

VALIDATION REPORT TITLE

SICHUAN HUADIAN XIXI RIVER HYDRO-ELECTRICITY DEVELOPMENT CO., LTD. DILUO HYDROELECTRIC PROJECT



Document Prepared By: Bureau Veritas Certification Holding SAS

Report No.BVC/China-VCS/7067/2012

Project Title	Sichuan Huadian Xixi River Hydro-electricity Development Co., Ltd. Diluo Hydroelectric Project
Version	Revision No.01
Report ID	BVC/China-VCS/7067/2012

Report Title	Validation Report of Sichuan Huadian Xixi River Hydro-electricity Development Co., Ltd. Diluo Hydroelectric Project
Client	Beijing Cronus Technology Consultancy Centre
Pages	13
Date of Issue	08/08/2012
Prepared By	Bureau Veritas Certification
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Summary:	
Bureau Veritas Certification has made the Pre-CDM validation of Sichuan Huadian Xixi River Hydro-electricity Development Co., Ltd. Diluo Hydroelectric Project, owned by Sichuan Huadian Xixi River Hydro-electricity Development Co.Ltd, which is located near the village of Zhatai, near Diluo Town of Butuo County in Sichuan Province,, with UNFCCC Reference 4901 on the basis of Voluntary Carbon Standard (VCS) Version 3 Program, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, as well as the host country criteria. The validation scope is defined as a periodic independent review and ex post determination by the Designated Operational Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up on-site visit and interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification 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 verification process is a list of Clarification Requests, Corrective Actions Requests, Forward Actions Requests (CLs, CARs and FARs). An analysis as provided by the applied VCS program approved methodology demonstrates that the project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PD version 02 dated 07/08/2012. The review of the PD version 02 and the information made available to us to determine the fulfilment of stated criteria. In our opinion, the project correctly applies and meets the relevant VCS requirements and the relevant host country criteria.	

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1 INTRODUCTION

1.1 Objective

Beijing Cronus Technology Consultancy Centre has commissioned Bureau Veritas Certification to verify the emission reductions of the Verified emission reduction (VER) of Sichuan Huadian Xixi River Hydro-electricity Development Co., Ltd. Diluo Hydroelectric Project (hereafter referred to as **"the Project"**), which is located near the village of Zhatai, near Diluo Town of Butuo County in Sichuan Province, for the period from 17/12/2009 to 14/06/2011, prior to its first CDM crediting period.

Bureau Veritas Certification as the validation/verification body of the Project has been accredited as a DOE by UNFCCC and also meets the competence requirements as set out in ISO 14065:2007.

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 VCS 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. Gap-Validation is a requirement for all pre-CDM projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of Voluntary Carbon Units (VERs).

VCS Version 3 Program and 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 and Criteria

The validation scope is defined as an independent and objective review of the VCS Project Description (VCS-PD), the Project's baseline study and Monitoring Report (MR) and other relevant documents. The information in these documents is reviewed against VCS Version 3 requirements, UNFCCC rules and associated interpretations.

The validation is not meant to provide any consulting towards the client. However, stated requests for forward actions and/or corrective actions may provide input for improvement of the Project monitoring towards reductions in the GHG emissions.

1.3 Level of assurance

The validation report is based on the VCS-PD, the VCS Monitoring Report (MR), CDM-PDD, supporting evidences made available to the verifier and information collected through performing interviews and during the on-site assessment. The validation conclusion is assured the level of assurance of the Project is high.

1.4 Summary Description of the Project

The Project is owned by Sichuan Huadian Xixi River Hydro-electricity Development Co.Ltd (hereafter referred to as **"the PP"**) and is located near the village of Zhatai, near Diluo Town of Butuo County in Sichuan Province,. The Project consists of 2 sets of 50 MW turbines, providing a total installed capacity of 100MW. The annual expected electricity supplied to Central China Power Grid (CCPG) is 397,013MWh and the annual estimated emission reductions are 337,572tCO₂e.

The Project has been registered on 15/06/2011 (UNFCCC ref. No. 4901) under approved CDM methodology ACM0002 Version 12.1.0 "Consolidated methodology for grid-connected electricity generation from renewable sources". The Project Start Date is 17/12/2009, when the Project commissioned, started electricity generation. The crediting period for the Project under the VCS is from 17/12/2009 to 14/06/2011.

Project title:	Sichuan Huadian Xixi River Hydro-electricity Development Co., Ltd. Diluo Hydroelectric Project
UNFCCC Ref number:	4901
Registration Date:	15/06/2011
Monitoring Period:	17/12/2009 to 14/06/2011
Project Participants:	China: Sichuan Huadian Xixi River Hydro-electricity Development Co.Ltd
Methodologies used	ACM0002 Version 12.1.0
Location of the Project:	near the village of Zhatai, near Diluo Town of Butuo County in Sichuan Province,
Geo coordinates:	Powerhouse: longitude 103° 2'41" E, latitude 27° 34'52" N; Dam Site: longitude 103° 2'50.43" E, latitude 27° 40'12.76" N
UNFCCC link:	http://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1308038914.86/view

2 VALIDATION PROCESS, FINDINGS AND CONCLUSION

2.1 Validation Process

The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The Project Description (VCS-PD) ^[6] submitted by Beijing Cronus Technology Consultancy Centre and additional background documents related to the project design and baseline, i.e. country Law, registered CDM-PDD ^[4], validation report, Approved methodology, Clarifications on Validation Requirements to be Checked by a certified validation body were reviewed.

