VERIFICATION AND CERTIFICATION REPORT

-GOLD STANDARD CER 1ST PERIODIC–

INNOVATIVE CARBON INVESTMENT CORPORATION

EVERBRIGHT SUQIAN & HUAINING BUNDLED SOLAR PV POWER GENERATION PROJECT

GOLD STANDARD REF. NO. : 1746

Monitoring Period: 2012-04-01 to 2013-03-31

(incl. both days)

Report No: QT-SHC03003/13 - 13/110

Date: 2013-09-13

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Verification Report:	***Report No.***		***Rev. No.***	***Date of 1st issue:***	***Date of this rev.***
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Project:	***Title:***			***GS Registration date:***	***GS-No.:***
	Everbright Suqian & Huaining Bundled Solar PV Power Generation Project			2013-08-26	1746
				UNFCCC-No.:	
				5913	
				Verification No.:	
				1st GS CER	
	GS Crediting period:			***From:***	***To:***
	☒ *Renewable (7y)* ☐ *Fixed (10y)*			2012-04-01	2019-03-31
	Project Scale:				
	☐ *Large Scale* ☒ *Small Scale*				
Project Participant(s):	***Client:***				
	Innovative Carbon Investment Corporation				
Applied methodology/ies:	***Title:***			***No.:***	***Scope(s) / TA(s)***
	Grid connected renewable electricity generation			AMS-I.D ver. 17.0	1 / 1.2
Monitoring period and monitoring report	***Pre-CDM Monitoring period (MP):***			***Monitoring Report:***	
	From:	***To:***	***No. of days:***	***Draft version:***	***Final version:***
	2012-04-01	2013-03-31	***365***	CMR 2013-08-30 SMR 2013-08-30	CMR 2013-08-30 SMR 2013-08-30
Verification team / Technical Review and Final Approval:	***Verification Team:***			***Technical review:***	***Final approval:***
	TL: Zhao Xuejiao TM: Yu Miao				
Key dates of verification:	***Publication of MR :***		***DVerR issued:***	***On-site (from):***	***On-site (to):***
	-		2013-09-08	2013-09-07	2013-09-07
Summary of Verification opinion	Innovative Carbon Investment Corporation has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Gold Standard CER 1st periodic verification of the project: "Everbright Suqian & Huaining Bundled Solar PV Power Generation Project", with regard to the relevant requirements for Gold Standard project activities. As a result of this verification, the verifier confirms that: ☒ all operations of the project are implemented and installed as planned and described in the GS registered project design document, ☒ the monitoring plan is in accordance with the applied approved CDM methodology, ☒ the installed equipment essential for measuring parameters required for calculating emission reductions are calibrated appropriately, ☒ the monitoring system is in place and functional. The project has generated GHG emission reductions, and ☒ the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. TÜV NORD JI/CDM CP herewith confirms that the project has achieved emission reductions in the above mentioned reporting period as listed below (verified amount).				
Emission reductions: [t CO_{2e}]	***Total verified amount***		***As per draft MR:***	***As per PDD:***	
	7,663 tCO_2e		7,663 tCO_2e	8,770 tCO_2e	
Document information:	*Filename:*			*No. of pages:*	
	2013-09-10 FVerR_GS CER 1st_Suqian&Huaining Bundled Solar.doc			94	

Abbreviations:

CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CMR	Carbon Monitoring Report
CO_2	Carbon dioxide
CO_{2eq}	Carbon dioxide equivalent
DVerR	Draft Verification Report
ECPG	East China Power Grid
EIA	Environmental Impact Assessment
EPB	Environmental Protection Bureau
ER	Emission Reduction
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	Greenhouse gas(es)
GS	Gold Standard
GSP	Gold Standard Passport
GS-TAC	Gold Standard Technical Advisory Committee
GSTK	Gold Standard Toolkit
IPCC	Intergovernmental Panel on Climate Change
LSC	Local Stakeholder Consultation
LSCR	Local Stakeholder Consultation Report
MDG	Millennium Development Goals
MP	Monitoring Plan
MR	Monitoring Report
NDRC	National Development and Reform Commission of the People's Republic of
NGO	Non Government Organisation
PA	Project Activity
PDD	Project Design Document

