



VERIFICATION REPORT

for the VCS Project Activity

Grouped Hydropower Plants in Chongqing,
Yunnan, Sichuan and Guizhou Provinces,
P.R.China

In
P.R. China

Report No. 01 996 9105053287

Version 01, 2010-06-08

TÜV Rheinland Japan Ltd.

**Voluntary Carbon Standard 2007****Verification Report Template****19 November 2007**

Name of Verification company:	Date of the issue:
TÜV Rheinland Japan Ltd.	2010-06-08
Report Title:	Approved by:
Validation Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China	Dr. Manfred Brinkmann
Client:	Project Title:
South Pole Carbon Asset Management Ltd.	Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China
Summary:	
The verification team has performed the first periodic verification of the VCS project: "Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China". The Grouped Project involves the installation and operation of 95 run-of-river hydropower plants in Chongqing, Sichuan, Guizhou and Yunnan Provinces, People's Republic of China. The Grouped Project is expected to export annual electricity of 470,996 MWh and 356,851 MWh to the Central China Power Grid (CCPG) and Southern China Power Grid (SCPG) respectively utilizing renewable hydro resources. The project activity achieves greenhouse gas (GHG) emissions reductions by displacing electricity from existing fossil fuel based power plants and likely capacity additions within the given grid. The verification was performed in accordance with the guidance and criteria of the VCS 2007.1 Standard as well as the AMS-I.D (Version 13) CDM methodology and respective tools. The management of South Pole Carbon Asset Management Ltd. and the project owner of each grouped project are responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions. A document review,	

followed by a site visit was conducted to verify the information submitted by the project participants regarding the present verification period.

Based on the assessment carried out, the verifier confirms that the project has been completely implemented and operated in accordance with the description given in the provided PD and the applied methodology AMS-I.D (Version 13).

After closing out the CARs and CLs, the verification team confirms that the installed equipment runs reliably and the meters are calibrated appropriately. The GHG emission reductions are calculated without material misstatements. It is verification team's opinion refers to the project's GHG emissions and resulting GHG emission reductions reported, both determined due to the valid and verified project's baseline, its monitoring plan and its associated documents.

Based on the information seen and evaluated the verification team confirm that the implementation of the Grouped Project resulted in 2,022,896 tCO₂e of emission reductions during the monitoring period 01/04/2006 to 05/06/2009.

The total emission reductions of the Grouped Project during the monitoring period from 01/04/2006 to 05/06/2009 are 2,022,896 tCO₂e.

Work carried out by:	Number of pages:
• Mr. Libo Ma (Team Leader) • Mr. Jiang Zhu (Team Member)	80

Abbreviations

ACM	Approved Consolidated Methodology
AFOLU	Agriculture, Forestry and Other Land Use
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CER	Certified Emission Reduction
CL	Clarification Request
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
CCPG	Central China Power Grid
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EB	Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reductions
FSR	Feasibility Study Report
GHG	Greenhouse Gas(es)
GWh	Giga Watt Hours
GWP	Global Warming Potential
I	Interview
IETA	International Emission Trading Association
IPCC	Intergovernmental Panel on Climate Change
kW	Kilo Watt
kWh	Kilo Watt Hours
LoA	Letter of Approval
MP	Monitoring Plan
MWR	China Ministry of Water Resources
MWh	Mega Watt Hours
NCV	Net Calorific Value
NDRC	National Development and Reform Commission of China
NGO	Non-governmental Organization
ODA	Official Development Fund
OM	Operating Margin
PD	Project Description
PDR	Preliminary Design Report
PP	Project Participants
SCPG	Southern China Power Grid
SEPA	State Environmental Protection Administration of China
SHP	Small Hydropower Project
t	Tonne
UNFCCC	United Nations Framework Convention on Climate Change
VAT	Value-added Tax
VCS	Voluntary Carbon Standard
VCU	Voluntary Carbon Unit

TABLE OF CONTENTS

1.	INTRODUCTION	6
1.1	Objective	6
1.2	Scope and Criteria	6
1.3	VCS Project Description	6
1.4	Level of Assurance	7
1.5	Verification Team	7
2.	METHODOLOGY	8
2.1	Desk review	8
2.2	On-site visit and follow-up interviews with project stakeholders	9
2.3	Resolution of outstanding issues	12
2.4	Internal quality control	14
3.	VERIFICATION FINDINGS.....	14
3.1	Remaining issues, including any material discrepancy, from previous validation	14
3.2	Project Implementation	14
3.3	Completeness of Monitoring	17
3.4	Accuracy of Emission Reduction Calculations	17
3.5	Quality of Evidence to Determine Emission Reductions	20
3.6	Management and Operational System	20
4.	VERIFICATION CONCLUSION.....	22

Appendix A: Verification Protocol

Appendix B: Document Review List of Sampling Projects

Appendix C: Certificates of Competence

1. Introduction

The South Pole Carbon Asset Management Ltd. has commissioned the VCS verifier TÜV Rheinland Japan Ltd. (TÜV Rheinland) to perform a verification of the VCS Project Activity “Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China” in P.R. China (hereafter called “the Grouped Project”). This report describes the verification process and the findings of the verification performed on the basis of Voluntary Carbon Standard (VCS) 2007.1 as well as criteria to provide for consistent project operations, monitoring and reporting.

1.1 Objective

The purpose of verification is to review the monitoring results and verify that monitoring methodology was implemented according to monitoring plan and monitoring data, used to confirm the reductions in anthropogenic emissions by sources is sufficient, definitive and presented in a concise and transparent manner.

In particular, monitoring plan, monitoring report and the project’s compliance with relevant VCS 2007.1 criteria are verified in order to confirm that the project has been implemented in accordance with previously registered design and conservative assumptions, as documented.

1.2 Scope and Criteria

The verification comprises a review of the monitoring report over the monitoring period from “**01/04/2006 to 05/06/2009**”¹ based on the registered VCS PD in part of the monitoring parameters and monitoring plan, emission reduction calculation spreadsheet, monitoring methodology and all related evidence provided by project participant.

On-site visit and stakeholders interviews are also performed as part of the initial verification process.

1.3 VCS Project Description

The Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China is a grouped project under VCS 2007.1, which consists of 95 run-of-river hydropower stations in less-developed rural areas of south-western China. There are four sub-groups (i.e. 9 projects are located in Yunnan Province, 67 in Chongqing City, 13 in Sichuan Province and 6 in Guizhou Province), which are determined by the geographical boundary².

The electricity generated from the Grouped Project will be supplied to Central China Power Grid (CCPG) and Southern China Power Grid (SCPG), where geographic and system boundaries can be clearly identified and information on the grid and calculation of baseline emissions is published and public available according to *China DNA’s Guidance on China Grid Baseline Emission Factors/13/* dated on 18th July 2008.

¹ 01/04/2006 is the earliest start date of the monitoring period within the Grouped Project and 05/06/2009 is the latest end date of monitoring period within the Grouped Project. The detailed monitoring period for each grouped project is differentiated and listed on the emission reduction calculation spreadsheets according to the monitoring records and electricity sales receipts.

² There were totally 98 projects within the Grouped Project in the VCS PD of 10th June 2009. However, all retrofitted projects (i.e. Project No. 17, 19 and 89) have been withdrawn from the grouped project during validation. Therefore, the final project list consists of 95 projects.

The CCPG and SCPG are both dominated by thermal power plants as per the *China Electrical Power Yearbook 2003~2007/11/*. By exporting annual electricity of 470,996 MWh and 356,851 MWh to the CCPG and SCPG respectively, the project activity achieves greenhouse gas (GHG) emissions reductions by displacing electricity from fossil fuel based power plants connected to the grid.

1.4 Level of Assurance

TÜV Rheinland provides assurance that the “Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China” meets VCS 2007.1 criteria. To ensure complete transparency, TÜV Rheinland included a verification protocol in Appendix A. The verification protocol addresses all the criteria that are required to be met by the VCS standard. Any clarification or corrective actions raised have been included in the verification protocol, along with the changes implemented and responses.

1.5 Verification Team

The verification team consists of the following personnel:

Role	Full Name	Appointed for Sectoral Scopes	Affiliation
Team Leader	Mr. Ma Libo	1	TÜV Rheinland (China) Ltd.
Team Member	Mr. Zhu Jiang	1	TÜV Rheinland (China) Ltd.
Technical Reviewer	Dr. Manfred Brinkmann	1, 3, 4, 5, 6, 10, 11, 12, 13	TÜV Rheinland Japan Ltd.

2. Methodology

The verification consists of the following three phases:

1. Desk review of the monitoring plan, monitoring report, project design document and other relevant documents;
2. On-site visit (including follow-up interviews with project stakeholders, when deemed necessary);
3. Resolution of outstanding issues and the issuance of the final Verification report and Certification statement.

The following sections outline each step in more detail.

2.1 Desk review³

The following table outlines the documentation reviewed during the verification:

- | | |
|------|---|
| /1/ | South Pole Carbon Asset Management Ltd., Monitoring Report of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China, version 1.0 of 11 th June 2009, version 3.0 of 16 th March 2010, version 04 of 19 th April 2010 and version 05 of 6 th June 2010. |
| /2/ | South Pole Carbon Asset Management Ltd., Monitoring data summary and emission reductions calculation spreadsheets, 19 th March 2010, 25 th May 2010 and 8 th June 2010. |
| /3/ | South Pole Carbon Asset Management Ltd., VCS PD of Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China, 13 th October 2009. |
| /4/ | VCS Board, Voluntary Carbon Standard 2007.1, 18 th November 2008. |
| /5/ | International Organization for Standardization, ISO 14064-2:2006, ISO 14064-3:2006 and ISO 14065:2007 (ISO, www.iso.org). |
| /6/ | CDM Executive Board, Clean Development Mechanism Validation and Verification Manual, Annex 3/EB51, 4 th December 2009. |
| /7/ | CDM Executive Board, AMS-I.D. version 13, Grid connected renewable electricity generation. |
| /8/ | CDM Executive Board, Attachment A to Appendix B of the Simplified Modalities and Procedures for Small-scale Project Activities Version 06, 30 th September 2005. |
| /9/ | CDM Executive Board, Tool to calculate the emission factor for an electricity system, version 01.1, EB35, 19 th October 2007. |
| /10/ | IPCC: Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories Reference Manual. 2006. |
| /11/ | China Electric Power Yearbook 2002~2007. |
| /12/ | China Energy Statistical Yearbook 2004~2007. |

³ The detailed document review list of sampling projects have been listed in Appendix B of this report.

- /13/ Chinese DNA, 2008 Baseline Emission Factors for Regional Power Grids in China, 18th July 2008⁴.
- /14/ China National Economic Trading Commission, Technical Administrative Code of Electric Energy Metering, DL/T 448-2000, 3rd November 2000.
- /15/ Ministry of Water Resources of People's Republic of China, Hydroenergy Design Code for Small Hydropower Projects (SL76-94).

2.2 On-site visit and follow-up interviews with project stakeholders

Place: Wulong County, Chongqing City, P.R.China

	Date	Name	Organization	Topic
/i/	2009-06-16	Mr. Liao Zhenghua	Chairman of Wulong County Small Hydropower Association	- Project background - Local hydropower development - Investment barriers - Project finance
/ii/	2009-06-16	Mr. Xu Xuebing	General Secretary of Wulong County Small Hydropower Association	- Environmental impact - Sustainable development

⁴ <http://cdm.ccchina.gov.cn/web/NewsInfo.asp?NewsId=3239>

/iii/	2009-06-16	Mr. Honglin	Fan	General Manager of Wulong County Canglong Hydropower Co., Ltd.	- Project management - Hydropower development barrier - Financial issues
/iv/	2009-06-16	Mr. Guiquan	Liao	General Manager of Wulong County Haoyun Hydropower Co., Ltd.	- Environmental impact - Monitoring issues
/v/	2009-06-16	Mr. Tinghua	He	General Manager of Wulong County Songshigou Hydropower Co., Ltd.	
/vi/	2009-06-16	Mr. Wang Wei		General Manager of Wulong County Landi Hydropower Co., Ltd.	
/vii/	2009-06-16	Mr. Huang Xiaohua		General Manager of Wulong County Yuxiang Hydropower Development Co., Ltd.	
/viii/	2009-06-16	Mr. Shihe	Huang	General Manager of Wulong County Yongxin Hydropower Development Co., Ltd.	
/ix/	2009-06-17	Mr. Yongzhou	Li	Local resident	- Local stakeholder comments - Environmental Impact
/x/	2009-06-17	Mr. Yi Shiyong		Local resident	- Job opportunities

Place: Wanzhou District, Chongqing City, P.R.China

	Date	Name	Organization	Topic
/xi/	2009-06-19	Mr. Xianyun	Yin General Manager of Chongqing Wanzhou Electric Development Co., Ltd.	- Project background - Local hydropower development - Investment barriers - Project finance - Environmental impact
/xii/	2009-06-19	Ms. Long Yu	Vice General Manager of Chongqing	- Sustainable development

				Wanzhou Electric Development Co., Ltd.	
/xiii/	2009-06-19	Mr. Liyong	Zhou	General Manager of Xianfeng	- Project management - Monitoring issues
/xiv/	2009-06-19	Mr. Lijun	Xiang	Local resident	- Local stakeholder comments - Environmental Impact - Job opportunities

Place: Ya'an County, Sichuan Province, P.R.China

	Date	Name	Organization	Topic
/xv/	2009-06-19	Mr. Mou Wei	Board Director of Mayihe Hydroelectric Plant	- Project background - Local hydropower development - Investment barriers - Project finance
/xvi/	2009-06-19	Mr. Zeng Yi	General Manager of Gaoqiaohe Hydroelectric Plant	- Environmental impact - Sustainable development
/xvii/	2009-06-19	Mr. Mao Jiong	Legal Representative of Daihuanggou Hydroelectric Plant	- Project management - Monitoring issues
/xviii/	2009-06-21	Mr. Dehong	Liu Plant Manager of Qingshuihe Stage I Hydroelectric Plant	

Place: Xingyi City, Guizhou Province, P.R.China

	Date	Name	Organization	Topic
/xix/	2009-06-23	Mr. Xiubing	Yang General Manager of Xingyi City Puti Power Co., Ltd.	- Project background - Local hydropower development - Investment barriers
/xx/	2009-06-23	Mr. Guangcan	Zhang Plant Manager of Xingyi City Puti Power Co., Ltd.	- Project finance - Environmental impact - Sustainable development - Project management - Monitoring issues

Place: Zhenyuan County/Lincang County/Yingjiang County/Fugong County, Yunnan Province, P.R.China

Date	Name	Organization	Topic
/xxi/ 2009-07-07	Mr. Zhang Jizhong	General Manager of Xiaojiehe Hydropower Co., Ltd.	- Project background - Local hydropower development - Investment barriers - Project finance
/xxii/ 2009-07-09	Mr. Huang Fengkun	Technical Director of Lincang Runda Hydropower Co., Ltd.	- Environmental impact - Sustainable development - Project management
/xxiii/ 2009-07-12	Mr. Wu Shiyuan	Manager of Yingjiang County Tianchao Hydropower Co., Ltd.	- Monitoring issues
/xxiv/ 2009-07-14	Mr. Wu Xiangquan	Vice General Manager of Yunnan Fugong Huatai Electricity Development Co., Ltd.	

