

VALIDATION OPINION FOR REVISION OF REGISTERED MONITORING PLAN

Carbon Asset Management Sweden AB

**Qinghai Jinshaxia 70MW
Hydropower Project**

UNFCCC Ref. No. 1467

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Organisation: SGS United Kingdom Limited		Client: Carbon Asset Management Sweden AB	
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Validation Team: Simon Zhao Xinguang – Lead Assessor Michael Wu Shimin – Assessor (Trainee) Grace Han Huijuan – Assessor (Trainee)		Distribution/Document Control <input checked="" type="checkbox"/> No Distribution (without permission from the Client or responsible organisational unit)	
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Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DOE	Designated Operational Entity
GHG	Greenhouse Gas(es)
MP	Monitoring Plan
NIR	New Information Requests
NWCG	Northwest China Power Grid
PDD	Project Design Document
PP	Project Participant
SGS	Société Générale de Surveillance
UNFCCC	United Nations Framework Convention on Climate Change

Table of Content

1.	Validation Opinion	5
2.	Introduction.....	6
2.1	Objective.....	6
2.2	Scope.....	6
2.3	GHG Project Description	6
2.4	The Names and Roles of the Validation Team Members	6
3.	Methodology.....	7
3.1	Review of CDM-PDD and Additional Documentation	7
3.2	Use of the Validation Protocol	7
3.3	Findings	7
3.4	Internal Quality Control	8
4.	Validation Findings	9
4.1	Participation Requirements	9
4.2	Project Design	9
4.3	Eligibility as a Small Scale Project.....	9
4.4	Baseline Selection and Additionality	9
4.5	Application of Baseline Methodology and Calculation of Emission Factors	9
4.6	Application of Monitoring Methodology and Monitoring Plan	9
4.7	Choice of the Crediting Period.....	10
4.8	Environmental Impacts	10
4.9	Local Stakeholder Comments	10
4.10	Findings of Previous Verification Reports.....	10
5.	List of Persons Interviewed	11
6.	Document References	12

1. Validation Opinion

Paragraph 57 of the modalities and procedures for the CDM allows project participants to revise monitoring plans in order to improve accuracy and/or completeness of information, subject to the revision being validated by a Designated Operational Entity.

SGS United Kingdom Ltd has been contracted by Carbon Asset Management Sweden AB to perform such a validation of the revision of monitoring plan according to the procedure detailed in annex 34 to EB 26 meeting report; the original monitoring plan is part of the PDD of registered CDM project: Qinghai Jinshaxia 70MW Hydropower Project, UNFCCC reference number 1467. The purpose of a validation is to have an independent third party assessment of the revision of monitoring plan. In particular, the level of accuracy and/or completeness in the proposed revision of the monitoring plan, and the conformity with approved monitoring methodology applicable to the project activity.

By applying the proposed revision of monitoring plan, the main metering system for monitoring the electricity supplied by the project to NWCG will be installed at Dalu 110kV transmission substation, instead of Alan 110kV transmission substation which was indicated in the original monitoring plan. And the electricity achieved by the project from NWCG will be monitored by the metering system installed at Dalu 110KV transmission substation, instead of the auxiliary transformer substation which was indicated in the original monitoring plan. Other monitoring parameters in the original monitoring plan remain unchanged. The formulas for emission reduction calculations remain unchanged. Theoretically, there should be no impact on the calculation of the emissions reduction achieved by this project activity

This revision improves the accuracy of information provided and consistency in the registered PDD and the monitoring plan.

Furthermore, we confirm that:

- (a) the proposed revision of the monitoring plan ensures that the level of accuracy or completeness in the monitoring and verification process is not reduced as a result of the revisions;
- (b) the proposed revision of the monitoring plan is in accordance with the approved monitoring methodology applicable to the project activity.
- (c) the findings of previous verification report have been taken into account.

Signed on Behalf of the Validation Body by Authorized Signatory

Signature:



Name: Siddharth Yadav

Date: 21/01/2009

2. Introduction

2.1 Objective

Paragraph 57 of the modalities and procedures for the CDM allows project participants to revise monitoring plans in order to improve accuracy and/or completeness of information, subject to the revision being validated by a Designated Operational Entity.

SGS United Kingdom Ltd has been contracted by Carbon Asset Management Sweden AB to perform such a validation of the revision of monitoring plan according to the procedure detailed in annex 34 to EB 26 meeting report; the original monitoring plan is part of the PDD of registered CDM project: Qinghai Jinshaxia 70MW Hydropower Project, UNFCCC reference number 1467. The purpose of a validation is to have an independent third party assessment of the revision of monitoring plan. In particular, the level of accuracy or completeness in the proposed revision of the monitoring plan, and the conformity with the approved monitoring methodology applicable to the project activity.