PP	Project Participant
QA/QC	Quality Assurance / Quality Control
SD	Sustainable Development
SFR	Stakeholder Feedback Round
SMR	Sustainability Monitoring Report
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard
XLS	Emission Reduction Calculation Spread Sheet

Table of Contents *Page*

1. INTRODUCTION 7
1.1. Objective 7
1.2. Scope 7

2. GHG PROJECT DESCRIPTION 9
2.1. Technical Project Description 9
2.2. Project Location 11
2.3. Project Verification History 11

3. METHODOLOGY AND VERIFICATION SEQUENCE 13
3.1. Verification Steps 13
3.2. Contract review 13
3.3. Appointment of team members and technical reviewers 13
3.4. Verification Planning 14
3.5. Desk review 16
3.6. On-site assessment 17
3.7. Draft verification reporting 18
3.8. Resolution of CARs, CLs and FARs 18
3.9. Final reporting 19
3.10. Technical review 19
3.11. Final approval 19

4. VERIFICATION FINDINGS 20

5. SUMMARY OF VERIFICATION ASSESSMENTS 21
5.1. Involved Parties and Project Participants 21
5.2. Implementation of the project 21
5.3. Project history 24
5.4. Post registration changes 25
5.5. Compliance with the monitoring plan 25
5.6. Compliance with the monitoring methodology 25
5.7. Monitoring parameters 25
5.8. Monitoring report 28
5.9. Sampling 28
5.9.1. Implementation of the sampling plan 28
5.9.2. Sampling approaches during verification 29
5.10. ER Calculation 29

5.11. Quality Management 31
5.12. Actual emission reductions during the first commitment period and the period from 1 January 2013 onwards 32
5.13. Comparison with ex-ante estimated emission reductions 32
5.14. Overall Aspects of the Verification 33
5.15. Hints for next periodic Verification 33

6. VERIFICATION AND CERTIFICATION STATEMENT 34

7. REFERENCES 35

ANNEX 1: VERIFICATION PROTOCOL 43

ANNEX 2: STATEMENTS OF COMPETENCE OF INVOLVED PERSONNEL 94

1. INTRODUCTION

Innovative Carbon Investment Corporation has commissioned the TÜV NORD JI/CDM Certification Program (CP) to carry out the GS CER 1st periodic verification of the project

"Everbright Suqian & Huaining Bundled Solar PV Power Generation Project"

with regard to the relevant requirements for Gold Standard project activities. The verifiers have reviewed the implementation of the monitoring plan (MP) in the registered Gold Standard project.

GHG data for the monitoring period was verified in detailed manner applying the set of requirements, audit practices and principles as required under the Gold Standard Requirements version 2.2, the Gold Standard Toolkit version 2.2 and respective Annexes, Validation and Verification Standard /VVS/ of the UNFCCC.

This report summarizes the findings and conclusions of this GS CER 1st periodic verification of the above mentioned Gold Standard registered project activity.

1.1. Objective

The objective of the verification is the review and ex-post determination by an independent entity of the GHG emission reductions. It includes the verification of the:

- implementation and operation of the project activity as given in the PDD,
- compliance with applied approved methodology and the provisions of the monitoring plan,
- data given in the monitoring report by checking the monitoring records, the emissions reduction calculation and supporting evidence,
- accuracy of the monitoring equipment,
- quality of evidence,
- significance of reporting risks and risks of material misstatements.

1.2. Scope

The verification of this registered project is based on the validated GS project design document /PDD/, the monitoring report /MR/, emission reduction calculation spread sheet /XLS/, supporting documents made available to the verifier and information collected through performing interviews and during the on-site assessment. Furthermore publicly available information was considered as far as available and required.