2.3 Resolution of outstanding issues

The objective of this phase of the verification is to resolve any outstanding issues which have to be clarified prior to final DOE's conclusions on the project implementation, monitoring practices and achieved emission reductions. In order to ensure transparency a verification protocol is completed for the project activity. The protocol shows in transparent manner criteria (requirements), means of verification and resulting statements on verification actual project activity against identified criteria.

The verification protocol serves the following purposes:

- It organises in a table form, details and clarifies the requirements, which VCS project is expected to meet;
- It ensures a transparent verification process where the DOE will document how a particular requirement has been verified and the result of the verification.

The verification protocol consists of two tables. Table 1 reflects the verification requirements and reference to the materials used to verify the project activity against those requirements, as well as means of verification, reference to Table 2 and preliminary and final opinion of the DOE on every particular requirement. The completed verification protocol for this project is enclosed in Appendix A to this report.

Findings during the verification can be interpreted as a non-compliance with VCS criteria or a risk to the compliance. Corrective action requests (CARs) are raised, in case:

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

Requests for clarification (CLs) are raised, if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met.

2.4 Internal quality control

The final verification report has passed a technical review before being submitted to the project participants. The technical review was performed by a technical reviewer qualified in accordance with TÜV Rheinland's qualification scheme for VCS validation and verification.

3. Verification Findings

The findings of the verification are described in the following sections. The verification criteria (requirements), the means of verification and the results of validation are documented in detail in the verification protocol in Appendix A.

3.1 Remaining issues, including any material discrepancy, from previous validation

The validation of the Grouped Project was completed on 5th November 2009 and it has been confirmed that there are no remaining issues from the previous validation of this project.

3.2 Project Implementation

3.2.1 The implementation of the project activity

The proposed Grouped Project involves the installation and operation of 95 run-of-river hydropower plants in Chongqing, Sichuan, Guizhou and Yunnan Provinces, People's Republic of China. The project sites have been verified by onsite physical inspections of all the sampling projects.

It was confirmed by site inspection that most of the grouped projects were developed as run-of-river hydropower projects, consisting of water intake structure, the water conveyance system and the power house. Only two projects (i.e. Project No. 74 and 75) involve construction of new reservoirs while the power densities of both projects⁵ are greater than 10W/m². Therefore, the project emissions from these two projects are not required to be considered in accordance with the applied methodology AMS-I.D. Version 13/7/. The power generating technology, installed capacity, technical specifications of the water turbine generators and electricity delivering systems have been verified to be consistent with the validated PD/3/ by site assessment of the sampling projects.

The validation team has reviewed the Construction Accomplishment Acceptance Report⁶ for the sampling projects and has verified that the project commissioning start date has been appropriately determined in the monitoring report in accordance with the validated PD/3/.

Therefore, the verification team confirms that no data and/or variables presented in the monitoring report and the associated emission reduction calculations differ significantly from the ones stated in the validated PD, which may lead to an increase in the emission reductions for this period in relation to the estimates in the validated PD.

⁵ It has been validated that the power density of Project No.74 and No.75 was calculated as 16 W/m² and 58 W/ m² with the surface area of the reservoirs were determined according to the Environmental Impact Assessment Reports.

⁶ The detailed references of each sampled project have been Listed in the Appendix B of this report.

3.2.2 The actual operation of the VCS project activity

According to the validated PD/1/, the Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou provinces, P.R.China is a grouped project under the definitions of VCS 2007.1, and it consists of four sub-groups (i.e. 9 projects are located in Yunnan Province, 67 in Chongqing City, 13 in Sichuan Province and 6 in Guizhou Province), which are classified by geographical boundary.

The verification team has independently carried out a sampling approach for the Grouped Project according to the Sampling Guidance, Clause A.2.4.6.4. By evaluating the potential risks (i.e. project types, installed capacity, estimated emission reductions, financial return rate and environmental impact) underlying the grouped project activities, the verification team finally determined the 19 sampling projects from the Grouped Project and carried out a complete verification of these 19 sampling projects⁷.

The verification team has confirmed by onsite assessment that the total generation capacity of the sampling projects are consistent with the validated PD/3/. The relevant evidence on how the GHG data were monitored and collected during the monitoring period (including daily and monthly monitoring records, the electricity transaction notes, electricity sale receipts, the accuracy and calibration of the electricity meters⁸). have been reviewed during onsite assessment. The project owners, operating staff and other involved stakeholders have been interviewed during onsite assessment. The details of the verification findings⁹ are summarized in the Appendix A of this verification report.

Verified Information of Sampled Projects

No.	Project Title	Project Owner	Major Generating Facilities	
21	Chongqing Wanzhou Xianfeng Hydroelectric Plant	Chongqing Wanzhou Xianfeng Hydroelectric Plant	Capacity	2*1.8 MW
			Hydro Turbine	HLA542-WJ-60
			Generators:	SFW-J1800-4/1480
55	Canglong Hydroelectric Plant	Wulong Canglong Hydropower Co., Ltd.	Capacity	0.88 MW (1*0.63MW+1*0.25MW)
			Hydro Turbine	HLA-WJ-50 HL110-WJ-42
			Generators:	SFW-W630-6/990 SFW-W250-6/740
57	Heixigou Hydroelectric Plant	Wulong Landi Hydropower Co., Ltd.	Capacity	1*1.0 MW
			Hydro Turbine	CJA237-W-115/1×13
			Generators:	SFW1000-12/1430
59	Muzonghe Stage IV Hydroelectric Plant	Wulong Landi Hydropower Co., Ltd.	Capacity	3*0.36 MW
			Hydro Turbine	HCD46-WJ-84
			Generators:	SFW360-14/180
63	Songshigou Hydroelectric Plant	Wulong Tukan Songshigou Hydroelectric Plant	Capacity	3*0.5 MW
			Hydro Turbine	GJ22-W-70/1X9
			Generators:	SFW-W500-8/990
64	Banqiao Stage III Hydroelectric Plant	Wulong Haoyun Hydropower Co., Ltd.	Capacity	3*0.68 MW
			Hydro Turbine	HCD54-WJ-60
			Generators:	SFW-W680-6/990
67	Baiguo Hydroelectric	Chongqing Wulong	Capacity	2*1.6 MW

⁷ All retrofitted projects (i.e. Project No. 17, 19 and 89) were withdrawn by the project developer during validation. The final sampling project number is 18.

⁸ See detailed document review list in the Appendix B of this report.

⁹ The verification findings are based on the monitoring report version 3.0 of 16th March 2010.

	Plant	Yuxiang Water Resource Development Co., Ltd.	Hydro Turbine	CJA237-W-110/2×11B
			Generators:	SFW1600-12/1730
68	Longqiao Hydroelectric Plant	Wulong Yongxin Hydropower Development Co., Ltd.	Capacity	2*2.0 MW
			Hydro Turbine	HLD54-WJ-78
			Generators:	SFW2000-6/1430
69	Baiyang Hydroelectric Plant	Chongqing Wulong Yuxiang Water Resource Development Co., Ltd.	Capacity	2*2.5 MW
			Hydro Turbine	CJA237-W-100/1×11
			Generators:	SFW2500-8/17300
72	Dahegou Hydroelectric Plant	Chongqing Fengyuanjinhui Hydropower Development Co., Ltd.	Capacity	5*0.63 MW
			Hydro Turbine	CJ237-9/1×5 (2) CJ237-9/1×6(3)
			Generators:	SFW630-6/990
75	Puti 2 nd Stage Hydroelectric Plant	Xingyi City Puti Power Co. Ltd.	Capacity	2*3.5+1*2.5 MW
			Hydro Turbine	HLUF3913-LJ-160 HLA551-LJ-140
			Generators:	SF3500-24/3250 SF2500-20/2800
78	Mayihe Hydroelectric Plant	Yingjing Mayihe Hydropower Station	Capacity	2*0.63 MW
			Hydro Turbine	DL54-WJ-60
			Generators:	SFW-W630-6/990
82	Qingshuihe Stage I Hydroelectric Plant	Sichuan Yingjing Yunwushan Hydropower Co., Ltd.	Capacity	2*2.5 MW
			Hydro Turbine	CJA237-W-110/2×10.2
			Generators:	SFW5000-8/2160
85	Daihuanggou Hydroelectric Plant	Yingjing County Sanhe Daihuanggou Hydroelectric Plant	Capacity	2*4.0 MW
			Hydro Turbine	CJA237-W-110/2×9
			Generators:	SFWE-K4000-8/1730
86	Gaoqiaohe Hydroelectric Plant	Sichuan Yingjing Gaoqiaohe Electric Power Co., Ltd.	Capacity	3*3.2 MW
			Hydro Turbine	HL110-WJ-92 (2 units) HLDT9-WJ-G2 (1 unit)
			Generators:	SFW3200-8/1730
94	Zhenyuan County Xiaojiehe Hydropower Station	Zhenyuan Yi, Hani and Lahu Autonomous County Xiaojiehe Hydropower Co., Ltd.	Capacity	1*5.0 MW
			Hydro Turbine	HL110-WJ-78
			Generators:	SFW2500-6/1430
96	Yingjiang Husa River 5 th Stage Hydropower Plant	Yingjiang County Tianchao Hydropower Co. Ltd.	Capacity	2*4.0 MW
			Hydro Turbine	HLD46-WJ-76
			Generators:	SFW4000-6/1730
98	Fugong County Lishadi Hydropower Plant Project	Yunnan Fugong Huatai Electricity Development Co. Ltd.	Capacity	2*7.0 MW
			Hydro Turbine	HLA1794-WJ-100
			Generators:	SFW7000-6/2150

According to the validated PD/3/ and the emission reductions calculation spreadsheets/2/, the total net electricity export to Southern China Power Grid (SCPG) is the accumulated electricity supply by the grouped projects that are located in Yunnan Province (i.e. Project No. 90~98) and Guizhou Province (i.e. Project No. 70, 71, 73, 74, 75). The total net electricity export to Central China Power Grid (CCPG) is the accumulated electricity supply by the grouped projects that are located in Chongqing City (i.e. Project No. 1~69 and 72) and Sichuan Province (i.e. Project No. 76~88). The total electricity export to SCPG and CCPG has been summarized in the emission reduction calculation spreadsheets and checked to be correctly accounted. The actual net electricity export to SCPG and CCPG is listed in the table below and compared with the estimated values in the validated PD/3/.

Net Electricity Export to SCPG (Unit: MWh)

Year	SCPG ($EG_{Export,y}$)	Compared with Validated PD ¹⁰
2006	161,646.454	N/A
2007	319,872.509	319,872.509/356,851.44=0.8964
2008	286,793.652	286,793.652/356,851.44=0.8037
2009	72,348.036	N/A
Total	840,660.650	N/A

Note: The total net electricity export to SCPG is estimated as 356,851.44 MWh/year in the validated PD.

Net Electricity Export to CCPG (Unit: MWh)

Year	CCPG($EG_{Export,y}$)	Compared with Validated PD
2006	270142.6	N/A
2007	450216.1	450216.1/470,996=0.9559
2008	473753.9	473753.9/470,996=1.0006
2009	131854.7	N/A
Total	1325967.4	N/A

Note: The total net electricity export to SCPG is estimated as 470,996 MWh/year in the validated PD.

From the tables above, the verification team confirms that the total net electricity exports to SCPG and CCPG are both comparable with the estimated values in the validated PD/3/ and the ratios of the monitored net electricity exports to the corresponding estimated values of SCPG and CCPG are within the range of 0.8037~1.0006, which are deemed reasonable.

3.3 Completeness of Monitoring

As reported in the monitoring report and validated PD/3/, a central GHG information system has been established in appropriate manner, which integrates functional units of projects owners, Intermediary companies, South Pole's China teams, Global Quality Control and Technical Support Team. Through cross-check with the monitoring records, calibration records and data management & archiving procedure, the verification team confirms that the implemented monitoring procedures are in line with the requirements of the validated monitoring plan as well as with the applied methodology AMS-I.D (Version 13). Furthermore, it is verification team's opinion that the implemented monitoring procedures fully satisfy the necessary criteria for a complete monitoring system and that the resulting emission reductions are calculated in a conservative and appropriate manner.

3.4 Accuracy of Emission Reduction Calculations

¹⁰ Since the monitoring period of the Grouped Project is from 01/04/2006 to 05/06/2009 which does not cover the whole year of 2006 and 2009, it is reasonable that the net electricity export to SCPG and CCPG in year 2007 and 2008 is comparable with the estimated annual electricity export in the validated PD/3/.

Most of the grouped projects are new run-of-river hydropower project and only 2 projects involve construction of new reservoirs. Since the power density of the 2 projects are greater than 10W/m^2 , the project emission is zero under AMS-I.D. Version 13/7/. Therefore, the project emission of the Grouped Project is zero under AMS-I.D. version 13 ($\text{PE}_y=0$).

The grouped projects are newly-built, with no transferred from another activity or to another activity. The main generating equipment including water turbine generators are newly purchased, and the name plates have been verified during site assessment. Therefore, no leakage needs to be considered for the project activity according to the methodology. ($\text{L}_y=0$).

Since the project emission and the leakage emission has been justified as zero under AMS.I.D Version 13, the calculation of the emission reductions simply involves the calculation of the baseline emissions.

Formula 1: $\text{ER}_y = \text{BE}_y - 0 = \text{EG}_y \times \text{EF}_y$

Where:

ER_y : Emission reductions (Unit: tCO_2e)

EG_y : Net electricity supplied to the grid (Unit: MWh)

EF_y : Baseline emission factor of the SCPG and CCPG, calculated ex-ante and will not be updated during the first crediting period. (Unit: $\text{tCO}_2\text{e/MWh}$)

BE_y : The baseline emissions (Unit: tCO_2e)

According to validated PD/3/, the EF_y of is ex-ante determined as $0.9735 \text{ tCO}_2\text{e/MWh}$ for CCPG and $0.87118 \text{ tCO}_2\text{e/MWh}$ for SCPG over the first crediting period. The net electricity delivered to the grid (EG_y) is the difference between the electricity exported to the grid (EG_{out}) and the electricity imported from the grid (EG_{in}) i.e.:

Formula 2: $\text{EG}_y = \text{EG}_{out} - \text{EG}_{in}$

The electricity exported and imported are both continuously monitored through bi-lateral gateway meters installed at a point which are both agreed by the grid company and the project owners. The daily and monthly monitoring records of all sampling projects¹¹ have been verified during onsite assessment.

The verification team has cross-checked the input values in the emission reductions calculation spreadsheets with the electricity sales invoices and electricity transaction notes of each grouped project. It was confirmed that the electricity sales invoices can only identify the electricity exported to the local grid (EG_{out}) while the electricity transaction notes can identify the electricity import from the grid and electricity export to the grid (EG_{out} and EG_{in}). The electricity transaction notes have been the basis for the grid company and project owner to issue the electricity invoices to each other.

