM0002 Version 12.3.0 /5/;
- ✓ CDM Validation and Verification Standard Version 09.0 /6/;
- ✓ Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board ;

Appendix 3 of this report contains a complete list of all documents and proofs reviewed by the validation team.

C.2. On-site inspection

Duration of on-site inspection: 06/12/2016-08/12/2016				
No.	Activity performed on-site	Site location	Date	Team member
1.	Opening meeting by CCCI	Powerhouse of the project	06/12/2016	Li Yiting
2	Site Observation: Location of meters, line diagrams, on site monitoring system, operation log book etc.	Powerhouse of the project	07/12/2016	Li Yiting
3	Document Review: Operation log book Monitoring manual Power Purchase Agreement etc.	Powerhouse of the project	08/21/2016	Li Yiting

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Wang	Pinhui	Yunnan Nanpan River Nuozu Electric Development Co., Ltd.	06/12/2016	Project implementation and overview of monitoring system	Li Yiting
2.	Chen	Dafei	Yunnan Nanpan River Nuozu Electric Development Co., Ltd.	07/12/2015	Calibration, data generation, recording, aggregation, calculation, reporting and QA/QC.	Li Yiting
3.	Zhang	Jie	Yunnan Nanpan River Nuozu Electric Development Co., Ltd.	08/12/2016		Li Yiting
4.	Qiang	Jun	Yunnan Nanpan River Nuozu Electric Development Co., Ltd.	08/12/2016		Li Yiting
5	Guo	He	Qinglong substation	07/12/2016		Li Yiting

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

SECTION D. Validation findings**D.1. Compliance with PDD form**

Means of validation	Comparing the revised PDD version 03.0 (both in tracked-change and clean versions) /2/ with the PDD form provided by CDM EB listed in UNFCCC website /4/ and the registered PDD Version 02.0 /3/.
Findings	No findings raised in this section.
Conclusion	The validation team confirms: ✓ The revised PDD (both in tracked-change and clean versions) was completed using the valid version of the applicable PDD form; ✓ The information transferred to the revised PDD is materially the same as that in the registered PDD.

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

Not Applicable.

D.3. Corrections

Not Applicable.

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

Not Applicable.

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

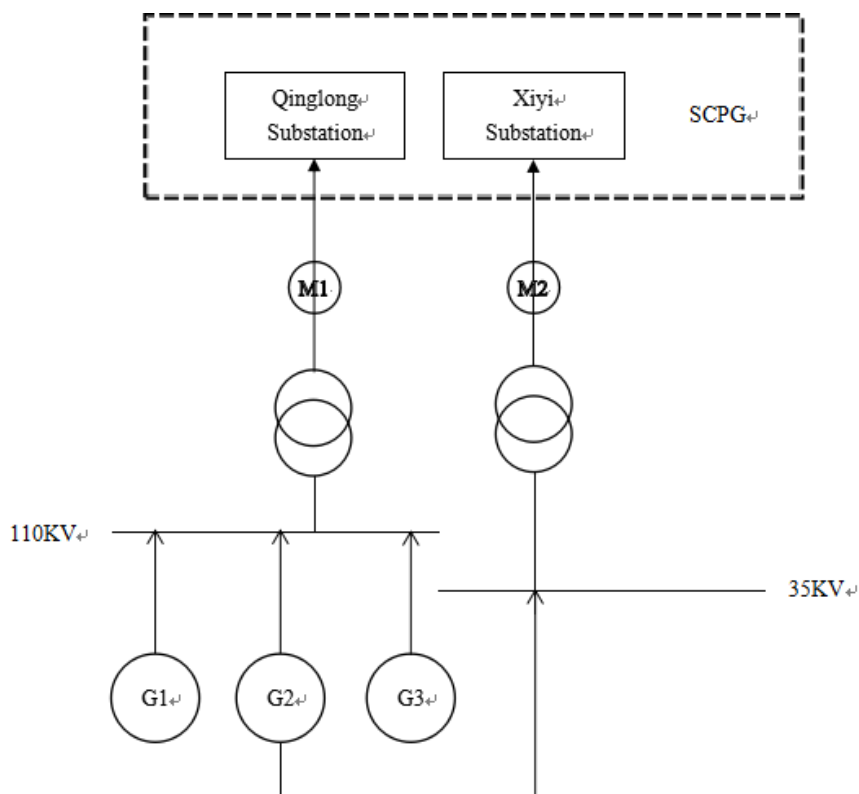
Not Applicable.