The verification is carried out on the basis of the following requirements, applicable for this project activity:

- Article 12 of the Kyoto Protocol /KP/,

- guidelines for the implementation of Article 12 of the Kyoto Protocol as presented in the Marrakech Accords under decision 3/CMP.1 /MA/, and subsequent decisions made by the Executive Board and COP/MOP,
- other relevant rules, including the host country legislation,
- CDM Validation and Verification Standard /VVS/,
- monitoring plan as given in the registered PDD /PDD/,
- Approved CDM Methodology,
- Gold Standard Requirements version 2.2/GSR/,
- Gold Standard Toolkit version 2.2/GSTK/.

2. GHG PROJECT DESCRIPTION

2.1. Technical Project Description

The project is a renewable solar PV electricity generation project activity that will displace electricity generation in the East China Power Grid (ECPG), displacing fossil fuel dominated electricity generation and thus resulting in greenhouse gases emission reductions.

The project is a grid connected solar photovoltaic (PV) project with a total installed capacity of 10.28MW (1.85MW+2MW+6.43MW).

The bundled project includes 3 small-scale PV power generation projects as follows:

Jiangsu Suqian Phase I Project has an installed capacity of 1.85MW. 1,968MWh electricity per year is estimated to be delivered to East China Power Grid (ECPG). The project is built on the roof of Shuanggou and Yanghe Distillery, Suqian city, Jiangsu province, P.R.China.

Jiangsu Suqian Phase II Project has an installed capacity of 6.43MW. 6,986MWh electricity per year is estimated to be delivered to East China Power Grid (ECPG). The project is built on the roof of Yanghe Distillery, Suqian city, Jiangsu province, P.R.China.

Anhui Huaining Project has an installed capacity of 2MW. 2,141MWh electricity per year is estimated to be delivered to East China Power Grid (ECPG). The project is located in Anqing city, Anhui province, P.R.China.

The key parameters of the project are given in Table 2-1:

Table 2-1: Technical data of the project activity

Suqian phase I project

Parameter	Unit	Value
Solar Cells		
Type	-	TW 230 (28) P
Material	-	Polycrystalline Silicon
Peak power	Wp	230
Power Tolerance Range	%	±3
Open Circuit Voltage (Voc)	V	36.7
Rated Power Voltage (Vmp)	V	29.7
Short Circuit Current (Isc)	A	8.72
Rated Power Current (Imp)	A	7.74
Number of module	Pieces	8,080
Supplier	-	Tianwei New Energy(Chengdu) PV Module Co., Ltd
Inverter		
Type	-	Sunway TG 750-800V-TE
Unit	-	3

Parameter	Unit	Value
Rated Capacity	kW	665.1
Rated Output voltage	V	320
Maximum Efficiency	%	98.5
Supplier	-	Carraro China Drive Systems Co. Ltd.

Suqian phase II project

Parameter	Unit	Value
Solar Cells		
Type	-	TW 240 (28) P
Material	-	Polycrystalline Silicon
Peak power	Wp	240
Power Tolerance Range	%	±3
Open Circuit Voltage (Voc)	V	37.1
Rated Power Voltage (Vmp)	V	30.3
Short Circuit Current (Isc)	A	8.88
Rated Power Current (Imp)	A	7.92
Number of module	Pieces	26,800
Supplier	-	Tianwei Solution (Beijing) Co., Ltd.
Inverter I		
Type	-	Sunway TG 750-900V-TE
Unit	-	8
Rated Capacity	kW	665.1
Rated Output voltage	V	320
Maximum Efficiency	%	98.5
Supplier	-	Carraro China Drive Systems Co. Ltd.
Inverter II		
Type	-	Solar Ocean 500 TL
Unit	-	2
Rated Capacity	kW	500
Rated Output voltage	V	270
Maximum Efficiency	%	98.6
Supplier	-	Samil New energy Co., Ltd