It was also confirmed that most of the Grouped Projects have complete electricity transaction notes during the monitoring period, which means that the electricity exported and imported can be directly determined through cross-check with the electricity transaction notes available to verification team. However, for some grouped projects (e.g. Project No. 2, 50, 55, 61, 62,

¹¹ Please see detailed reference list in the Appendix B.

64, 74 and 76 et al), the electricity transaction notes have not been completely collected while the electricity sales invoices issued by the project owner have been used for cross-check to determine the net electricity supply to the grid. The verification team has issued CL01 to request the project proponents to provide the electricity invoices from the grid to determine the electricity purchased (i.e. imported) by the project owner. In response to CL01, the project proponents have conducted a conservative approach to determine the imported electricity for projects which only have the electricity invoices issued by the project owner. A discount factor of 1.46% is applied and determined according to the highest average ratio of import electricity to export electricity of 65 projects which have the complete transaction notes of electricity imported and exported during the monitoring period. The verification team has conducted the described process in the monitoring report and is able to confirm the selected discount factor is conservative since:

- ◆ The discount factor is selected as the highest average electricity import to export ratio, which is calculated according to the average import to export ratios over the entire monitoring period for 65 grouped projects that have complete electricity import/export data. This is consistent with the grouped projects which have adopted the discount factor to estimate the electricity import since the discount factor has been applied during the entire monitoring period in the emission reduction calculation spreadsheets.
- ◆ The ratio of 1.46% is conservative through cross-check with the “*Hydroenergy Design Code for Small Hydropower Projects (SL76-94)*”/15/ issued by Ministry of Water Resources of People’s Republic of China, which indicates that the internal consumption for hydropower plants should be within range of 0.5%-1%. The verification team has listed the ratios of imported electricity to exported electricity of other projects in the following table for cross-check.

Statistic Monitoring Results of EG_{in}/EG_{out} within the Grouped Project

EG_{in}/EG_{out}	0%~0.5%	0.5%~1%	1%~1.46%
Total Project Number	47	15	3
Percent	72.3%	23.1%	4.6%

From the statistic monitoring results indicated in the table above, the verification team is able to confirm it is very unlikely the ratio of EG_{in}/EG_{out} crosses the selected discount factor within the Grouped Project considering the technical competences, operation and management experiences and hydro resources utilization are similar in the same region.

By applying the discount factor of 1.46%, the electricity imported from the grid has been conservatively determined for:

- ◆ Project No. 2, 50, 55, 61, 62, 64, 74, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 93, 94, 95, 97 and 98, of which all the electricity receipts only indicate the electricity exported during the whole monitoring period;
- ◆ Project No. 46 and 96, of which the electricity receipts only indicate the electricity exported for part of the monitoring period.

Furthermore, the verification team has confirmed the emission reductions of each grouped projects have been conservatively calculated in line with abovementioned *Formula 1&2* in the emission reduction calculation spreadsheets/2/. The total emission reductions within SCPG

are the accumulated emission reductions achieved by the grouped projects that are located in Yunnan Province (i.e. Project No. 90~98) and Guizhou Province (i.e. Project No. 70, 71, 73, 74, 75). The total emission reductions within CCPG are the accumulated emission reductions achieved by the grouped projects that are located in Chongqing City (i.e. Project No. 1~69 and 72) and Sichuan Province (i.e. Project No. 76~88). The total emission reductions within SCPG and CCPG have been summarized in the emission reduction calculation spreadsheets/2/ and checked to be correctly accounted.

Verified Emission Reductions within CCPG and SCPG

Year	ERs within CCPG (tCO₂e)	ERs within SCPG (tCO₂e)	ERs within CCPG and SCPG (tCO₂e)
2006	262,932	140,812	403,744
2007	438,212	278,653	716,865
2008	461,120	249,837	710,957
2009	128,311	63,019	191,330
Total	1,290,575	732,321	2,022,896

Notes: The detailed ERs of each grouped project are listed in the Section 4 of this report.

By cross-check with the electricity sale receipts and electricity transaction notes¹², the verification team confirms that the monitoring results as listed in the Monitoring data summary and emission reductions calculation spreadsheets/2/ dated on 8th June 2010 are conservative. The verification team confirms that the applied spreadsheet formulas and connections are correct and in line with the indicated emission reduction calculation in the monitoring plan as well as in the validated PD/3/ and the applied methodology/7/.

3.5 Quality of Evidence to Determine Emission Reductions

The critical parameters used for the determination of the emission reductions are the reading records of the gateway meters reflecting the electricity exchanged (export & import) with the grid. Furthermore, the internal daily/monthly reading records have been cross-check with the electricity sales receipts/invoice and electricity transaction notes signed by the grid company and the project owners, which are deemed as external documented evidence. The values in the electricity sales receipts/invoice and electricity transaction notes are the real electricity output which have been sold (exported) or purchased (imported) from the grid. Therefore, the verification team confirms that the evidence is of sufficient quantity and reliable. The quoted information has been reviewed by the verification team and found to be consistently applied for the emission reduction calculations/2/.

3.6 Management and Operational System

A central information system has been established for the Grouped Project in line with the monitoring report. The monitoring organization structure, quality assurance process and

¹² All the electricity receipts and electricity transaction notes of each grouped project have been used for cross-check to determine the actual electricity imported and exported to the grid. The reference list of the electricity sales receipts and electricity transaction notes for sampling projects has been listed in the Appendix B of this report.

monitoring roles and responsibility have been implemented in accordance with the monitoring report. The central GHG information system has integrated four functional units: projects owners, Intermediary companies, South Pole's China team and Global Quality Control and Technical Support Team, where the coordination effectiveness has been verified during site assessment. South Pole Carbon Asset Management Ltd. is responsible for gathering and managing individual projects' information and their monitoring relevant documents by using their central information control tool (i.e. PMT software).

The monitoring data and records will be archived in electronic documents and paper documents. The project owners will keep the copies of electricity generation records and sales receipts. Calibration of Meters & Metering has been implemented periodically according to DL/T448-2000/14/. After calibrated by qualified entity, the electricity metering equipment is sealed and stamped, which has been verified during onsite assessment. It was also confirmed during site assessment that all the staff involved in the grouped projects has received periodic training on operation and maintenance of the hydropower plant. The training records have been reviewed by the validation team to be valid.

In summary, the verification team has ensured that the quality management system for the Project is in place. The documented instructions including the responsibilities have been properly implemented and in line with the monitoring report and validated VCS PD. The internal review being a regular practice ensures the quality assurance of the monitoring procedures.

4. Verification conclusion

The scope of this verification covers the determination of voluntary greenhouse gas emission reductions according to the VCS standard 2007.1 generated by the following project: "Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China".

The management of South Pole Carbon Asset Management Ltd. and the project owners of each grouped project are responsible for the preparation of the GHG data and the reported GHG emission reductions on the basis set out within the project's monitoring plan indicated in the validated PD and the applied methodology AMS-I.D (version 13).

The verification team of TÜV Rheinland confirms that the GHG emission reductions reported for the project in the monitoring report 6th June 2010 are fairly stated and the project design meets all VCU verification criteria. The GHG emission reductions were calculated correctly on the basis of the baseline and monitoring methodology, AMS-I.D/version 13 and the monitoring plan provided in the validated PD. The installed monitoring system runs reliably and is calibrated appropriately. Furthermore, the installed system is fully capable of recording the necessary data to determine the emission reductions. VCS emission reductions are calculated without any material misstatements in a conservative and appropriate manner.

Based on the information provided and verified, the verification team of TÜV Rheinland is able to confirm the following statement:

The total emission reductions of the Grouped Project during the monitoring period from 01/04/2006 to 05/06/2009 are 2,022,896 tCO₂e. The verified emission reductions of each grouped project are listed in the following table.

Project Title	Verified Emission Reductions
1. Zengfuyoujiang Hydroelectric Plant	Reporting period: 2007-12-08 to 2009-06-04
	Verified emission in the above reporting period:
	Project emissions: 0 tCO ₂ e
	Baseline emissions: 1355 tCO ₂ e
	Emission reductions: 1355 tCO ₂ e
	Emission reductions within 2006: 0 tCO ₂ e
	Emission reductions within 2007: 27 tCO ₂ e
	Emission reductions within 2008: 1014 tCO ₂ e
	Emission reductions within 2009: 314 tCO ₂ e
2. Jianshitan Hydroelectric	Reporting period: 2006-04-10 to 2009-05-09

Plant	Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 4796 tCO₂e Emission reductions: 4796 tCO₂e Emission reductions within 2006: 1021 tCO₂e Emission reductions within 2007: 1654 tCO₂e Emission reductions within 2008: 1550 tCO₂e Emission reductions within 2009: 571 tCO₂e
3. Jinxing Hydroelectric Plant	Reporting period: 2006-04-20 to 2009-05-19 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 6230 tCO₂e Emission reductions: 6230 tCO₂e Emission reductions within 2006: 1196 tCO₂e Emission reductions within 2007: 2442 tCO₂e Emission reductions within 2008: 2592 tCO₂e Emission reductions within 2009: 0 tCO₂e
4. Huzhong Hydroelectric Plant	Reporting period: 2006-04-20 to 2009-05-19 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 27057 tCO₂e Emission reductions: 27057 tCO₂e Emission reductions within 2006: 3845 tCO₂e Emission reductions within 2007: 10505 tCO₂e Emission reductions within 2008: 9133 tCO₂e Emission reductions within 2009: 3574 tCO₂e
5 & 6. Chongqing Wanzhou Fengmu Hydroelectric Plant & Chongqing Wanzhou Longdong Hydroelectric Plant	Reporting period: 2006-08-24 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 2483 tCO₂e Emission reductions: 2483 tCO₂e

	Emission reductions within 2006: 200 tCO ₂ e Emission reductions within 2007: 947 tCO ₂ e Emission reductions within 2008: 980 tCO ₂ e Emission reductions within 2009: 356 tCO ₂ e
7. Chongqing Wanzhou Dengta Hydroelectric Plant	Reporting period: 2006-04-23 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 1804 tCO ₂ e Emission reductions: 1804 tCO ₂ e Emission reductions within 2006: 208 tCO ₂ e Emission reductions within 2007: 639 tCO ₂ e Emission reductions within 2008: 721 tCO ₂ e Emission reductions within 2009: 236 tCO ₂ e
8. Chongqing Wanzhou Mayuexi Hydroelectric Plant	Reporting period: 2008-09-25 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 383 tCO ₂ e Emission reductions: 383 tCO ₂ e Emission reductions within 2006: 0 tCO ₂ e Emission reductions within 2007: 0 tCO ₂ e Emission reductions within 2008: 177 tCO ₂ e Emission reductions within 2009: 206 tCO ₂ e
9. Chongqing Wanzhou Xiaolong Hydroelectric Plant	Reporting period: 2007-03-24 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 2108 tCO ₂ e Emission reductions: 2108 tCO ₂ e Emission reductions within 2006: 0 tCO ₂ e

	Emission reductions within 2007: 632 tCO ₂ e Emission reductions within 2008: 1183 tCO ₂ e Emission reductions within 2009: 293 tCO ₂ e
10. Chongqing Wanzhou Yihe Hydroelectric Plant	Reporting period: 2007-12-25 to 2009-12-24 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 782 tCO ₂ e Emission reductions: 782 tCO ₂ e Emission reductions within 2006: 0 tCO ₂ e Emission reductions within 2007: 0 tCO ₂ e Emission reductions within 2008: 579 tCO ₂ e Emission reductions within 2009: 203 tCO ₂ e
11. Chongqing Wanzhou Tiande Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 2669 tCO ₂ e Emission reductions: 2669 tCO ₂ e Emission reductions within 2006: 452 tCO ₂ e Emission reductions within 2007: 1017 tCO ₂ e Emission reductions within 2008: 789 tCO ₂ e Emission reductions within 2009: 411 tCO ₂ e
12. Chongqing Wanzhou Puziling Hydroelectric Plant	Reporting period: 2007-05-24 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 2050 tCO ₂ e Emission reductions: 2050 tCO ₂ e Emission reductions within 2006: 0 tCO ₂ e

	Emission reductions within 2007: 579 tCO ₂ e Emission reductions within 2008: 1092 tCO ₂ e Emission reductions within 2009: 379 tCO ₂ e
13. Chongqing Wanzhou Yanshan Hydroelectric Plant	Reporting period: 2006-07-25 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 2828 tCO ₂ e Emission reductions: 2828 tCO ₂ e Emission reductions within 2006: 0 tCO ₂ e Emission reductions within 2007: 1875 tCO ₂ e Emission reductions within 2008: 532 tCO ₂ e Emission reductions within 2009: 421 tCO ₂ e
14. Chongqing Wanzhou Lianmeng Hydroelectric Plant	Reporting period: N/A Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 0 tCO ₂ e Emission reductions: 0 tCO ₂ e Emission reductions within 2006: 0 tCO ₂ e Emission reductions within 2007: 0 tCO ₂ e Emission reductions within 2008: 0 tCO ₂ e Emission reductions within 2009: 0 tCO ₂ e
15. Chongqing Wanzhou Wanlin Hydroelectric Plant	Reporting period: 2007-09-20 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 2780 tCO ₂ e Emission reductions: 2780 tCO ₂ e Emission reductions within 2006: 0 tCO ₂ e Emission reductions within 2007: 189 tCO ₂ e

	Emission reductions within 1935 tCO ₂ e 2008: Emission reductions within 656 tCO ₂ e 2009:
16. Chongqing Wanzhou Gaodongzi Hydroelectric Plant	Reporting period: N/A Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 0 tCO ₂ e Emission reductions: 0 tCO ₂ e Emission reductions within 0 tCO ₂ e 2006: Emission reductions within 0 tCO ₂ e 2007: Emission reductions within 0 tCO ₂ e 2008: Emission reductions within 0 tCO ₂ e 2009:
18. Chongqing Wanzhou Yanjingxi Hydroelectric Plant	Reporting period: 2007-04-24 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 3456 tCO ₂ e Emission reductions: 3456 tCO ₂ e Emission reductions within 0 tCO ₂ e 2006: Emission reductions within 1248 tCO ₂ e 2007: Emission reductions within 1624 tCO ₂ e 2008: Emission reductions within 584 tCO ₂ e 2009:
20. Chongqing Wanzhou Dibao Hydroelectric Plant	Reporting period: 2007-12-25 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO ₂ e Baseline emissions: 4645 tCO ₂ e Emission reductions: 4645 tCO ₂ e Emission reductions within 0 tCO ₂ e 2006: Emission reductions within 0 tCO ₂ e 2007: Emission reductions within 3224 tCO ₂ e 2008:

	Emission reductions within 2009:	1421 tCO ₂ e
21. Chongqing Wanzhou Xianfeng Hydroelectric Plant	Reporting period:	2007-03-28 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	17976 tCO ₂ e
	Emission reductions:	17976 tCO ₂ e
	Emission reductions within 2006:	0 tCO ₂ e
	Emission reductions within 2007:	5444 tCO ₂ e
	Emission reductions within 2008:	9452 tCO ₂ e
	Emission reductions within 2009:	3080 tCO ₂ e
22&31. Heba Hydroelectric Plant & Chengmending Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-25
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	3932 tCO ₂ e
	Emission reductions:	3932 tCO ₂ e
	Emission reductions within 2006:	1156 tCO ₂ e
	Emission reductions within 2007:	970 tCO ₂ e
	Emission reductions within 2008:	885 tCO ₂ e
	Emission reductions within 2009:	921 tCO ₂ e
24. Beiya Hydroelectric Plant	Reporting period:	2006-04-01 to 2009-05-25
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	599 tCO ₂ e
	Emission reductions:	599 tCO ₂ e
	Emission reductions within 2006:	182 tCO ₂ e
	Emission reductions within 2007:	261 tCO ₂ e
	Emission reductions within 2008:	2.4 tCO ₂ e