Bureau Veritas Certification verified the information contained in the documents reviewed against the requirements set in VCS Standard Version 3.2 effective as the 01/02/2012 ^[3] and the Clean Development Mechanism Validation and Verification Manual version 01.2 ^[2], issued by CDM Executive Board at its 55th meeting on 30/07/2010.

In addition, on 18/07/2012, Bureau Veritas Certification performed an interview with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Sichuan Huadian Xixi River Hydro-electricity Development Co.Ltd were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Sichuan Huadian Xixi River Hydro-electricity Development Co.Ltd (The PP)	↳ Project background information
	↳ Project technology, operation, maintenance and monitoring capability.
	↳ Project monitoring and management plan.
	↳ Project approvals (incl. EIA approval, LOA, FSR approval)
	↳ Government policies related to wind power projects
	↳ Applicability of selected methodology.
	↳ Baseline determination.
	↳ Emission reductions calculation.
Beijing Cronus Technology Consultancy Centre	↳ Emission reduction monitoring plan.
	↳ Monitoring Plan
	↳ Monitored data and Monitoring Report
	↳ GHG Calculations

During the validation process no material discrepancies were found and Bureau Veritas did not considered necessary to raise neither corrective actions, nor clarifications nor other findings.

2.2 Validation Findings

2.2.1 Gap Validation

According to the VCS standard Version 3.2 for projects validated under the CDM, the cover page and sections 1.2, 1.3, 1.5, 1.6, 1.7, 1.9, 1.10, 1.12.1, 1.12.2, 1.12.3, 1.12.4 and 1.13 of the VCS Project Description Template shall be completed and a validation/verification body shall undertake a validation of same to provide a gap validation for the project's compliance with the VCS rule.

Bureau Veritas Certification verified the information reported in the VCS-PD version 02 dated 07/08/2012^[6] against the CDM-PDD^[4], CDM validation report^[7], Project Host country (China) LOA^[9], Project Operation Log^[10], Business License^[8] and UNFCCC website^[11] and found consistent. The detailed validation process is documented in the Table below

CRITERIA OF VCS-PD	Ref	COMMENTS	Concl.
1. Project Details			
1.2 Sectoral Scope and Project Type	VCS-PD, CDM-PDD, CDM Validation Report	As a hydor power plant, the Project falls into the sectoral scope I (renewable source).	OK
1.3 Project Proponent	VCS-PD, CDM-PDD, CDM Validation Report, LOA, UNFCCC website, PPA	The Project owner is Sichuan Huadian Xixi River Hydro-electricity Development Co.Ltd.	OK
1.5 Project Start Date	VCS-PD, Project commercial operation Grid company certificate	The project starting date in VCS Version 3.2 is defined as the date when the Project began generating GHG emission reduction or removals. As per implementation log of the Project, on 17/12/2009 the Project commenced to deliever electricity to the grid. As a consequence the Project starting date is 17/12/2009. The CDM validation is	OK

CRITERIA OF VCS-PD	Ref	COMMENTS	Concl.
		completed on 31/05/2011[7], which meets the requirement that 'Non-AFOLU projects shall complete validation within two years of the project start date'.	
1.6 Project Crediting Period and	VCS-PD, Project commercial operation Grid company certificate, CD- PDD, CDM Validation report, UNFCCC website	The Project starting date is 17/12/2009 and the Project was registered as CDM on 15/06/2011. Consequently the VCS crediting period is from 17/12/2009 to 14/06/2011.	OK
1.7 Project Scale and Estimated GHG Emission Reductions or Removals	VCS-PD, CDM-PDD, CDM Validation report	The Project is expected to achieve 337,572tCO ₂ e per year. It is thus categorized as ' Project ' as per VCS 3.2 definition.	OK
1.9 Project Location	Site visit, VCS-PD, CDM-PDD, CDM Validation report	The project site is located near the village of Zhatai, near Diluo Town of Butuo County in Sichuan Province,. The Project coordinates are :Powerhouse: longitude 103° 2'41" E, latitude 27° 34'52" N; Dam Site: longitude 103 ° 2'50.43" E, latitude 27° 40'12.76" N.	OK
1.10 Conditions Prior to Project Initiation	VCS-PD, CDM-PDD, CDM Validation report	The scenario existing prior to the start of the implementation of the project activity is Central China Power Grid (CCPG), which is dominated by fossil-fuel fired power plant, providing the same electricity service as the Project. The implementation of the Project was not to generate GHG emissions primarily for the purpose of its subsequent removal or destruction.	OK