Huaining project

Parameter	Unit	Value
Solar Cells		
Type	-	TWSF-aSi- 95W-1
Material	-	Amorphous Silicon Film
Power Output	Wp	93.01~98.00
Open Circuit Voltage (Voc)	V	134.58~142.23
Rated Power Voltage (Vmpp)	V	102~113.08

Parameter	Unit	Value
Short Circuit Current (Isc)	A	1.11~1.34
Rated Power Current (Impp)	A	0.93~1.17
Dimension	mm	1,300*1,100*6.8
Number of module	Pieces	21,030
Supplier	-	Baoding Tianwei Solarfilms Co., Ltd.
Inverter		
Type	-	Sunway TG610-800V-TE
Unit	-	4
Rated Capacity	kW	514.6
Rated Output voltage	V	270
Maximum Efficiency	%	98.5
Supplier	-	Carraro China Drive Systems Co., Ltd.

2.2. Project Location

The details of the project location are given in Table 2-1:

Table 2-1: Project Location

No.	Project Location
Host Country	People's Republic of China
Region:	Jiangsu and Anhui Province
Project location address:	Suqian City and Anqing City

Suqian Phase I Project	
Latitude:	32°09'58"~32°10'05"N (Sihong County) 33°13'36"~33°13'45"N (Yanghe Town)
Longitude:	119°29'47"~119°30'18" (Sihong County) 118°11'25"~118°11'53"E (Yanghe Town)

Suqian Phase II Project	
Latitude:	33°47'9"~33°47'30"N
Longitude:	118°21'37" ~118°26'2"E

Huaining Project	
Latitude:	30°46'14" ~30°46'39" N
Longitude:	116°47'46"~116°48'20"E

2.3. Project Verification History

Essential events since the registration of the project are presented in the following Table 2-2.

Table 2-2: Status of previous Monitoring Periods

#	Item	Time	Status
1	Date of CDM registration	2012-03-19	-
2	Date of GS registration	2013-08-26	
3	Start of GS crediting period	2012-04-01	-
4	1st periodic GS CER verification	2012-04-01 to 2013-03-31	On-going

An overview of all Post Registration Changes is given in the following table.

Table 2-3: Overview Post Registration Changes

#	Applicable from – to / as of	MP	Type of post registration change [1)]	Description	Status[2)] / Date
1	N/A	-	TDfrMP	N/A	N/A
2	N/A	-	TDfMM	N/A	N/A
3	N/A	-	CrPDD	N/A	N/A
4	N/A	-	PCfrMP	N/A	N/A
5	N/A	-	PCfMM	N/A	N/A
6	N/A	-	CoPD	N/A	N/A

1) TDfrMP : Temporary deviation from registered monitoring plan
TDfMM : Temporary deviation from the monitoring methodology
CrPDD : Corrections to the registered PDD
PCfrMP : Permanent changes from registered Monitoring Plan
PCfMM : Permanent changes from Monitoring Methodology
CoPD : Changes to the project design of a registered project activity

2) Approval (by EB) or Acceptance (by DOE)

3. METHODOLOGY AND VERIFICATION SEQUENCE

3.1. Verification Steps

The verification consisted of the following steps:

- Contract review
- Appointment of team members and technical reviewers
- A desk review of the Monitoring Report/MR/ submitted by the client and additional supporting documents with the use of customised verification protocol/CPM/ according to the Gold Standard Requirements version 2.2, the Gold Standard Toolkit version 2.2 and respective Annexes, Validation and Verification Standard/VVS/,
- Verification Planning,
- Publication of Verification Workplan,
- On-Site assessment,
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Draft verification reporting
- Resolution of corrective actions (if any)
- Final verification reporting
- Technical review
- Final approval of the verification.