	Emission reductions within 2009:	154 tCO ₂ e
25. Wulong Guanqiao Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	1324 tCO ₂ e
	Emission reductions:	1324 tCO ₂ e
	Emission reductions within 2006:	226 tCO ₂ e
	Emission reductions within 2007:	535 tCO ₂ e
	Emission reductions within 2008:	397 tCO ₂ e
	Emission reductions within 2009:	166 tCO ₂ e
26&40&48. Xiangyang Stage II&III&I Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	12058 tCO ₂ e
	Emission reductions:	12058 tCO ₂ e
	Emission reductions within 2006:	980 tCO ₂ e
	Emission reductions within 2007:	5047 tCO ₂ e
	Emission reductions within 2008:	4637 tCO ₂ e
	Emission reductions within 2009:	1394 tCO ₂ e
27. Qingtongxi Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	1756 tCO ₂ e
	Emission reductions:	1756 tCO ₂ e
	Emission reductions within 2006:	318 tCO ₂ e
	Emission reductions within 2007:	673 tCO ₂ e
	Emission reductions within 2008:	473 tCO ₂ e

	Emission reductions within 2009:	292 tCO ₂ e
28. Heping Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	2682 tCO ₂ e
	Emission reductions:	2682 tCO ₂ e
	Emission reductions within 2006:	324 tCO ₂ e
	Emission reductions within 2007:	889 tCO ₂ e
	Emission reductions within 2008:	992 tCO ₂ e
	Emission reductions within 2009:	477 tCO ₂ e
29. Guanziya Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	987 tCO ₂ e
	Emission reductions:	987 tCO ₂ e
	Emission reductions within 2006:	227 tCO ₂ e
	Emission reductions within 2007:	362 tCO ₂ e
	Emission reductions within 2008:	398 tCO ₂ e
	Emission reductions within 2009:	0 tCO ₂ e
30. Baiyangping Hydroelectric Plant	Reporting period:	2006-04-15 to 2009-05-14
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	1936 tCO ₂ e
	Emission reductions:	1936 tCO ₂ e
	Emission reductions within 2006:	320 tCO ₂ e
	Emission reductions within 2007:	825 tCO ₂ e
	Emission reductions within 2008:	595 tCO ₂ e

	Emission reductions within 2009: 196 tCO ₂ e
32. Shuanglong Hydroelectric Plant	Reporting period: 2006-06-15 to 2009-05-14 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 1515 tCO₂e Emission reductions: 1515 tCO₂e Emission reductions within 2006: 82 tCO₂e Emission reductions within 2007: 834 tCO₂e Emission reductions within 2008: 599 tCO₂e Emission reductions within 2009: 0 tCO₂e
33. Chushuitang Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 6103 tCO₂e Emission reductions: 6103 tCO₂e Emission reductions within 2006: 1016 tCO₂e Emission reductions within 2007: 2294 tCO₂e Emission reductions within 2008: 2012 tCO₂e Emission reductions within 2009: 781 tCO₂e
34. Shuangqiao Hydroelectric Plant	Reporting period: 2008-02-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 851 tCO₂e Emission reductions: 851 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 0 tCO₂e Emission reductions within 2008: 569 tCO₂e

	Emission reductions within 2009:	282 tCO ₂ e
35. Shiqiao Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	3821 tCO ₂ e
	Emission reductions:	3821 tCO ₂ e
	Emission reductions within 2006:	472 tCO ₂ e
	Emission reductions within 2007:	1647 tCO ₂ e
	Emission reductions within 2008:	1299 tCO ₂ e
	Emission reductions within 2009:	403 tCO ₂ e
36. Shuanglian Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	3587 tCO ₂ e
	Emission reductions:	3587 tCO ₂ e
	Emission reductions within 2006:	538 tCO ₂ e
	Emission reductions within 2007:	1509 tCO ₂ e
	Emission reductions within 2008:	981 tCO ₂ e
	Emission reductions within 2009:	559 tCO ₂ e
37. Baijia Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	5180 tCO ₂ e
	Emission reductions:	5180 tCO ₂ e
	Emission reductions within 2006:	856 tCO ₂ e
	Emission reductions within 2007:	2198 tCO ₂ e
	Emission reductions within 2008:	1470 tCO ₂ e

	Emission reductions within 2009:	656 tCO ₂ e
38. Xinqiao Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	5209 tCO ₂ e
	Emission reductions:	5209 tCO ₂ e
	Emission reductions within 2006:	948 tCO ₂ e
	Emission reductions within 2007:	2151 tCO ₂ e
	Emission reductions within 2008:	1412 tCO ₂ e
	Emission reductions within 2009:	698 tCO ₂ e
39. Luchi Hydroelectric Plant	Reporting period:	N/A
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	0 tCO ₂ e
	Emission reductions:	0 tCO ₂ e
	Emission reductions within 2006:	0 tCO ₂ e
	Emission reductions within 2007:	0 tCO ₂ e
	Emission reductions within 2008:	0 tCO ₂ e
	Emission reductions within 2009:	0 tCO ₂ e
41. Xiangyun Hydroelectric Plant	Reporting period:	2006-04-25 to 2009-05-24
	Verified emission in the above reporting period:	
	Project emissions:	0 tCO ₂ e
	Baseline emissions:	3861 tCO ₂ e
	Emission reductions:	3861 tCO ₂ e
	Emission reductions within 2006:	440 tCO ₂ e
	Emission reductions within 2007:	1501 tCO ₂ e
	Emission reductions within 2008:	1639 tCO ₂ e
	Emission reductions within 2009:	281 tCO ₂ e

42. Hongshan Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 3230 tCO₂e Emission reductions: 3230 tCO₂e Emission reductions within 2006: 465 tCO₂e Emission reductions within 2007: 1310 tCO₂e Emission reductions within 2008: 1059 tCO₂e Emission reductions within 2009: 396 tCO₂e
43. Leyuan Hydroelectric Plant	Reporting period: 2009-01-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 1342 tCO₂e Emission reductions: 1342 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 0 tCO₂e Emission reductions within 2008: 0 tCO₂e Emission reductions within 2009: 1342 tCO₂e
44. Yong'an Hydroelectric Plant	Reporting period: 2007-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 3009 tCO₂e Emission reductions: 3009 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 1154 tCO₂e Emission reductions within 2008: 1204 tCO₂e Emission reductions within 2009: 651 tCO₂e

45. Suokousi Hydroelectric Plant	Reporting period: 2006-04-15 to 2009-05-14 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 4450 tCO₂e Emission reductions: 4450 tCO₂e Emission reductions within 2006: 1035 tCO₂e Emission reductions within 2007: 1699 tCO₂e Emission reductions within 2008: 1357 tCO₂e Emission reductions within 2009: 359 tCO₂e
46. Xinli Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 5925 tCO₂e Emission reductions: 5925 tCO₂e Emission reductions within 2006: 1690 tCO₂e Emission reductions within 2007: 921 tCO₂e Emission reductions within 2008: 3314 tCO₂e Emission reductions within 2009: 0 tCO₂e
47. Caijiagou Stage III Hydroelectric Plant	Reporting period: 2007-07-15 to 2009-05-14 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 3250 tCO₂e Emission reductions: 3250 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 832 tCO₂e Emission reductions within 2008: 1684 tCO₂e Emission reductions within 2009: 734 tCO₂e

49. Cheqingyan Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 8940 tCO₂e Emission reductions: 8940 tCO₂e Emission reductions within 2006: 1831 tCO₂e Emission reductions within 2007: 3159 tCO₂e Emission reductions within 2008: 2985 tCO₂e Emission reductions within 2009: 965 tCO₂e
50. Lianghekou Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 7006 tCO₂e Emission reductions: 7006 tCO₂e Emission reductions within 2006: 1313 tCO₂e Emission reductions within 2007: 2595 tCO₂e Emission reductions within 2008: 2673 tCO₂e Emission reductions within 2009: 425 tCO₂e
51. Wuhe Hydroelectric Plant	Reporting period: 2006-09-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 2594 tCO₂e Emission reductions: 2594 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 1118 tCO₂e Emission reductions within 2008: 1027 tCO₂e Emission reductions within 2009: 449 tCO₂e

52. Sihe Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 6724 tCO₂e Emission reductions: 6724 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 2883 tCO₂e Emission reductions within 2008: 2778 tCO₂e Emission reductions within 2009: 1063 tCO₂e
53. Shilingyan Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 3355 tCO₂e Emission reductions: 3355 tCO₂e Emission reductions within 2006: 497 tCO₂e Emission reductions within 2007: 1205 tCO₂e Emission reductions within 2008: 1148 tCO₂e Emission reductions within 2009: 505 tCO₂e
54. Nanmu Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 9390 tCO₂e Emission reductions: 9390 tCO₂e Emission reductions within 2006: 1267 tCO₂e Emission reductions within 2007: 3546 tCO₂e Emission reductions within 2008: 3178 tCO₂e Emission reductions within 2009: 1399 tCO₂e

55. Canglong Hydroelectric Plant	Reporting period: 2006-04-03 to 2009-05-14 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 9207 tCO₂e Emission reductions: 9207 tCO₂e Emission reductions within 2006: 2033 tCO₂e Emission reductions within 2007: 3660 tCO₂e Emission reductions within 2008: 2699 tCO₂e Emission reductions within 2009: 815 tCO₂e
56. Daheba Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 12163 tCO₂e Emission reductions: 12163 tCO₂e Emission reductions within 2006: 1877 tCO₂e Emission reductions within 2007: 4528 tCO₂e Emission reductions within 2008: 4123 tCO₂e Emission reductions within 2009: 1635 tCO₂e
57. Heixigou Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 15392 tCO₂e Emission reductions: 15392 tCO₂e Emission reductions within 2006: 3150 tCO₂e Emission reductions within 2007: 5747 tCO₂e Emission reductions within 2008: 5006 tCO₂e Emission reductions within 2009: 1489 tCO₂e

58. Yanchanghe Stage III Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 10035 tCO₂e Emission reductions: 10035 tCO₂e Emission reductions within 2006: 1548 tCO₂e Emission reductions within 2007: 3077 tCO₂e Emission reductions within 2008: 3951 tCO₂e Emission reductions within 2009: 1459 tCO₂e
59. Muzonghe Stage IV Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 14437 tCO₂e Emission reductions: 14437 tCO₂e Emission reductions within 2006: 2687 tCO₂e Emission reductions within 2007: 4456 tCO₂e Emission reductions within 2008: 5338 tCO₂e Emission reductions within 2009: 1956 tCO₂e
60. Dengta Hydroelectric Plant	Reporting period: 2006-04-15 to 2009-05-14 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 3690 tCO₂e Emission reductions: 3690 tCO₂e Emission reductions within 2006: 102 tCO₂e Emission reductions within 2007: 1580 tCO₂e Emission reductions within 2008: 1605 tCO₂e Emission reductions within 2009: 403 tCO₂e

61. Banqiao Stage II Hydroelectric Plant	Reporting period: 2006-05-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 11281 tCO₂e Emission reductions: 11281 tCO₂e Emission reductions within 2006: 1893 tCO₂e Emission reductions within 2007: 3486 tCO₂e Emission reductions within 2008: 4231 tCO₂e Emission reductions within 2009: 1671 tCO₂e
62. Shuangchahe Hydroelectric Plant	Reporting period: 2007-05-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 4867 tCO₂e Emission reductions: 4867 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 0 tCO₂e Emission reductions within 2008: 4867 tCO₂e Emission reductions within 2009: 0 tCO₂e
63. Songshigou Hydroelectric Plant	Reporting period: 2006-04-15 to 2009-05-14 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 8710 tCO₂e Emission reductions: 8710 tCO₂e Emission reductions within 2006: 1990 tCO₂e Emission reductions within 2007: 3791 tCO₂e Emission reductions within 2008: 2647 tCO₂e Emission reductions within 2009: 282 tCO₂e

64. Banqiao Stage III Hydroelectric Plant	Reporting period: 2008-05-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 9027 tCO₂e Emission reductions: 9027 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 0 tCO₂e Emission reductions within 2008: 5754 tCO₂e Emission reductions within 2009: 3273 tCO₂e
65. Shujiahe Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 12734 tCO₂e Emission reductions: 12734 tCO₂e Emission reductions within 2006: 2100 tCO₂e Emission reductions within 2007: 5934 tCO₂e Emission reductions within 2008: 3597 tCO₂e Emission reductions within 2009: 1103 tCO₂e
66. Yangyan Hydroelectric Plant	Reporting period: 2006-04-13 to 2009-05-12 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 16162 tCO₂e Emission reductions: 16162 tCO₂e Emission reductions within 2006: 2721 tCO₂e Emission reductions within 2007: 5599 tCO₂e Emission reductions within 2008: 6205 tCO₂e Emission reductions within 2009: 1637 tCO₂e

67. Baiguo Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 23589 tCO₂e Emission reductions: 23589 tCO₂e Emission reductions within 2006: 4547 tCO₂e Emission reductions within 2007: 9542 tCO₂e Emission reductions within 2008: 8217 tCO₂e Emission reductions within 2009: 1283 tCO₂e
68. Longqiao Hydroelectric Plant	Reporting period: 2006-04-15 to 2009-05-14 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 42701 tCO₂e Emission reductions: 42701 tCO₂e Emission reductions within 2006: 7220 tCO₂e Emission reductions within 2007: 16238 tCO₂e Emission reductions within 2008: 14944 tCO₂e Emission reductions within 2009: 4299 tCO₂e
69. Baiyang Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 25900 tCO₂e Emission reductions: 25900 tCO₂e Emission reductions within 2006: 4059 tCO₂e Emission reductions within 2007: 11301 tCO₂e Emission reductions within 2008: 9779 tCO₂e Emission reductions within 2009: 761 tCO₂e

70. Xinmin Tailwater Stage II Hydroelectric Plant	Reporting period: 2006-04-15 to 2009-05-14 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 10737 tCO₂e Emission reductions: 10737 tCO₂e Emission reductions within 2006: 2066 tCO₂e Emission reductions within 2007: 4217 tCO₂e Emission reductions within 2008: 3548 tCO₂e Emission reductions within 2009: 906 tCO₂e
71. Dongliuhe Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 8362 tCO₂e Emission reductions: 8362 tCO₂e Emission reductions within 2006: 1807 tCO₂e Emission reductions within 2007: 3341 tCO₂e Emission reductions within 2008: 1514 tCO₂e Emission reductions within 2009: 1700 tCO₂e
72. Dahegou Hydroelectric Plant	Reporting period: 2007-04-26 to 2009-05-21 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 20410 tCO₂e Emission reductions: 20410 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 10723 tCO₂e Emission reductions within 2008: 7324 tCO₂e Emission reductions within 2009: 2363 tCO₂e