The Validation was performed in accordance with the UNFCCC criteria for the Clean Development Mechanism (CDM) and the host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

SGS reviewed the project design documentation, using a risk based approach and conducted follow-up interviews.

2.2 Scope

The scope of the validation is defined as an independent and objective review of the project design document, the project baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against the Kyoto Protocol requirements, the UNFCCC rules and associated interpretations. SGS has employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

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

2.3 GHG Project Description

As per the registration information of the project on the CDM website: <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, there is no change in the project activity description. The project was registered on 5th May 2008 under UNFCCC Ref. No. 1467 against ACM0002 version 06.

2.4 The Names and Roles of the Validation Team Members

Name	Role	Affiliate
Simon Zhao Xinguang	Lead Assessor	SGS China
Michael Wu Shimin	Assessor (Trainee)	SGS China
Grace Han Huijuan	Assessor (Trainee)	SGS China

3. Methodology

3.1 Review of CDM-PDD and Additional Documentation

The validation is performed primarily as a document review of the publicly available project documents. The assessment is performed by trained assessors using a validation protocol.

A site visit is usually required to verify assumptions in the baseline.

3.2 Use of the Validation Protocol

The validation protocol used for the assessment is partly based on the templates of the IETA / World Bank Validation and Verification Manual and partly on the experience of SGS with the validation of CDM projects. It serves the following purposes:

- it organises, details and clarifies the requirements the project is expected to meet; and
- it documents both how a particular requirement has been validated and the result of the validation.

The validation protocol consists of several tables. The different columns in these tables are described below.

Checklist Question	Ref ID	Means of Verification (MoV)	Comment	Draft and/or Final Conclusion
The various requirements are linked to checklist questions the project should meet.	Lists any references and sources used in the validation process. Full details are provided in the table at the bottom of the checklist.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (Y), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). A Clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

3.3 Findings

As an outcome of the validation process, the team can raise different types of findings

In general, where insufficient or inaccurate information is available and clarification or new information is required the Assessor shall raise a **Clarification Request (CL)** specifying what additional information is required.

Where a non-conformance arises the Assessor shall raise a **Corrective Action Request (CAR)**. A CAR is issued, where:

- .Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions;
- Issues identified in a FAR during validation to be verified during verification have not been resolved by the project participants.

A **Forward Action Request (FAR)** is raised during verification for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.

The validation process may be halted until this information has been made available to the assessors' satisfaction. Failure to address a CL/FAR may result in a CAR. Information or clarifications provided as a result of an CL/FAR may also lead to a CAR.

Corrective Action Requests, Clarification Requests and Forward Action Requests are raised in the draft validation protocol and detailed in a separate form (Findings Overview). In this form, the Project Developer is given the opportunity to address and "close" outstanding CARs and respond to CLs and FARs.

3.4 Internal Quality Control

Following the completion of the assessment process and a recommendation by the Assessment team, all documentation will be forwarded to a Technical Reviewer. The task of the Technical Reviewer is to check that all procedures have been followed and all conclusions are justified. The Technical Reviewer will either accept or reject the recommendation made by the assessment team.

4. Validation Findings

4.1 Participation Requirements

As per the Validation Report by DNV, dated 25th November 2007 available on UNFCCC webpage <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, No changes have been made.

4.2 Project Design

As per the Validation Report by DNV, dated 25th November 2007 available on UNFCCC webpage <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, No changes have been made.

4.3 Eligibility as a Small Scale Project

As per the Validation Report by DNV, dated 25th November 2007 available on UNFCCC webpage <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, No changes have been made.

4.4 Baseline Selection and Additionality

As per the Validation Report by DNV, dated 25th November 2007 available on UNFCCC webpage <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, No changes have been made.

4.5 Application of Baseline Methodology and Calculation of Emission Factors

As per the Validation Report by DNV, dated 25th November 2007 available on UNFCCC webpage <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, No changes have been made.

4.6 Application of Monitoring Methodology and Monitoring Plan

The modifications to the registered monitoring plan are as follows:

1. The location of the metering system for monitoring the electricity supplied by the project to NWCG (B.7.2, Page 20): The location of the main metering system is changed from "Alan 110kV transmission substation" to "Dalu 110kV transmission substation".
2. The location of the metering system for monitoring the electricity achieved by the project from NWCG (B.7.2, Page 20): The location of the metering system for monitoring the electricity achieved by the project from NWCG is changed from "the auxiliary transformer substation" to "Dalu 110kV transmission substation".