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

By reviewing the revised PDD version 03.0 /2/ and the registered PDD Version 02.0 /3/, the permanent changes from registered monitoring plan are summarized as: according to the PPA signed with the power grid /7/, the electricity generated by the project activity is connected via one 110KV line to Qinglong substation and one 35KV line to Xiyi substation, which is different from the two 110KV lines connected with Qinglong substation and Xiyi substation in the registered PDD. Furthermore, the location of the two main meters (M1 and M2) has been changed from the high voltage side of the transformer in the project site to Qinglong substation and Xiyi substation.

Based on the onsite inspection, the verification team can confirm that the generated electricity is exported to SCPG via the 110KV line and one bidirectional electricity meters (M1) with accuracy class of 0.2S was installed at Qinglong substation, and the 35KV transmission line is still not finished. The meter installed at Qinglong substation (M1) measure both the electricity delivered to SCPG ($EG_{out,y}$) and the electricity imported from SCPG ($EG_{in,y}$). The meter installed at Xiyi substation (M2) will be applied after the 35KV transmission line connects to SCPG.

Please refer to the below diagram for an overview on how the project activity is connected to the grid, and the location of the electricity meters as described above.



Means of validation	<p>The permanent changes from the registered monitoring plan was confirmed by interviews with key personnels, on-site inspection of the monitoring system including location of meters and line diagrams, and review of following documents:</p> <ul style="list-style-type: none"> • Electricity line diagram /8/ • Power Purchase Agreement (PPA) /7/ <p>The compliance of the permanent changes from the registered monitoring plan to the applied methodology was confirmed by review of the applied methodology ACM0002 Version 12.3.0 /3/</p> <p>The validation team also compared the revised monitoring plan /2/ against the registered monitoring plan /3/, and confirmed the accuracy level of the meters was not changed, therefore the permanent changes from the registered monitoring plan do not reduce the level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan, and the changes are unlikely to lead to a reduction in the accuracy of the calculation of emission reductions.</p> <p>By reviewing the Power Purchase Agreement /7/, the validation team confirmed the permanent change to the monitoring plan is of a type described in the Project Standard Appendix 1 that does not need prior approval, since the changes are required by the Power Purchase Agreement and have no any adverse impact on the applicability and application of the applied methodology, the additionality and the scale of the project activity.</p>
Findings	No findings raised in this section.
Conclusion	<p>The validation team confirms:</p> <ul style="list-style-type: none"> ✓ The permanent changes to the registered monitoring plan described in the revised PDD /2/ are in compliance with the applied methodology /5/; ✓ The permanent changes from the registered monitoring plan do not reduce the level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan, and are unlikely to lead to a reduction in the accuracy of the calculation of emission reductions; ✓ The permanent change to the monitoring plan is of a type described in the Project Standard Appendix 1 /1/ that does not need prior approval.

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

Not Applicable.

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

Not Applicable.

SECTION E. Internal quality control

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The validation report underwent an Internal Technical Review (ITR) before requesting approval of changes.

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 CCCI procedures.

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

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

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

- The review encompasses all aspects related to applicable post-registration changes, closure of CARs and CLs during the validation exercise, review of sample documents.

The reviewer may raise Clarification Requests to the validation team and will discuss these matters with the Team Leader.

After the agreement of the responses to the Clarification Requests from the validation team as well as the PP(s), the finalized validation report is accepted for further processing.