73. Xinmin Stage II Hydroelectric Plant	Reporting period: 2006-04-15 to 2009-05-14 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 52767 tCO₂e Emission reductions: 52767 tCO₂e Emission reductions within 2006: 8924 tCO₂e Emission reductions within 2007: 20786 tCO₂e Emission reductions within 2008: 18082 tCO₂e Emission reductions within 2009: 4975 tCO₂e
74. Guizhou Province Xingyi City Puti Hydropower Plant Technical Reform Project	Reporting period: 2006-04-01 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 30334 tCO₂e Emission reductions: 30334 tCO₂e Emission reductions within 2006: 16231 tCO₂e Emission reductions within 2007: 14103 tCO₂e Emission reductions within 2008: 0 tCO₂e Emission reductions within 2009: 0 tCO₂e
75. Guizhou Province Xingyi City Puti 2nd Stage (Xiniutang) Hydropower Plant Technical Reform Project	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 60129 tCO₂e Emission reductions: 60129 tCO₂e Emission reductions within 2006: 23293 tCO₂e Emission reductions within 2007: 36836 tCO₂e Emission reductions within 2008: 0 tCO₂e Emission reductions within 2009: 0 tCO₂e

76. Wumaxi Stage I Hydroelectric Plant	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 10063 tCO₂e Emission reductions: 10063 tCO₂e Emission reductions within 2006: 2568 tCO₂e Emission reductions within 2007: 3114 tCO₂e Emission reductions within 2008: 3491 tCO₂e Emission reductions within 2009: 890 tCO₂e
77. Mozigou Hydroelectric Plant	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 6909 tCO₂e Emission reductions: 6909 tCO₂e Emission reductions within 2006: 1828 tCO₂e Emission reductions within 2007: 2162 tCO₂e Emission reductions within 2008: 2094 tCO₂e Emission reductions within 2009: 825 tCO₂e
78. Mayihe Hydroelectric Plant	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 18218 tCO₂e Emission reductions: 18218 tCO₂e Emission reductions within 2006: 4832 tCO₂e Emission reductions within 2007: 5631 tCO₂e Emission reductions within 2008: 6081 tCO₂e Emission reductions within 2009: 1674 tCO₂e

79. Jinyatan Hydroelectric Plant	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 28184 tCO₂e Emission reductions: 28184 tCO₂e Emission reductions within 2006: 4467 tCO₂e Emission reductions within 2007: 9595 tCO₂e Emission reductions within 2008: 11750 tCO₂e Emission reductions within 2009: 2372 tCO₂e
80. Toudaoshui Hydroelectric Station	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 31410 tCO₂e Emission reductions: 31410 tCO₂e Emission reductions within 2006: 9073 tCO₂e Emission reductions within 2007: 7959 tCO₂e Emission reductions within 2008: 11263 tCO₂e Emission reductions within 2009: 3115 tCO₂e
81. Sanhui Hydroelectric Plant	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 55198 tCO₂e Emission reductions: 55198 tCO₂e Emission reductions within 2006: 12909 tCO₂e Emission reductions within 2007: 17842 tCO₂e Emission reductions within 2008: 19359 tCO₂e Emission reductions within 2009: 5088 tCO₂e

82. Qingshuihe Stage I Hydroelectric Plant	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 51285 tCO₂e Emission reductions: 51285 tCO₂e Emission reductions within 2006: 760 tCO₂e Emission reductions within 2007: 22079 tCO₂e Emission reductions within 2008: 22525 tCO₂e Emission reductions within 2009: 5921 tCO₂e
83. Gongjiagou Hydroelectric Plant	Reporting period: 2006-04-20 to 2009-05-19 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 102646 tCO₂e Emission reductions: 102646 tCO₂e Emission reductions within 2006: 27316 tCO₂e Emission reductions within 2007: 28875 tCO₂e Emission reductions within 2008: 37054 tCO₂e Emission reductions within 2009: 9401 tCO₂e
84. Chahe Stage III Hydroelectric Plant	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 75501 tCO₂e Emission reductions: 75501 tCO₂e Emission reductions within 2006: 19255 tCO₂e Emission reductions within 2007: 26747 tCO₂e Emission reductions within 2008: 23075 tCO₂e Emission reductions within 2009: 6424 tCO₂e

85. Daihuanggou Hydroelectric Plant	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 89254 tCO₂e Emission reductions: 89254 tCO₂e Emission reductions within 2006: 21743 tCO₂e Emission reductions within 2007: 29342 tCO₂e Emission reductions within 2008: 30016 tCO₂e Emission reductions within 2009: 8153 tCO₂e
86. Gaoqiaohe Hydroelectric Plant	Reporting period: 2006-04-26 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 162120 tCO₂e Emission reductions: 162120 tCO₂e Emission reductions within 2006: 39928 tCO₂e Emission reductions within 2007: 51527 tCO₂e Emission reductions within 2008: 54556 tCO₂e Emission reductions within 2009: 16109 tCO₂e
87. Zhuyeshan Hydroelectric Plant	Reporting period: 2006-04-20 to 2009-05-19 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 67350 tCO₂e Emission reductions: 67350 tCO₂e Emission reductions within 2006: 21968 tCO₂e Emission reductions within 2007: 22640 tCO₂e Emission reductions within 2008: 17732 tCO₂e Emission reductions within 2009: 5010 tCO₂e

88. Lianghekou Hydroelectric Plant	Reporting period: 2006-04-25 to 2009-05-24 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 153662 tCO₂e Emission reductions: 153662 tCO₂e Emission reductions within 2006: 37253 tCO₂e Emission reductions within 2007: 51721 tCO₂e Emission reductions within 2008: 54183 tCO₂e Emission reductions within 2009: 10505 tCO₂e
90. Dabaishu Hydroelectric Plant	Reporting period: 2006-04-21 to 2009-05-20 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 43841 tCO₂e Emission reductions: 43841 tCO₂e Emission reductions within 2006: 10599 tCO₂e Emission reductions within 2007: 14495 tCO₂e Emission reductions within 2008: 14698 tCO₂e Emission reductions within 2009: 4049 tCO₂e
91. Dashi Stage III Hydroelectric Plant	Reporting period: 2006-04-16 to 2009-05-15 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 51658 tCO₂e Emission reductions: 51658 tCO₂e Emission reductions within 2006: 11052 tCO₂e Emission reductions within 2007: 17053 tCO₂e Emission reductions within 2008: 18491 tCO₂e Emission reductions within 2009: 5062 tCO₂e

92. Dashi Stage II Hydroelectric Plant	Reporting period: 2006-04-16 to 2009-05-15 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 69270 tCO₂e Emission reductions: 69270 tCO₂e Emission reductions within 2006: 16238 tCO₂e Emission reductions within 2007: 23218 tCO₂e Emission reductions within 2008: 23322 tCO₂e Emission reductions within 2009: 6492 tCO₂e
93. Yunnan Midu County Taishanhe Hydropower Station	Reporting period: 2008-08-13 to 2008-12-15 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 9420 tCO₂e Emission reductions: 9420 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 0 tCO₂e Emission reductions within 2008: 9420 tCO₂e Emission reductions within 2009: 0 tCO₂e
94. Zhenyuan County Xiaojiehe Hydropower Station	Reporting period: 2008-03-25 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 12017 tCO₂e Emission reductions: 12017 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 0 tCO₂e Emission reductions within 2008: 11031 tCO₂e Emission reductions within 2009: 986 tCO₂e
95. Jinghong City Chuangye	Reporting period: 2006-07-21 to 2009-05-21

Hydropower Station (from 2006-07-21 to 2009-05-21)	Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 98635 tCO₂e Emission reductions: 98635 tCO₂e Emission reductions within 2006: 26279 tCO₂e Emission reductions within 2007: 29203 tCO₂e Emission reductions within 2008: 34116 tCO₂e Emission reductions within 2009: 9037 tCO₂e
96. Yingjiang Husa River 5th Stage Hydropower Plant	Reporting period: 2006-08-25 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 80707 tCO₂e Emission reductions: 80707 tCO₂e Emission reductions within 2006: 10362 tCO₂e Emission reductions within 2007: 29836 tCO₂e Emission reductions within 2008: 31810 tCO₂e Emission reductions within 2009: 8699 tCO₂e
97. Yunnan Province Jinping County Mengqiao Village Datan Hydropower Station	Reporting period: 2007-04-26 to 2009-05-25 Verified emission in the above reporting period: Project emissions: 0 tCO₂e Baseline emissions: 78755 tCO₂e Emission reductions: 78755 tCO₂e Emission reductions within 2006: 0 tCO₂e Emission reductions within 2007: 27518 tCO₂e Emission reductions within 2008: 42169 tCO₂e Emission reductions within 2009: 9068 tCO₂e
98. Fugong County Lishadi Hydropower Plant Project	Reporting period: 2006-09-26 to 2009-05-25 Verified emission in the above reporting period:

Project emissions:	0	tCO ₂ e
Baseline emissions:	125689	tCO ₂ e
Emission reductions:	125689	tCO ₂ e
Emission reductions within 2006:	13961	tCO ₂ e
Emission reductions within 2007:	58047	tCO ₂ e
Emission reductions within 2008:	41636	tCO ₂ e
Emission reductions within 2009:	12045	tCO ₂ e

Appendix A

CDM VERIFICATION PROTOCOL

Grouped Hydropower Plants in Chongqing, Yunnan, Sichuan and Guizhou Provinces, P.R.China
in
P.R. China

to Report No. 01 996 9105053287

Table 1: Verification requirements

(Based on §56, §57 and §62 of the CDM Modalities and Procedures and on CDM Verification and Verification Manual, Annex 3 of EB51)

Checklist question	Ref.	MoV ¹³	Findings, comments, references, data sources	Draft conclusion	Final conclusion
1. Implementation					
1.1 Have all physical features proposed in the registered PD been implemented at the project site?	/1/,/2/,/3/	DR I	Yes, the physical features of the sampling projects have been verified to be consistent with the validated VCS PD.		OK
1.2 Has the project activity been operated in accordance with the project scenario described in the registered PD and relevant guidance? Reference: < http://cdm.unfccc.int/EB/033/eb33rep.pdf >, §75	/1/,/2/,/3/, /4/,/7/	DR I	Yes, the grouped projects have been operated in accordance with the project scenario described in the validated PD and relevant VCS requirements.		OK
1.3 If the project activity is implemented on a number of different locations, has the Monitoring report provided the verifiable starting dates for each site?	/1/,/2/,/3/, /4/,/7/	DR I	Yes, the starting date of each grouped project has been provided in the monitoring report.		OK
2. Monitoring plan and methodology					
2.1 Is the monitoring plan established in accordance with the monitoring methodology?	/1/,/3/,/7/	DR I	The monitoring plan has been established in accordance with AMS.I.D Version 13.		OK
2.2 In case the implemented monitoring plan defers from the monitoring methodology, has any requests for revision to or deviation from the monitoring methodology been officially	/1/,/3/,/7/	DR	Not applicable.		OK

¹³ MoV = Means of Verification, DR = Document Review, I = Interview, www = internet search.

Checklist question	Ref.	MoV ¹³	Findings, comments, references, data sources	Draft conclusion	Final conclusion
communicated to the CDM EB? Reference: < http://cdm.unfccc.int/EB/033/eb33rep.pdf >, §84, §58					
2.2.1 Have the above changes to the monitoring plan been approved by the CDM EB?	/1/,/3/,/7/	DR	Not applicable.		OK
3. Monitoring and the monitoring plan					
3.1 Is monitoring established in full compliance with the monitoring plan, contained in the registered PD (or new monitoring plan approved by the CDM EB)?	/1/,/2/,/3/	DR I	Yes, the monitoring has been established in line with the monitoring plan in the PD.		OK
3.2 Are all baseline emission parameters monitored and updated in accordance with monitoring plan, monitoring methodology and relevant CDM EB decisions?	/1/,/2/,/3/, /7/	DR I	CL01 If the electricity invoices are used for cross-check evidence, the electricity invoices for electricity purchase from the Grid should also be provided.	CL01	OK (Refer to Table 2)
3.2.1 Was the monitoring equipment for baseline emission parameters controlled and monitoring results recorded as per approved frequency?	/1/,/2/,/3/, /7/	DR I	Yes, the electricity imported and exported is continuously monitored by the gateway meter identified in the power purchase agreement, which was signed between the project owner and power grid company. The readings of the monitoring meters are hourly recorded by the operational personnel and monthly reported.		OK

Checklist question	Ref.	MoV ¹³	Findings, comments, references, data sources	Draft conclusion	Final conclusion
3.2.2 Was the monitoring equipment for baseline emission parameters calibrated in accordance with QA&QC procedures described in the registered monitoring plan?	/1/,/2/,/3/, /7/	DR I	Yes, the gateway meters have been periodically calibrated according to relevant national standards. CAR04 Please refer to Annex III of the monitoring report, the accuracy of the gateway meters of Project No. 43, 52 and 55 shall be provided.	CAR04	OK (Refer to Table 2)
3.3 Are all project emission parameters monitored and updated in accordance with monitoring plan, monitoring methodology and relevant CDM EB decisions?	/1/,/2/,/3/, /7/	DR I	Most of the grouped projects are new run-of-river hydropower project and only 2 projects involve construction of new reservoirs. Since the power density of the 2 projects are greater than 10W/m ² , the project emission is zero under AMS-I.D. Version 13. Therefore, the project emission of the Grouped Project is zero under AMS-I.D. version 13 (PE _y =0).		OK
3.3.1 Was the monitoring equipment for project emission parameters controlled and monitoring results recorded as per approved frequency?	/1/,/2/,/3/, /7/	DR I	Idem.		OK
3.3.2 Was the monitoring equipment for project emission parameters calibrated in accordance with QA&QC procedures described in the registered monitoring plan?	/1/,/2/,/3/, /7/	DR I	Idem.		OK

Checklist question	Ref.	MoV ¹³	Findings, comments, references, data sources	Draft conclusion	Final conclusion
3.4 Are all leakage emission parameters monitored and updated in accordance with monitoring plan, monitoring methodology and relevant CDM EB decisions?	/1/,/2/,/3/, /7/	DR I	The grouped projects are newly-built, with no transferred from another activity or to another activity. The main generating equipment including water turbine generators are newly purchased, and the name plates have been verified during site assessment. Therefore, no leakage needs to be considered for the project activity according to the methodology. (Ly=0).		OK
3.4.1 Was the monitoring equipment for leakage emission parameters controlled and monitoring results recorded as per approved frequency?	/1/,/2/,/3/, /7/	DR I	Idem.		OK
3.4.2 Was the monitoring equipment for leakage emission parameters calibrated in accordance with QA&QC procedures described in the registered monitoring plan?	/1/,/2/,/3/, /7/	DR I	Idem.		OK
3.5 Were all monitoring parameters available and verifiable through the whole monitoring period?	/1/,/2/,/3/, /7/	DR I	Yes.		OK
3.5.1 In case, only partial monitoring data is available and PP(s) provide estimations or assumptions for the rest of data, was it possible to verify those estimations and assumptions? Reference: < http://cdm.unfccc.int/EB/026/eb26rep.pdf >, §109(b)	/1/,/2/,/3/, /7/	DR I	CL01 If the electricity invoices are used for cross-check evidence, the electricity invoices for electricity purchase from the Grid should also be provided.	~~CL01~~	OK (Refer to Table 2)