Due to the adjustment of the grid structure of Qinghai Province, the main metering system of the project was moved to Dalu 110kV transmission substation on 15/04/2008. The document issued by the grid company instructing the move of the main metering system has been checked by SGS (Ref. /8/). The transmission loss (approximately 1%) does not affect the metered electricity. The meters are installed at the far end of the transmission lines from the project site. When the electricity arrives at the meters, the transmission loss has been deducted already.

Before 20/10/2008, the project achieved electricity from a 10kV transmission line at the dam. The PP built a transmission line from the project site to the dam. The electricity used by the dam has been supplied by the project itself since 21/10/2008. During urgent situation when all the 4 generators of the project are out of operation at the same time, the electricity used by the power house and used by the dam will need to be achieved from Dalu 110kV transmission substation. The transmission line construction has been finished and the electricity supplied by the 10kV backup line at the dam has been stopped since 24:00 20/10/2008. The instruction issued by the grid company on 16/10/2008 for stopping supplying electricity to the dam has been provided to SGS (Ref. /9/). Since 21/10/2008, all the electricity achieved by the project from NWCG has been from the Dalu 110kV transmission substation and has been monitored by the main metering system installed at the Dalu 110kV Transmission Substation. It is more conservative to monitor the electricity achieved by the

project from NWCG at the Dalu 110kV transmission substation than at the project site, as the transmission loss will be included in the meter readings of the main metering system.

Rest of the monitoring plan remains the same as mentioned in the registered PDD available at UNFCCC website <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, and revised monitoring plan is attached with the revised validation opinion.

There is no other change in the Validation Report by DNV, dated 25th November 2007 available on UNFCCC webpage <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>.

This revision improves the accuracy of information provided and consistency in registered PDD and the monitoring plan. And it is in accordance with the approved monitoring methodology applicable to the project activity, i.e. ACM0002 version 06.

4.7 Choice of the Crediting Period

As per the Validation Report by DNV, dated 25th November 2007 available on UNFCCC webpage <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, No changes have been made.

4.8 Environmental Impacts

As per the Validation Report by DNV, dated 25th November 2007 available on UNFCCC webpage <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, No changes have been made.

4.9 Local Stakeholder Comments

As per the Validation Report by DNV, dated 25th November 2007 available on UNFCCC webpage <http://cdm.unfccc.int/Projects/DB/DNV-CUK1197268584.97>, No changes have been made.

4.10 Findings of Previous Verification Reports

One periodic verification has been carried out for the project. 3 NIRs (equal to CLs in this report), 1 CAR and 2 FARs were raised during the last verification. (Ref. /7/) The NIRs and CAR have been address during the last verification. The 2 FARs were raised for requesting the PP to revise the monitoring plan. The proposed revision of monitoring pan follows the 2 FARs and has properly addressed the issues raised during the last verification.

5. List of Persons Interviewed

Date	Name	Position	Short Description of Subject Discussed
02/12/2008	Ms. Meng Jing	Project Consultant	Revision of the monitoring plan

6. Document References

Category 1 Documents (documents provided by the Client that relate directly to the GHG components of the project, (i.e. the CDM Project Design Document, confirmation by the host Party on contribution to sustainable development and written approval of voluntary participation from the designated national authority):

- /1/ Revised Monitoring Plan dated 17th November 2008.

Category 2 Documents (background documents used to check project assumptions and confirm the validity of information given in the Category 1 documents and in validation interviews):

- /2/ Registered PDD: Qinghai Jinshaxia 70MW Hydropower Project (UN Ref. 1467), Version 04.1, dated 8th October 2007.
- /3/ Validation Report, issued by DNV, Report No. 2007-0770, revision 01, dated 25th November 2007.
- /4/ ACM0002: Consolidated baseline methodology for grid-connected electricity generation from renewable sources, version 06, dated 19th May 2006.
- /5/ Validation and Verification Manual, version 01, dated 28th November 2008.
- /6/ Annex34 to EB26 meeting report
- /7/ Verification Report of Qinghai Jinshaxia 70MW Hydropower Project for the monitoring period from 5th May 2008 to 31st August 2008, issued by SGS, **version 1, dated 21st November 2008.**
- /8/ Instruction for moving the main metering system of Jinshaxia project, issued by the grid company, dated 5th May 2008.
- /9/ Instruction for stopping supplying electricity to the dam of the project through 10kV transmission line, issued by the grid company, dated 16th October 2008.

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