SECTION F. Validation opinion

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CCCI has performed the validation on post-registration changes for 75MW Yunnan Nuoze Hydropower Project, CDM Registration Reference Number 8785. The project is located between Huaning County, Yuxi City and Mile county, Honghe Prefecture, Yunnan Province, China with the geo-coordinates of dam of north latitude 24.4749° and east longitude 103.1048° and powerhouse of north latitude 24.4673° and east longitude 103.1009°. The project activity is a hydro power project with a total installed capacity of 75MW, including three sets of 25MW turbine-generator unit for power generation, and supplied to the South China Power Grid (SCPG).

The validation consisted of the following three phases: i) desk review of the project design documents and additional background documents; ii) on site inspection and follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion.

CCCI assessed the post registration changes described in the monitoring plan of the revised PDD version 03.0/2/. Based on the validation activities undertaken, CCCI confirms that the permanent changes in the monitoring plan do not impact either:

- a) The compliance of the monitoring plan with applied monitoring methodology; or
- b) The level of accuracy of the monitoring and calculation of emission reductions compared with the requirements contained in the registered monitoring plan.

The permanent change to the monitoring plan is of a type described in the Project Standard Appendix 1 that does not need prior approval.

CCCI therefore requests approval of the post registration changes concurrent with the submission of the Request for Issuance for the monitoring period 01/01/2013 -31/12/2013, 01/01/2014-31/12/2014 and 01/01/2015-31/12/2015.

Appendix 1. Abbreviations

Abbreviations	Full texts
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction(s)
CL	Clarification Request
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
PCP	Project Cycle Procedure
PDD	Project Design Document
PP	Project Participant
PS	Project Standard
UNFCCC	United Nations Framework Convention for Climate Change
VVS	CDM Validation and Verification Standard
CCPG	Central China Power Grid

Appendix 2. Competence of team members and technical reviewers

Li Yiting	Team Leader	Ms. Li Yiting has worked in CDM projects since 2006 and gained extensive experience in the development and implementation of CDM projects, working in the area of project-based mechanisms. Her background includes both project validation and verification, in different sectoral scopes, including wind power, hydro power, biomass, waste heat recovery in cement industry, coke oven gas recovery industry. From year 2009 onwards she has been involved in validation and verification of CDM projects and also as a technical reviewer.
Stefan Liang	Technical Reviewer	Mr. Stefan Liang is a lead Auditor based in Beijing. Mr Liang holds a BEn in Environmental Engineering and an MSc in Environmental Science & Engineering. He has 8.5 years' experience in carbon project development and certification, including 7.5 years' experience in GHG projects' validation and verification. He has participated in CDM validation and verification for about 100 projects, which include sectors such as wind power, hydropower, biomass, waste heat recovery waste disposal and coal mine methane. Mr Liang has completed the CCCI Validation & Verification training course and has also completed internal auditor training in ISO 9001 and ISO14001, and lead auditor training in ISO 14064.

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
/1/	CDM EB	CDM Project Standard Version 09.0	https://cdm.unfccc.int/Reference/Standards/index.html	EB
/2/	Enecore Carbon Ltd	Revised Project Design Document version 03.0 dated 04/02/2017	-	Project participants
/3/	Enecore Carbon Ltd	Registered Project Design Document Version 02.0 dated 12/04/2012	http://cdm.unfccc.int/Projects/DB/ERM-CVS1355485407.25/view	EB
/4/	CDM EB	Project design document form (version 08.0)	https://cdm.unfccc.int/Reference/PDDs_Foams/index.html	EB
/5/	CDM EB	ACM0002: Consolidated baseline methodology for grid-connected electricity generation from renewable sources" (Version 12.3.0)	http://cdm.unfccc.int/methodologies/PAMethodologies/approved	EB
/6/	CDM EB	CDM Validation and Verification Standard Version 09.0	https://cdm.unfccc.int/Reference/Standards/index.html	EB
/7/	Co-signed by Yunnan Nanpan River Nuozu Electric Development Co., Ltd and Yunan Power Grid Company	Power Purchase Agreement	-	Project participants
/8/	Yunnan Nanpan River Nuozu Electric Development Co., Ltd	Electricity line diagram	-	Project participants

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

No CLs, CARs and FARs from this validation