Checklist question	Ref.	MoV ¹³	Findings, comments, references, data sources	Draft conclusion	Final conclusion
3.6 Was management and operation system established and operated in accordance with the monitoring plan?	/1/,/2/,/3/, /7/	DR I	Yes, the management and operation system has been established and operated in accordance with the monitoring plan.		OK
3.7 Was it possible to verify that involved management and operation personnel is fully aware of the responsibilities and perform all operations according to the registered monitoring plan and internally developed manuals?	/1/,/2/,/3/, /7/	DR I	Yes.		OK
4. Parameters					
4.1 Monitored parameter Title: <u>EG_{Export,y}</u> Indication: <u>The accumulated net electricity exported to the China Southern Power Grid by all the hydropower plants under the Grouped project located in Yunnan and Guizhou Provinces in the year y</u> Units: <u>MWh per year</u> Estimated value (ex-ante): <u>356,851.44</u> Measured value (ex-post): <u>286,793.652 in 2008</u>	/1/,/2/,/3/, /7/	DR I	CAR01 The blank cells in the emission reduction calculation spreadsheet shall be filled with the monitoring results. CAR02 The total electricity delivered to Central China Power Grid and Southern China Power Grid shall be identified in the emission reductions calculation spreadsheet. CAR03 Please refer to Section 4 of the monitoring report, the monitoring start dates and end dates shall be revised as consistent format. CL01 If the electricity invoices are used for cross-check evidence, the electricity	~~CAR01~~ ~~CAR02~~ ~~CAR03~~ ~~CL01~~ ~~CL02~~	OK (Refer to Table 2)

Checklist question	Ref.	MoV ¹³	Findings, comments, references, data sources	Draft conclusion	Final conclusion
			invoices for electricity purchase from the Grid should also be provided. CL02 It should be clarified how the electricity imported and exported is considered in the emission reduction calculation spreadsheets. Existed emission reduction calculation spreadsheets only identify inputs of the net electricity output.		
4.2 Monitored parameter Title: <u>EG_{Export,y}</u> Indication: <u>The accumulated net electricity exported to the Central China Power Grid by all the hydropower plants under the Grouped project located in Chongqing City and Sichuan Province in the year y</u> Units: <u>MWh per year</u> Estimated value (<i>ex-ante</i>): <u>470,996</u> Measured value (<i>ex-post</i>): <u>473,753.9 in 2008</u>	/1/,/2/,/3/, /7/	DR I	Idem	~~CAR01~~ ~~CAR02~~ ~~CAR03~~ ~~CL01~~ ~~CL02~~	OK (Refer to Table 2)
4.3 Default parameter Title: <u>EF_{SCPG,y}</u> Indication: <u>Baseline emission factor of Southern China Power Grid</u> Units: <u>tCO₂e/MWh</u> Used value: <u>0.87118</u>	/1/,/2/,/3/, /7/,/13/	DR	The baseline emission factor of Southern China Power Grid is selected according to the most recent emission data published by the DNA of P.R. China on 18 th July 2008.		OK

Checklist question	Ref.	MoV ¹³	Findings, comments, references, data sources	Draft conclusion	Final conclusion
4.4 Default parameter Title: <u>EF_{CCPG,y}</u> Indication: <u>Baseline emission factor of Central China Power Grid</u> Units: <u>tCO₂e/MWh</u> Used value: <u>0.9735</u>	/1/,/2/,/3/, /7/,/13/	DR	The baseline emission factor of Central China Power Grid is selected according to the most recent emission data published by the DNA of P.R. China on 18 th July 2008.		OK
5. Calculations					
5.1 Have all the calculations related to the baseline emissions been carried according to the formulae and methods described in the registered PDD and applied methodology?	/1/,/2/,/3/, /7/,/13/	DR	CL02 It should be clarified how the electricity imported and exported is considered in the emission reduction calculation spreadsheets. Existed emission reduction calculation spreadsheets only identify inputs of the net electricity output. CL03 The operating hours of each grouped project should be clearly listed in the emission reduction calculation spreadsheet CL04 For Project No. 74&75, the electricity sales receipts should be provided for cross-check. CL05 For Project No. 93, the electricity invoices should be completely provided and the covered monitoring period of the electricity invoices should be clarified with the monthly reading records or electricity transaction notes.	CL02 CL03 CL04 CL05 CL06 CL07	OK (Refer to Table 2)

Checklist question	Ref.	MoV ¹³	Findings, comments, references, data sources	Draft conclusion	Final conclusion
			CL06 For Project No. 95&97, it was reviewed that many electricity invoices have been issued for each month. The monthly reading records should be provided for cross-check purpose to determine the covered monitoring month for each electricity invoice. CL07 It was reviewed that an illustration list of electricity transaction data issued by the local grid company are used as the data source of the net on-grid electricity output to determine the monthly emission reductions for some specified cases. However, further supporting evidence such as the electricity sales invoice or the electricity transaction notes should be provided for cross-check to determine the accuracy of data in the illustration list.		
5.2 Have all the calculations related to the project emissions been carried according to the formulae and methods described in the registered PDD and applied methodology?	/1/,/2/,/3/, /7/,/13/	DR	The project emissions are considered as zero for all the grouped projects according to AMS.I.D version 13.		OK
5.3 Have all the calculations related to the leakage emissions been carried according to the formulae and methods described in the registered PDD and applied methodology?	/1/,/2/,/3/, /7/,/13/	DR	The project emissions are considered as zero for all the grouped projects according to AMS.I.D version 13.		OK

Table 2: List of Requests for Corrective Action (CAR) and Clarification (CL)			
Observation	Reference (Table 1)	Summary of project owner response	Verification team conclusion
CAR01The blank cells in the emission reduction calculation spreadsheet shall be filled with the monitoring results.	4.1 4.2	The blank cells are filled with monitoring results in the revised spreadsheet. The cells were left blank due to missing monitoring data of the months. Notes are inserted accordingly to the months that are marked as nil.	OK. The blank cells have been filled with the monitoring results as indicated in the electricity sales receipts or electricity transaction notes which are checked to be valid by the verification team. The notes added in the spreadsheets are checked to be appropriate based on the supporting evidence. The CAR is therefore closed.
CAR02The total electricity delivered to Central China Power Grid and Southern China Power Grid shall be identified in the emission reductions calculation spreadsheet.	4.1 4.2	The total electricity delivered to Central China Power Grid and Southern China Power Grid is identified in both of the revised spreadsheet and the revised monitoring report.	OK. The total electricity delivered to the Central China Power Grid and Southern China Power Grid by the Grouped Project has been listed on a yearly basis in the emission reduction calculation spreadsheets. The monitoring results have been compared with validated PD and the details have been described in the Section 3.2.2 of this report. The verification team confirms the ratios of the monitored net electricity exports to the corresponding estimated values of SCPG and CCPG are within the range of 0.8037~1.0006, which are deemed reasonable. The CAR is therefore closed.

CAR03 Please refer to Section 4 of the monitoring report, the monitoring start dates and end dates shall be revised as consistent format.	4.1 4.2	The date format is revised to be consistent.	OK. The date format has been revised to be consistent in line with the spreadsheets. The CAR is therefore closed.
CAR04 Please refer to Annex III of the monitoring report, the accuracy of the gateway meters of Project No. 43, 52 and 55 shall be provided.	3.2.2	Accuracy of the gateway meters of projects 52 and 55 have been corrected in the revised monitoring report. Furthermore, the accuracy of gateway meter from project 43 has also been incorporated in Annex III of the monitoring report.	OK. The accuracy of gateway meters of Project No. 43, 52, 55 has been added. The CL is therefore closed.
CL01 If the electricity invoices are used for cross-check evidence, the electricity invoices for electricity purchase from the Grid should also be provided.	3.2 3.5.1 4.1 4.2	Both electricity invoices and electricity transaction notes (ETNs) for electricity purchase from the grid are provided for the projects with such documents available. However, for some projects only electricity purchase invoice is available without ETNs. These projects are: No. 2, 50, 55, 61, 62, 64, 74, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 93, 94, 95, 97 and 98. ETNs are not available for a part of the monitoring period for projects No. 46 and 96. The electricity sales invoices of these projects show either of the followings: - The sales amount is specified as the net sales amount. In this case, the amount purchased from the grid has been taken into account. - There is no clear indication whether the sales amount is net. To account for the electricity purchase from the grid, a discount factor is applied on the export amount. As a conservative	OK. The verification team has cross-checked the input values in the emission reductions calculation spreadsheets with the electricity sales invoices and electricity transaction notes of each grouped project. It was confirmed that the electricity sales invoices can only identify the electricity exported to the local grid while the electricity transaction notes can identify the electricity import from the grid and electricity export to the grid. The electricity transaction notes have been the basis for the grid company and plant owner to issue the electricity invoices to each other. In order to determine the imported electricity for projects which only have the electricity invoices, a discount factor of 1.46% is applied and determined according to the statistical

		approach, the discount factor is applied to both situations described above, regardless whether the sales amount is specified as the net amount. In the calculation 1.46% has been applied as the discount factor on these projects' export amount. The discount factor is determined based on the following procedure: Step 1: Identify the ratio of import electricity to export electricity for each of the projects that have both the export electricity data and import electricity data. 75% of the projects have data available. Step 2: From the step above, the average import to export ratio of all projects over time can be calculated. The average import to export value is based on the entire data available for a certain project within the monitoring period from 01/04/2006 to 05/06/2009. Given the fact that the import to export ratio is subject to strong variations over time, the average value over the maximum possible time interval is deemed as the most appropriate value to be applied as default discount factor. Step 3: Among all projects identified under Step 2, the highest value of the average import to export ratio is chosen as the discount factor. Step 4: Confirmation of conservativeness. According to the	average ratios of import electricity to export electricity of other grouped projects which have the complete data of electricity imported and exported during the monitoring period. By conducting described process from Step 1 to Step 4, the verification team confirms the selected discount factor has been chose as the highest average import to export ratio, which is calculated according to the highest average import to export ratio over the entire monitoring period for 65 grouped projects that have complete electricity import/export data during the monitoring period. This is consistent with the grouped projects which have adopted the discount factor to estimate the electricity import since the discount factor has been applied during the entire monitoring period in the emission reduction calculation spreadsheets. For the significantly higher values which are marked as BLUE in the spreadsheets (i.e. Project 32: 5.45% in 2006, Project 30: 6.71% in 2009, etc.), it can be observed in the emission reductions calculation processes for these projects that these higher import/export values have been calculated based on the monitoring data of certain months of the entire monitoring period . As for 5.45% of project 32 in 2006, it is
--	--	---	---

		“Hydroenergy Design Code for Small Hydropower Projects (SL76-94)” issued by Ministry of Water Resources of People’s Republic of China, the internal consumption for hydropower plants is shown as 0.5%-1%. Since the discount factor identified is higher than 1% (which is the higher end of the official reference rate), the discount factor is confirmed to be conservative. The projects using the discount factor are projects No. 2, 50, 55, 61, 62, 64, 74, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 93, 94, 95, 97 and 98. It should be noted that the discount factor is also applied to projects 46 and 96 for a part of the monitoring period whenever exact information for determination of the electricity imports/export ratio is missing,	calculated based on 3 months data (July to September 2006). Without considering the other months' generation records, it is realistic that the import to export ratio appears to be abnormally high. In 2007, with 12 months' records available the ratio is calculated as 0.78%. And in 2008 with 9 months' records, the ratio is calculated as 1.81%. It is clear that the value calculated based on 3 months data does not represent the import to export ratio of the entire monitoring period for this particular project. It is the similar situation for 6.71% of Project No. 30 in 2009, it is calculated based on 5 months data (Jan. to May 2009), which also covers the dry season and the electricity export is relatively less from January to March through cross-checked with the monitoring data in 2007&2008. Since the discount factor is applied for the entire monitoring period, it is realistic that it should be selected based on the complete available import/export data over the monitoring period. The selected 1.46% is further confirmed conservative according to the SL76-94/15/, which represents local third-party expertise and clearly stated that the internal consumption for small hydropower project should be within the range of 0.5~1.0%.
--	--	---	---

			By applying the discount factor of 1.46%, the electricity imported has been conservatively determined for -Project No. 2, 50, 55, 61, 62, 64, 74, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 93, 94, 95, 97 and 98, of which all the electricity receipts only indicate the electricity exported during the whole monitoring period; -Project No. 46 and 96, of which the electricity receipts only indicate the electricity exported for part of the monitoring period. The CL is therefore closed.
--	--	--	---

CL02 It should be clarified how the electricity imported and exported is considered in the emission reduction calculation spreadsheets. Existed emission reduction calculation spreadsheets only identify inputs of the net electricity output.	4.1 4.2 5.1	The spreadsheet has been revised to show electricity imported and exported to the grid for transparency of calculation of net electricity exports. In the response to CL01, it is explained that a discount factor is applied to account for the electricity import of the 25 projects, for which electricity import values are not specified in the sales invoices.	OK. The process on how the electricity imported and exported has been determined is appropriately explained in response to CL01. The emission reductions calculation spreadsheet has also been revised to clearly indicate the electricity imported and exported. The CL is therefore closed.
CL03 The operating hours of each grouped project should be clearly listed in the emission reduction calculation spreadsheet	5.1	The operating hours of each project is listed in the spreadsheet.	OK. The operating hours of each project has been listed in the spreadsheets. The operating hours have been checked to be reasonable through cross-check case by case within the same region. No significant inconsistency has been found. The CL is therefore closed.
CL04 For Project No. 74&75, the electricity sales receipts should be provided for cross-check.	5.1	The sales receipts for project no. 74 and 75 have been provided for cross check. However, receipts of 2008 and 2009 (and certain months in 2007) are not available. Only the generation that can be checked with generation records and cross-checked with sales receipts would be accounted in emission reduction calculations for these two particular projects. Emission reductions from 2008 and 2009 (and certain months in 2007) will not be claimed during this verification.	OK. The verification team has checked the electricity transaction notes which are available, and found the values consistently applied in the emission reduction calculation spreadsheets. It was also confirmed that: -For Project No. 74, the supporting evidence, covering the months of January, February, August, November 2007 afterwards, are not available for verification. -For Project No. 75, the supporting evidence, covering the months of May

			2006 and January 2008 afterwards, are not available for verification. For these months, the emission reductions have not been claimed in the emission reduction calculation spreadsheets. It is deemed conservative and the CL is therefore closed.
--	--	--	--