3.2. Contract review

To assure that

- the project falls within the scopes for which accreditation is held,
- the necessary competences to carry out the verification can be provided,
- Impartiality issues are clear and in line with the GS accreditation requirements

a contract review was carried out before the contract was signed.

3.3. Appointment of team members and technical reviewers

On the basis of a competence analysis and individual availabilities a verification team, consisting of one team leader was appointed.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the Table 3-1 below.

Table 3-1: Involved Personnel

	Name	Company	Function [1]	Qualification Status [2]	Scheme competence [3]	Technical competence [4]	Verification competence [5]	Host country Competence	On-site visit
☐ Mr. ☒ Ms.	Zhao Xuejiao	TÜV NORD China	TL	LA	☒	1.2	☒	☒	☒
☐ Mr. ☒ Ms.	Yu Miao	TÜV NORD China	TM	LA	☒	1.2	☒	☒	☐
☒ Mr. ☐ Ms.	Dr. Jochen Schubert	TÜV NORD Cert GmbH	TR/ FA[B]	SA	☒	1.2	☒	☐	-

1) TL: Team Leader; TM: Team Member, TR: Technical review; OT: Observer-Team, OR: Observer-TR; FA: Final approval
2) GHG Auditor Status: A: Assessor; LA: Lead Assessor; SA: Senior Assessor; T: Trainee; TE: Technical Expert
3) GHG auditor status (at least Assessor)
4) As per S01-MU03 or S01-VA070-A2 (such as 1.1, 1.2, …)
5) In case of verification projects

A) Team Member: GHG auditor (at least Assessor status), Technical Expert (incl. Host Country Expert or Verification Expert), not ETE
B) No team member

Team Leader Zhao Xuejiao contributed to the review of documents, the assessment of the project activity and to the preparation of this report.

Team Leader and team member contributed to the assessment of special aspects of the project activity, e.g. technical or host country aspects.

Statements of competence for the above mentioned involved personnel are enclosed in annex 2 of this report.

3.4. Verification Planning

In order to ensure a complete, transparent and timely execution of the verification task the team leader has planned the complete sequence of events necessary to arrive at a substantiated final verification opinion.

Various tools have been established in order to ensure an effective verification planning.

Risk analysis and detailed audit testing planning

For the identification of potential reporting risks and the necessary detailed audit testing procedures for residual risk areas table A-1 is used. The structure and content of this table is given in Table 3-2 below.

Table 3-2: Table A-1; Identification of verification risk areas

Table A-1: GHG calculation procedures and management control testing / Detailed audit testing of residual risk areas and random testing				
Identification of potential reporting risk	**Identification, assessment and testing of management controls**	**Areas of residual risks**	**Additional verification testing performed**	**Conclusions and Areas Requiring Improvement (including *Forward Action Requests*)**
The following potential risks were identified and divided and structured according to the possible areas of occurance.	*The potential risks of raw data generation have been identified in the course of the monitoring system implementation.* *The following measures were taken in order to minimize the corresponding risks.* *The following measures are implemented:*	*Despite the measures implemented in order to reduce the occurrence probability the following residual risks remain and have to be addressed in the course of every verification.*	*The additional verification testing performed is described. Testing may include:* - *Sample cross checking of manual transfers of data* - *Recalculation* - *Spreadsheet 'walk throughs' to check links and equations* - *Inspection of calibration and maintenance records for key equipment* - *Check sampling analysis results* *Discussions with process engineers who have detailed knowledge of process uncertainty/error bands.*	*Having investigated the residual risks, the conclusions should be noted here. Errors and uncertainties are highlighted.*

The completed table A-1 is enclosed in Annex 1 (table A-1) to this report.

Project specific periodic verification checklist

In order to ensure transparency and consideration of all relevant assessment criteria, a project specific verification protocol has been developed. The protocol shows, in a transparent manner, criteria and requirements, means and results of the verification. The verification protocol serves the following purposes:

- It organises, details and clarifies the requirements a GS project is expected to meet for verification
- It ensures a transparent verification process where the verifying DOE documents how a particular requirement has been proved and the result of the verification.