CRITERIA OF VCS-PD	Ref	COMMENTS	Concl.
1.12.1 Right of use	FSR, LoAs, PPA	Sichuan Huadian Xixi River Hydro-electricity Development Co., Ltd. Diluo Hydroelectric Project in Sichuan Province is developed by Sichuan Huadian Xixi River Hydro-electricity Development Co.Ltd. The letter of Approval (No.1730) issued by National Development and Reform Commission of the P.R.^[9] China is provided to demonstrate the right of use of the Project. Information has also been verified by checking the Business liscence^[8].	OK
1.12.2 Emission Trading Programs and Other Binding Limits	VCS-PD, CDM-PDD, CDM Validation Report, UNFCCC website	N.A. to the Project. The Project has been registered as a CDM project on 15/06/2011. Only GHG emission reductions achieved from the starting date of the Project 17/12/2009 to 14/06/2011 could be verified as VCU's under the VCS version 3.2.	OK
1.12.3 Participation under Other GHG Programs	VCS-PD, CDM-PDD, CDM Validation Report, UNFCCC website	The Project has been registered as a CDM project (UNFCCC Reference No.4901) on 15/06/2011. Only GHG emission reductions achieved from the starting date of the Project 17/12/2009 to 14/06/2011 could be verified as VCU's under the VCS Version 3.2 program.	OK
1.12.4 Other Forms of Environmental Credit	VCS-PD, CDM-PDD, CDM Validation Report, UNFCCC website	The project neither has nor intends to generate any other form of GHG-related environmental credit for GHG emission reductions or removals claimed under the VCS Program. The Project only will generate CER from 15/06/2011 onwards.	OK
1.13 Additional Information Relevant to the Project -Eligibility Criteria	VCS-PD, CDM-PDD, CDM	- it is not a grouped project;	OK

CRITERIA OF VCS-PD	Ref	COMMENTS	Concl.
-Leakage Management -Commercially Sensitive Information -Further Information	Validation Report, UNFCCC website	- leakage is 0; - no commercial sensitive information has been excluded to the public - there is not any additional relevant legislative, technical, economic, sectoral, social, environmental, geographic, site-specific and/or temporal information that may have a bearing on the eligibility of the project, the net GHG emission reductions or removals, or the quantification of the project's net GHG emission reductions or removals	

2.2.2 Methodology Deviations

No methodology deviation has been applied to the Project

2.2.3 New Project Activity Instances

Not applicable since Sichuan Huadian Xixi River Hydro-electricity Development Co., Ltd. Diluo Hydroelectric Project is not a grouped project.

2.3 Validation Conclusion

In Bureau Veritas Certification's opinion the Project conforms to the relevant criteria of VCS Standard Version 3.2.

3 VALIDATION CONCLUSION

Bureau Veritas Certification has performed the validation of Sichuan Huadian Xixi River Hydro-electricity Development Co., Ltd. Diluo Hydroelectric Project, CDM Registration Reference Number 4901, owned by Sichuan Huadian Xixi River Hydro-electricity Development Co.Ltd, which is located in near the village of Zhatai, near Diluo Town of Butuo County in Sichuan Province,, and applying the methodology ACM0002 Version 12.1.0. The validation was performed based on the requirements set by VCS Standard Version 3.2 effective as the 01/02/2012, UNFCCC criteria for the CDM and relevant guidance provided by CMP and the CDM Executive Board.

The validation 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 and onsite visit; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

The management of Sichuan Huadian Xixi River Hydro-electricity Development Co.Ltd is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions of the project on the basis set out within the project Monitoring Plan in the registered PDD. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the Project, is the responsibility of the management of the Project.

Bureau Veritas Certification has verified the project Description version 02 dated 07/08/2012 for as indicated below. Analysis as provided by the applied VCS program approved methodology demonstrates that the project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PD version 02 dated 07/08/2012.

The review of the PD version 02 and the information made available to us to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant VCS requirements and the relevant host country criteria.

REFERENCES

Documents reviewed:

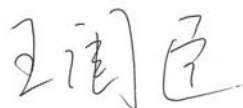
- [1]. Approved methodology ACM0002 ver. 12.1.0 – “Consolidated methodology for grid-connected electricity generation from renewable sources”
- [2]. Validation and Verification Manual Version 01.2 dated 30/07/2010
- [3]. VCS Standard Version 3.2 effective as the 01/02/2012
- [4]. Registered CDM-PDD version 5.1 dated 19/05/2011, CDM Ref No. 4901
- [5]. VCS-PD Version 01, dated 11/07/2012
- [6]. VCS-PD Version 02, dated 07/08/2012
- [7]. CDM Validation Report Version 2.1, dated 31/05/2011;
- [8]. Business License of the PP
- [9]. LoA of the Project (No.1730) issued by National Development and Reform Commission of P.R.China in Mar.2009
http://cdm.unfccc.int/filestorage/A/P/5/AP5EBV20L9WXS8RFGYMQD4J7136HNU/China%20LoA.pdf?t=dGt8bThkbWp6fDCJ7mCi_fwCjwIsmLcjct4y
- [10]. Implementation log of the Project
- [11]. <http://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1308038914.86/view>

Persons interviewed:

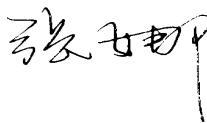
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