CL05 For Project No. 93, the electricity invoices should be completely provided and the covered monitoring period of the electricity invoices should be clarified with the monthly reading records or electricity transaction notes.	5.1	From August to December 2008, sales receipts and electricity transaction notes are available for verification and cross check. Only the generation from these months is being considered in the revised emission reduction calculations for this particular project. From January to May 2009, the local area experienced drought, there was no generation during the period from No. 93.	OK. The verification team has reviewed the transaction notes dated from August 2008 to December 2008, and is able to further confirm that the monitoring results for the Project No. 93 are consistently applied in the emission reduction calculation spreadsheets. Since no emission reductions have been claimed during the period of January to May 2009, no electricity sales receipts are available for cross-check purpose. The CL is therefore closed.
CL06 For Project No. 95&97, it was reviewed that many electricity invoices have been issued for each month. The monthly reading records should be provided for cross-check purpose to determine the covered monitoring month for each electricity invoice.	5.1	Electricity transaction notes and electricity sales receipts are provided for verification and cross check for projects No. 95. For project 97, operation records and sales invoices have been submitted for cross check purpose. No invoice is available for November 2007, January and July 2008. These months will not claim emission reductions.	OK. The verification team has cross-checked the electricity sales invoices with the electricity transaction notes of Project No. 95 and found the electricity exported is consistent in each monitoring months. It is clearly indicated in the electricity transaction notes that the covered monitoring period for each month is from 26 th of last month to 25 th of this month. Further, the input values for determining the emission reductions are also in line with the electricity transaction notes. For Project No. 97, the verification team has cross-check the electricity sales invoices with the monthly reading records. It is clearly indicated in the monthly reading records that

			the covered monitoring period for each month is from 26th of last month to 25th of this month. The invoicing date is at the end of each month (i.e. during the period of 26th to 31st of each month). The CL is therefore closed.
CL07 It was reviewed that an illustration list of electricity transaction data issued by the local grid company are used as the data source of the net on-grid electricity output to determine the monthly emission reductions for some specified cases. However, further supporting evidence such as the electricity sales invoice or the electricity transaction notes should be provided for cross-check to determine the accuracy of data in the illustration list.	5.1	For some of the projects, sales records for certain months cannot be retrieved. Therefore the 'illustration list', i.e. a list of generation data provided as official third-party evidence from the grid companies, is used as evidence in the absence of sales records. To address the DOE's concern, emission reductions will not be claimed for the months that sales records cannot be retrieved as a conservative approach. The cells are highlighted in orange in the calculation spreadsheet. Projects with certain months missing sales records are listed as below: From 1 to 6, 8, 9, 13, from 22 to 24, 27, 29, 30, 32, from 34 to 38, 41, 42, from 45 to 47, from 50 to 53, 55, 56, from 60 to 63, 65, 67, and from 69 to 72.	OK. The emission reductions have not been claimed for the specified months which lack of electricity sales receipts or transaction notes for cross-check purpose. It is conservative and the CL is therefore closed.
CL08 The information of the project proponents and responsible entity for the monitoring report should be clearly provided in the monitoring report.	5.1	A list of project developers is added to the monitoring report in Annex VI.	OK. A complete list of project proponents has been provided in the Annex VI of the monitoring report. The information has been checked to be consistent with the validated PD. The CL is therefore closed.

Appendix B

DOCUMENT REVIEW LIST OF SAMPLING PROJECT

Document Review List for Sampling Project No. 21

- <21-01> Chongqing City Wanzhou District Construction Acceptance Committee, Construction Accomplishment Acceptance Report of Xianfeng Hydroelectric Plant, October 15th 2007.
- <21-02> Chongqing City Wanzhou District Xianfeng Hydroelectric Plant, Power Purchasing Agreement, July 4th 2007.
- <21-03> Chongqing City Wanzhou Measurement Quality Testing Centre, Calibration Certificate of Project No. 21, Valid from 13th February 2007 to 12th February 2012.
- <21-04> Chongqing City Wanzhou District Xianfeng Hydroelectric Plant, Daily and monthly reading records of Xianfeng Hydroelectric Plant.
- <21-05> Chongqing City Wulong County Haoyun Hydroelectric Plant, Monitoring manual of Xianfeng Hydroelectric Plant, June 3rd. 2009.
- <21-06> Chongqing City Wanzhou District Xianfeng Hydroelectric Plant, Staff Training Records, June 2009.
- <21-07> Chongqing City Wanzhou district Xianfeng Hydroelectric Plant, Electrical Connection Scheme of Xianfeng Hydroelectric Plant, June 2009.
- <21-08> Chongqing City Wanzhou District Xianfeng Hydroelectric Plant, electricity transaction notes from April 2007 to October 2009.

Document Review List for Project No. 55

- <55-01> Chongqing City Wulong County Construction Acceptance Committee, Construction Accomplishment Acceptance Report of Canglong Hydroelectric Plant, Jan. 2005.
- <55-02> Chongqing City Wulong County Canglong Hydroelectric Co., Ltd., Grid Connection Agreement, October 2004.
- <55-03> Chongqing City Puling Electric Power Industry Co., Ltd., Certificate on Calibration of Electricity Energy Meters of Project No. 55, 63 and 68, 23rd March 2010.
- <55-04> Chongqing City Wulong County Canglong Hydroelectric Co., Ltd., Daily and monthly reading records of Canglong Hydroelectric Plant, June 2009.
- <55-05> Chongqing City Wulong County Canglong Hydroelectric Co., Ltd., Staff Training Records, June 2008.
- <55-06> Chongqing City Wulong County Canglong Hydroelectric Co., Ltd., Electrical Connection Scheme of Canglong Hydroelectric Plant, June 2009.
- <55-07> Chongqing Fuling Electric Power Industrial Co. Ltd., Electricity invoices, April 2004 to June 2009.
- <55-08> Chongqing City Wulong County Canglong Hydroelectric Co., Ltd., electricity sales invoices from April 2006 to May 2009.

Document Review List for Project No. 57

- <57-01> Chongqing City Wulong County Heixigou Hydroelectric station, Monitoring structure of Heixigou Hydroelectric Project.
- <57-02> Chongqing City Wulong County Hydroelectric Project Completion Acceptance Committee, Construction Accomplishment Acceptance Report of Heixigou Hydroelectric Project, February 15th, 2003.
- <57-03> Chongqing City Wulong County Power Supply Co., Ltd., Certificate on Calibration of Electricity Energy Meters of Project No. 57, 59, 64, 67 and 69, 23rd March 2010.

- <57-04> Chongqing City Wulong County Landi Hydroelectric Co., Ltd., Power Purchasing Agreement, February 25th, 2009.
- <57-05> Chongqing City Wulong County Landi Hydroelectric Co., Ltd., Daily and monthly reading records of Heixigou Hydroelectric Project, June 2009.
- <57-06> Chongqing City Wulong County Landi Hydroelectric Co., Ltd., Monitoring manual of Heixigou Hydroelectric Project, June 3rd, 2009.
- <57-07> Chongqing City Fuling District Water Conservancy and Electric Power Construction Survey and Design Institute, Electrical Connection Scheme of Heixigou Hydroelectric Project.
- <57-08> Chongqing City Wulong County Power Supply Co., Ltd., Electricity Transaction Notes of Heixigou Hydroelectric Station from April 2006 to May 2009.

Document Review List for Project No. 59

- <59-01> Chongqing City Wulong County Muzonghe IV Stage Hydroelectric station, Monitoring structure of Muzonghe IV Stage Hydroelectric Project.
- <59-02> Chongqing City Wulong County Hydroelectric Project Completion Acceptance Committee, Construction Accomplishment Acceptance Report of Muzonghe IV Stage Hydroelectric Project, March 10th, 2004.
- <59-03> Chongqing City Wulong County Power Supply Co., Ltd., Certificate on Calibration of Electricity Energy Meters of Project No. 57, 59, 64, 67 and 69, 23rd March 2010.
- <59-04> Chongqing City Wulong County Landi Hydroelectric Co., Ltd., Power Purchasing Agreement, February 25th, 2009.
- <59-05> Chongqing City Wulong County Landi Hydroelectric Co., Ltd., Daily and monthly reading records of Muzonghe IV Stage Hydroelectric Project, June 2009.
- <59-06> Chongqing City Wulong County Landi Hydroelectric Co., Ltd., Monitoring manual of Muzonghe IV Stage Hydroelectric Project, June 3rd, 2009.
- <59-07> Chongqing City Wulong County Landi Hydroelectric Co., Ltd., Staff Training Examinations, 2008.
- <59-08> Chongqing City Wulong County Power Supply Limited Liability Company, Electricity Transaction Notes of Muzonghe IV Stage Hydroelectric Station from April 2006 to May 2009.

Document Review List for Project No. 63

- <63-01> Chongqing City Wulong County Construction Acceptance Committee, audit report of Wulong County Tukan Hydroelectric Plant, Dec. 12th. 2005.
- <63-02> Chongqing City Wulong County Tukan Songshigou Hydroelectric Co., Ltd., Power Connection Agreement, July 16th. 2008.
- <63-03> Chongqing City Fuling Electric Power Industry Co., Ltd., Certificate on Calibration of Electricity Energy Meters of Project No. 55, 63 and 68, 23rd March 2010.
- <63-04> Chongqing Fuling Electric Power Industrial Co. Ltd., Calibration records of Electricity meters, August 2004.
- <63-05> Chongqing City Wulong County Tukan Songshigou Hydroelectric Co., Ltd., Monitoring manual of Songshigou Hydroelectric Plant, June 3rd. 2009.
- <63-06> Chongqing City Wulong County Tukan Songshigou Hydroelectric Co., Ltd., Electrical Connection Scheme of Songshigou Hydroelectric Plant, June 2009.
- <63-07> Chongqing Fuling Electric Power Industrial Co. Ltd., Electricity Transaction Notes from April 2006 to May 2009.

Document Review List for Project No. 64

- <64-01> Chongqing City Wulong County Haoyun Hydroelectric Co., Ltd., Monitoring structure of Haoyun Hydroelectric Plant.
- <64-02> Chongqing City Wulong County Construction Acceptance Committee, Construction Accomplishment Acceptance Report of Haoyun Hydroelectric Plant, Feb. 2008.
- <64-03> Chongqing City Wulong County Power Supply Co., Ltd., Certificate on Calibration of Electricity Energy Meters of Project No. 57, 59, 64, 67 and 69, 23rd March 2010.
- <64-04> Chongqing City Wulong County Haoyun Hydroelectric Co., Ltd., Power Purchasing Agreement, July 16th 2008.
- <64-05> Chongqing Fuling Electric Power Industrial Co. Ltd., Calibration records of Electricity meters, June 15th. 2009.
- <64-06> Chongqing City Wulong County Haoyun Hydroelectric Co., Ltd., Daily and monthly reading records of Banqiao Stage III Hydroelectric Plant, 2009.
- <64-07> Chongqing City Wulong County Haoyun Hydroelectric Co., Ltd., Monitoring manual of Banqiao Stage III Hydroelectric Plant, June 3rd. 2009.
- <64-08> Chongqing City Wulong County Haoyun Hydroelectric Co., Ltd., Staff Training Records, June 2008.
- <64-09> Chongqing City Wulong County Banqiao Haoyun Hydroelectric Co., Ltd., Electrical Connection Scheme of Banqiao Stage III Hydroelectric Plant, June 2009.
- <64-10> Chongqing Fuling Electric Power Industrial Co. Ltd., Electricity invoices from June 2008 to May 2009.

Document Review List for Project No. 67

- <67-01> Chongqing City Wulong County Baiguo Hydroelectric station, Monitoring structure of Baiguo Hydroelectric Project.
- <67-02> Chongqing City Wulong County Hydroelectric Project Completion Acceptance Committee, Construction Accomplishment Acceptance Report of Baiguo and Baiyang Hydroelectric Projects, February 4th, 2005.
- <67-03> Chongqing City Wulong County Power Supply Co., Ltd., Certificate on Calibration of Electricity Energy Meters of Project No. 57, 59, 64, 67 and 69, 23rd March 2010.
- <67-04> Chongqing City Wulong County Yuxiang Water Resources Development Co., Ltd., Power Purchasing Agreement of Baiguo and Baiyang Hydroelectric Projects, July 27th, 2008.
- <67-05> Baiguo Hydroelectric Station, Daily and monthly reading records of Baiguo Hydroelectric Project, June 18th, 2009.
- <67-06> Chongqing City Wulong County Yuxiang Water Resources Development Co., Ltd., Monitoring manual of Baiguo Hydroelectric Project, June 3rd, 2009.
- <67-07> Baiguo Hydroelectric Station, Electrical Connection Scheme (copying screen) of Baiguo Hydroelectric Project, June 18th, 2009.
- <67-08> Chongqing City Wulong County Yuxiang Hydropower Development Co., Ltd., Electricity Transaction Notes from April 2006 to May 2009.

Document Review List For Project No. 68

- <68-01> Daozhen County Construction Acceptance Committee, Construction Accomplishment Acceptance Report of Longqiao Hydroelectric Plant, March 18th. 2008.

- <68-02> Chongqing City Wulong County Yongxin Hydroelectric Co., Ltd., Power Connection Agreement, July 16th. 2005.
- <68-03> Chongqing City Puling Electric Power Industry Co., Ltd., Certificate on Calibration of Electricity Energy Meters of Project No. 55, 63 and 68, 23rd March 2010.
- <68-04> Chongqing Fuling Electric Power Industrial Co. Ltd., Calibration records of Electricity meters, December 15th 2008.
- <68-05> Chongqing City Wulong County Haoyun Hydroelectric Co., Ltd., Daily and monthly reading records of Longqiao Hydroelectric Plant, June 16th. 2009.
- <68-06> Chongqing City Wulong County Haoyun Hydroelectric Co., Ltd., Monitoring manual of Longqiao Hydroelectric Plant, June 3rd. 2009.
- <68-07> Chongqing City Wulong County Haoyun Hydroelectric Co., Ltd., Staff Training Records, Jan. 2009.
- <68-08> Chongqing City Wulong County Banqiao Haoyun Hydroelectric Co., Ltd., Electrical Connection Scheme of Longqiao Hydroelectric Plant, June 2009.
- <68-09> Chongqing Fuling Electric Power Industrial Co. Ltd., Electricity Transaction Notes from April 2006 to May 2009.

Document Review List for Project No. 69

- <69-01> Chongqing City Wulong County Baiyang Hydroelectric station, Monitoring structure of Baiyang Hydroelectric Project.
- <69-02> Chongqing City Wulong County Hydroelectric Project Completion Acceptance Committee, Construction Accomplishment Acceptance Report of Baiguo and Baiyang Hydroelectric Projects, February 4th, 2005.
- <69-03> Chongqing City Wulong County Power Supply Co., Ltd., Certificate on Calibration of Electricity Energy Meters of Project No. 57, 59, 64, 67 and 69, 23rd March 2010.
- <69-04> Chongqing City Wulong County Yuxiang Water Resources Development Co., Ltd., Power Purchasing Agreement of Baiguo and Baiyang Hydroelectric Projects, July 27th, 2008.
- <69-05> Baiyang Hydroelectric Station, Daily and monthly reading records of Baiyang Hydroelectric Project, June 18th, 2009.
- <69-06> Chongqing City Wulong County Yuxiang Water Resources Development Co., Ltd., Monitoring manual of Baiyang Hydroelectric Project, June 3rd, 2009.
- <69-07> Baiyang Hydroelectric Station, Electrical Connection Scheme (copying screen) of Baiyang Hydroelectric Project, June 18th, 2009.
- <69-08> Chongqing City Wulong County Yuxiang Hydropower Development Co., Ltd., Electricity Transaction Notes from April 2006 to May 2009.