The basic structure of this project specific verification protocol for the periodic verification is described in Table 3-3.

Table 3-3: Table A-2; Structure of the project specific periodic verification checklist

Table A-2: Periodic verification checklist				
Checklist Item	***Reference***	***Verification Team Comments***	***Draft Conclusion***	***Final Conclusion***
The checklist items in Table A-2 are linked to the various requirements the monitoring of the project should meet. The checklist is organised in various sections as per the requirements of the topic and the individual project activity. It further includes guidance for the verification team.	*Gives reference to the information source on which the assessment is based on.*	*The section is used to elaborate and discuss the checklist item in detail. It includes the assessment of the verification team and how the assessment was carried out. The reporting requirements of the VVS shall be covered in this section.*	*Assessment based on evidence provided if the criterion is fulfilled (OK), or a CAR, CL or FAR (see below) is raised. The assessment refers to the draft verification stage.*	*In case of a corrective action or a clarification the final assessment at the final verification stage is given.*

The periodic verification checklist (verification protocol) is the backbone of the complete verification starting from the desk review until final assessment. Detailed assessments and findings are discussed within this checklist and not necessarily repeated in the main text of this report.

The completed verification protocol is enclosed in Annex 1 (table A-2) to this report.

3.5. Desk review

During the desk review all documents initially provided by the client and publicly available documents relevant for the verification were reviewed. The main documents are listed below:

- the last revision of the GS Passport and GS PDD including the monitoring plan/GSP/&/PDD/,
- the last revision of the GS validation report/VAL/,
- the monitoring report, including the claimed emission reductions for the project/MR/,
- the emission reduction calculation spreadsheet/XLS/.

Other supporting documents, such as publicly available information on the UNFCCC website and GS website, and background information were also reviewed.

3.6. On-site assessment

As most essential part of the verification exercise it is indispensable to carry out an inspection on site in order to verify that the project is implemented in accordance with the applicable criteria. Furthermore the on-site assessment is necessary to check the monitoring data with respect to accuracy to ensure the calculation of emission reductions. The main tasks covered during the site visit include, but are not limited to:

- The on-site assessment included an investigation of whether all relevant equipment is installed and works as anticipated.
- The operating staff was interviewed and observed in order to check the risks of inappropriate operation and data collection procedures.
- Information processes for generating, aggregating and reporting the selected monitored parameters were reviewed.
- The duly calibration of all metering equipment was checked.
- The monitoring processes, routines and documentations were audited to check their proper application.
- The monitoring data were checked completely.
- The data aggregation trails were checked via spot sample down to the level of the meter recordings.

Before and during the on-site visit the verification team performed interviews with the project participants to confirm selected information and to resolve issues identified in the document review.

Representatives of Everbright Photovoltaic Energy (Suqian) Limited (Project owner) and Innovative Carbon Investment Corporation (project buyer) including the operational staff of the plant were interviewed. The main topics of the interviews are summarised in Table 3-4.

Table 3-4: Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
1. Projects & Operations Personnel: Everbright Photovoltaic Energy (Suqian) Limited /IM01/ 2. Project buyer: Innovative Carbon Investment Corporation/IM02/	- General aspects of the project - Technical equipment and operation - Changes since validation / previous verification - Monitoring and measurement equipment - Remaining issues from validation/ previous verification - Calibration procedures - Quality management system - Involved personnel and responsibilities - Training and practice of the operational personnel - Implementation of the monitoring plan - Monitoring data management

Interviewed Persons / Entities	Interview topics
	- Data uncertainty and residual risks - GHG emission reduction calculation - Procedural aspects of the verification - Maintenance - Environmental aspects - Sustainable development issues

The list of interviewees is included in chapter 7.4.