Document Review List for Project No. 72

- <72-01> Chongqing City Wulong County Fengyuan Jinhui Hydroelectric Development Co., Ltd., Plant Layout.
- <72-02> Tongzi County Hydroelectric Project Completion Acceptance Committee, Construction Accomplishment Acceptance Report of Dahegou Hydroelectric Project, March 12th, 2007.
- <72-03> Chongqing City Wulong County Fengyuan Jinhui Hydroelectric Development Co., Ltd., Power Purchasing Agreement, January 5th, 2009.
- <72-04> Chongqing City Nanchuan District Power Supply Co., Ltd., Certificate on Calibration of Electricity Energy Meters of Project No. 72, 23rd March 2010.

- <72-05> Chongqing City Wulong County Fengyuan Jinhui Hydroelectric Development Co., Ltd., Monitoring manual of Dahegou Hydroelectric Project, June 3rd, 2009.
- <72-06> Chongqing City Wulong County Fengyuan Jinhui Hydroelectric Development Co., Ltd., Electrical Connection Scheme of Dahegou Hydroelectric Project.
- <72-07> Chongqing City Nanchuan Power Supply Limited Liability Company, Electricity Transaction Notes of Dahegou Hydroelectric Station, May 2007 to May 2009.
- <72-08> Chongqing City Wulong County Fengyuan Jinhui Hydroelectric Development Co., Ltd., Electricity Sales Receipts, May 2007 to May 2009.

Document Review List for Project No. 75

- <75-01> Guizhou Renxing Certified Public Accountants, Financial Audit Report, 12th April 2008
- <75-02> Xingyi City Puti Power Co. Ltd., Power Purchasing Agreement of the Project, 26th March 2008.
- <75-03> Xingyi City Electric Power Co., Ltd., Calibration Certificate of Project No. 75, Valid from 10th January 2006 to 9th January 2011.
- <75-04> Guizhou Province Xingyi City Puti 2nd Stage (Xiniutang) Hydropower Plant Technical Reform Project, Daily and Monthly Reading Records, 23rd June 2009
- <75-05> Guizhou Province Xingyi City Puti 2nd Stage (Xiniutang) Hydropower Plant Technical Reform Project, Monitoring Manual
- <75-06> Guizhou Province Xingyi City Puti 2nd Stage (Xiniutang) Hydropower Plant Technical Reform Project, Staff Training Plan, 10th May 2009.
- <75-07> Guizhou Province Xingyi City Puti 2nd Stage (Xiniutang) Hydropower Plant Technical Reform Project, Electricity Transaction Notes from April 2006 to December 2007.

Document Review List for Project No. 78

- <78-01> Yingjing County Myihe Hydropower station, Monitoring Structure, May, 2009.
- <78-02> Yingjing County Myihe Hydropower station, Plant Layout.
- <78-03> Yingjing Substation of Beijing Hongri Accounting Firm, Financial Closure Report for Construction Accomplishment, May 2006.
- <78-04> Sichuan Yingjing Power Co., Ltd., Power Purchasing Agreement of Yingjing County Myihe Hydropower station, December 13th 2004.
- <78-05> Sichuan Yingjing Electric Power Co., Ltd., Calibration Certificate of Project No. 78, Valid from 6th June 2005 to 15th April 2010.
- <78-06> Yingjing County Myihe Hydropower station, Daily and Monthly Reading Records.
- <78-07> Yingjing County Myihe Hydropower station, Monitoring Manual, May, 2009.
- <78-08> Yingjing County Myihe Hydropower station, Electrical Connection Scheme.
- <78-09> Bureau of Quality and Technical Supervision of Ya'an in Sichuan, Certificate of Calibration Entity, August 14th 2008.
- <78-10> Yingjing County Myihe Hydropower station, Electricity Transaction Notes from April 2006 to May 2009.

Document Review List for Project No. 82

- <82-01> Sichuan Yingjing Yunwushan Hydropower Co., Ltd., Monitoring Structure, May 2009.
- <82-02> Yingjing Substation of Beijing Hongri Accounting Firm, Construction Accomplishment Auditing Report, March 2006.

- <82-03> Sichuan Yingjing Yunwushan Hydropower Co., Ltd., Power Purchasing Agreement of Sichuan Yingjing Yunwushan Hydropower Co., Ltd., November 16th 2006.
- <82-04> Sichuan Yingjing Electric Power Co., Ltd., Calibration Certificate of Project No. 82, Valid from 7th December 2006 to 26th May 2010.
- <82-05> Sichuan Yingjing Yunwushan Hydropower Co., Ltd., Daily and Monthly Reading Records.
- <82-06> Sichuan Yingjing Yunwushan Hydropower Co., Ltd., Monitoring Manual, May, 2009.
- <82-07> Sichuan Yingjing Yunwushan Hydropower Co., Ltd., Electrical Connection Scheme.
- <82-08> Bureau of Quality and Technical Supervision of Ya'an in Sichuan, Certificate of Calibration Entity, August 14th 2008.
- <82-09> Sichuan Yingjing Power Co., Ltd., Electricity Transaction Notes from December 2006 to May 2009.

Document Review List for Sampling Project No. 85

- <85-01> Daihuanggou Hydroelectric Plant, Monitoring Structure, May 2009.
- <85-02> Yingjing Substation of Beijing Hongri Accounting Firm, Construction Accomplishment Auditing Report, March 2006.
- <85-03> Daihuanggou Hydroelectric Plant, Power Purchasing Agreement of Daihuanggou Hydroelectric Plant, March 25th 2004
- <85-04> Sichuan Yingjing Electric Power Co., Ltd., Calibration Certificate of Project No. 85, Valid from 6th August 2005 to 13th April 2010.
- <85-05> Daihuanggou Hydroelectric Plant, Daily and Monthly Reading Records.
- <85-06> Daihuanggou Hydroelectric Plant, Monitoring Manual, May, 2009.
- <85-07> Daihuanggou Hydroelectric Plant, Electrical Connection Scheme.
- <85-08> Bureau of Quality and Technical Supervision of Ya'an in Sichuan, Certificate of Calibration Entity, August 14th 2008.
- <85-09> Sichuan Yingjing Power Co., Ltd., Electricity Transaction Notes from April 2006 to May 2009.

Document Review List for Sampling Project No. 86

- <86-01> Gaoqiaohe Hydroelectric Plant, Monitoring Structure, May, 2009.
- <86-02> Gaoqiaohe Hydroelectric Plant, Plant Layout.
- <86-03> Yingjing Auditing Bureau, Construction Accomplishment Auditing Report, March 10th 2006.
- <86-04> Gaoqiaohe Hydroelectric Plant, Power Purchasing Agreement of Gaoqiaohe Hydroelectric Plant, November 2003.
- <86-05> Sichuan Yingjing Electric Power Co., Ltd., Calibration Certificate of Project No. 86, Valid from 6th July 2005 to 26th May 2010.
- <86-06> Gaoqiaohe Hydroelectric Plant, Daily and Monthly Reading Records.
- <86-07> Gaoqiaohe Hydroelectric Plant, Monitoring Manual, May, 2009.
- <86-08> Gaoqiaohe Hydroelectric Plant, Electrical Connection Scheme.
- <86-09> Bureau of Quality and Technical Supervision of Ya'an in Sichuan, Certificate of Calibration Entity, August 14th 2008.

- <86-10> SouthPole Carbon Assesment Ltd.,VCU Calculation Sheets,2009.
- <86-11> Sichuan Yingjing Power Co., Ltd., Electricity Transaction Notes from April 2006 to May 2009.

Document Review List for Sampling Project No. 94

- <94-01> Zhenyuan Yi, Lahu Autonomous County Xiaojiehe Hydropower Co., Ltd., Power Purchasing Agreement of the Project, 1st January 2009.
- <94-02> Simao City Power Supply Bureau, Calibration Certificate of Project No.94, Valid from 28th December 2007 to 27th December 2009.
- <94-03> Pu'er City Development and Reform Committee, Construction Accomplishment Acceptance Report of Zhenyuan County Xiaojiehe Hydropower Station, 15th May 2009.
- <94-04> Zhenyuan Yi, Lahu Autonomous County Xiaojiehe Hydropower Co., Ltd., Staff Training Records, 2006, 2007 and 2008.
- <94-05> Zhenyuan Yi, Lahu Autonomous County Xiaojiehe Hydropower Co., Ltd., Daily and Monthly Reading Records of Zhenyuan County Xiaojiehe Hydropower Station.
- <94-06> Zhenyuan Yi, Lahu Autonomous County Xiaojiehe Hydropower Co., Ltd., Monitoring Manual of Zhenyuan County Xiaojiehe Hydropower Station.
- <94-07> Zhenyuan Yi, Lahu Autonomous County Xiaojiehe Hydropower Co., Ltd., Electricity Transaction Notes from April 2008 to May 2009.

Document Review List for Sampling Project No. 96

- <96-01> Yingjiang Husa River 5th Stage Hydropower Plant Project Construction Acceptance Committee, Construction Accomplishment Acceptance Report, July 2008.
- <96-02> Yingjiang County Tianchao Hydropower Co. Ltd. Grid Connected Agreement of the Project, 17th September 2006.
- <96-03> Dehong Jincheng Electric Energy Measurement Equipment Testing Technology Co., Ltd. Calibration Certificate of Project No. 96, Valid from 26th May 2006 to 25th May 2009.
- <96-04> Yingjiang Husa River 5th Stage Hydropower Plant Project, Daily and Monthly Reading Records, July 2009
- <96-05> Yingjiang Husa River 5th Stage Hydropower Plant Project, Monitoring Mannual,
- <96-06> Yingjiang Husa River 5th Stage Hydropower Plant Project, Staff Training Plan, October 2008.
- <96-07> Yingjiang Husa River 5th Stage Hydropower Plant Project, Electricity Transaction Notes from September 2006 to May 2009.

Document Review List for Sampling Project No. 98

- <98-01> Lishadi Hydropower Project Construction Acceptance Committee, Construction Accomplishment Acceptance Report, August 2008
- <98-02> Yunnan Fugong Huatai Electricity Development Co. Ltd., Power Purchasing Agreement of the Project, 27th December 2007.
- <98-03> Yunnan Province Measurement and Testing Technical Research Institute, Calibration Certificate of Project No.98, Valid from 14th March 2006 to 13th March 2010.
- <98-04> Fugong County Lishadi Hydropower Plant Project, Daily and Monthly Reading Records, July 2009
- <98-05> Fugong County Lishadi Hydropower Plant Project, Monitoring Mannual,

- <98-06> Fugong County Lishadi Hydropower Plant Project, Staff Training Plan, 10th May 2009.
- <98-07> Fugong County Lishadi Hydropower Plant Project, Electricity Transaction Notes from October 2006 to May 2009.

Appendix C

CERTIFICATES OF COMPETENCE

Qualification

Ma, Libo /

Emission Trading

United Nations Framework Convention on Climate Change

Auditor No.:

(AuditorenRegNr)

Appointed:
(Zugelassen)

☒ ja

Qualification Level: Auditor
(Qualifikationsstufe)

External:
(Externer)

☐ ja

Add. reviewer: ☐ yes
(Zusätzlicher Prüfer)

EAC Scopes:
(EAC Branchen)

CDM 01 – Energy industries (renewable – / non-renewable sources)

Add. qualification:
(zus. Qualifikation)

First Appointment: 2009-06-01
(Erstberufung)

Valid to: 2012-05-31
(Gültig bis)

Remarks:

Languages: Chinese
English

Experience Exchange

Date

Location

Remarks

Accredita

Monitoring

Latest Monitoring:
(letzte Beurteilung)

Next
Monitoring:
(nächste
Beurteilung)

Remarks:

[View / Edit Monitoring](#)

History of scope allocation

Date: 2009-06-02
Change: EAC CDM added
By: Manfred Brinkmann
Reason:

History

Created: 2008-03-20 15:44:05 Daxun Li/Bj/Chn/TUV
Modified: 2008-03-20 15:44:19 Daxun Li/Bj/Chn/TUV

Qualification

Zhu, Jiang /

Emission Trading United Nations Framework Convention on Climate Change

Auditor No.:
(AuditorenRegNr)

Appointed:
(Zugelassen)

☒ ja

Qualification Level:
(Qualifikationsstufe)

Auditor

External:
(Externer)

☐ ja

Add. reviewer:
(Zusätzlicher Prüfer)

☐ yes

EAC Scopes:
(EAC Branchen)

CDM 01 – Energy industries (renewable – / non-renewable sources)

Add. qualification:
(zus. Qualifikation)

First Appointment:
(Erstberufung)

2009/03/09

Valid to:
(Gültig bis)

2012/03/08

Remarks:

Languages:

Chinese
English

Experience Exchange

Date

Location

Remarks

Accreditation(s)

Monitoring

Latest Monitoring:
(letzte Beurteilung)

Next Monitoring:
(nächste Beurteilung)

Remarks:

[View / Edit Monitoring](#)

History of scope allocation

Date: 2009-03-08
Change: EAC CDM added
By: Manfred Brinkmann
Reason:

History

Created: 2008/03/20 14:56:52 Daxun Li/Bj/Chn/TUV
Modified: 2008/03/20 14:57:07 Daxun Li/Bj/Chn/TUV

Qualification

Brinkmann, Manfred /

Emission Trading

United Nations Framework Convention on Climate Change

Auditor No. :
(AuditorenRegNr)

Appointed:
(Zugelassen)

☒ ja

Qualification Level: Lead Auditor
(Qualifikationsstufe)

External:
(Externer)

☐ ja

Add. reviewer:
(Zusätzlicher Prüfer)

☒ yes

EAC Scopes:
(EAC Branchen)

CDM 03 - Energy demand
CDM 04 - Manufacturing industries
CDM 05 - Chemical industry
CDM 10 - Fugitive emissions from fuels (solid; oil and gas)
CDM 11 - Fugitive emissions from production and consumption
of halocarbons and sulphur hexafluoride
CDM 12 - Solvents use
CDM 01 - Energy industries (renewable - / non-renewable
sources)
CDM 06 - Construction
CDM 13 - Waste handling and disposal

Add. qualification:
(zus. Qualifikation)

First Appointment: 2004-03-03
(Erstberufung)

Valid to: 2013-03-02
(Gültig bis)

Remarks:

Languages: German
English
French

Experience Exchange

Date

Location

Remarks

Accredita

Monitoring

Latest Monitoring:
(letzte Beurteilung)

Next
Monitoring:
(nächste
Beurteilung)

Remarks:

History of scope allocation

Date: 2004-03-05
Change: EAC CDM, CDM added
By: Klaus-Dieter Fritsch
Reason:

Date: 2004-03-03
Change: EAC CDM, CDM, CDM, CDM, CDM, CDM added
By: Klaus-Dieter Fritsch
Reason: Qualification is based on the applicant's ISO 14001 auditor qualification.

History

Created: 2003-12-11 13:27:13 -
Modified: 2010-04-02 10:36:57 Manfred Brinkmann/Jpn/TUV