3.7. Draft verification reporting

On the basis of the desk review, the on-site visit, follow-up interviews and further background investigation the verification protocol is completed. This protocol together with a general project and procedural description of the verification and a detailed list of the verification findings form the draft verification report. This report is sent to the client for resolution of raised CARs, CLs and FARs.

3.8. Resolution of CARs, CLs and FARs

Nonconformities raised during the verification can either be seen as a non-fulfilment of criteria ensuring the proper implementation of a project or where a risk to deliver high quality emission reductions is identified.

Corrective Action Requests (CARs) are issued, if:

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

The verification team uses the term Clarification Request (CL), which is be issued if:

- information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

Forward Action Requests (FAR) indicate essential risks for further periodic verifications. Forward Action Requests are issued, if:

- the monitoring and reporting require attention and / or adjustment for the next verification period.

For a detailed list of all CARs, CLs and FARs raised in the course of the verification pl. refer to chapter 4.

3.9. Final reporting

Upon successful closure of all raised CARs and CLs the final verification report including a positive verification opinion can be issued. In case not all essential issues could finally be resolved, a final report including a negative verification opinion is issued.

The final report summarizes the final assessments w.r.t. all applicable criteria.

3.10. Technical review

Before submission of the final verification report a technical review of the whole verification procedure is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the verification team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the verification opinion and the topic specific assessments as prepared by the verification team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

3.11. Final approval

After successful technical review an overall (esp. procedural) assessment of the complete verification will be carried out by a senior assessor located in the accredited premises of TÜV NORD.

After this step the request for issuance can be started.

4. VERIFICATION FINDINGS

In the following paragraphs the findings from the desk review of the monitoring report/MR/, the calculation spreadsheet/XLS/, PDD/PDD/, the Validation Report/VAL/ and other supporting documents, as well as from the on-site assessment and the interviews are summarised.

The summary of CAR, CL and FAR issued are shown in Table 4-1:

Table 4-1: Summary of CAR, CL and FAR

Verification topic	No. of CAR	No. of CL	No. of FAR
A – Description of project activity	0	0	0
B – Implementation of project activity	0	0	0
C – Description of monitoring system	0	0	0
D – Data and parameters	0	0	0
E - Calculation of Emission Reductions	0	0	0
SUM	**0**	**0**	**0**

No CARs, CLs and FARs were raised.

5. SUMMARY OF VERIFICATION ASSESSMENTS

The following paragraphs include the summary of the final verification assessments after all CARs and CRs are closed out. For details of the assessments pl. refer to the discussion of the verification findings in chapter 4 and the verification protocol (Annex 1).

5.1. Involved Parties and Project Participants

The following project participants are involved in this project activity.

Table 5-1: Project Parties and project participants

Party	Project Participant
P. R. China	Everbright Photovoltaic Energy (Suqian) Limited
United Kingdom of Great Britain and Northern Ireland	Innovative Carbon Investment Corporation

5.2. Implementation of the project

During the verification a site visit was carried out. On the basis of this site visit and the reviewed project documentation it can be confirmed that w.r.t. the realized technology, the project equipments, as well as the monitoring and metering equipment, the project has been implemented and operated as described in the registered PDD/PDD/.

The project utilizes solar power to generate electricity by installing PV modules and inverters. The generated power is measured by meters. The project exports the generated electricity to the Anhui and Jiangsu Power Grid, which is a part of East China Power Grid (ECPG). The recorded generation data/LOG/, meter readings/MRD/, meter calibration certificates/CAL/, monthly electricity sale invoices and power balance sheet/EBS/, and plant operation records/O&M/ were verified by the verification team during the on-site visit.

Jiangsu Suqian Phase I Project started construction in November 2010 and was commissioned on 2010-12-06/PPA/. Jiangsu Suqian Phase II Project started construction in October 2011 and was commissioned on 2011-11-22/PPA/. Anhui Huaining Project started construction in November 2010 and was commissioned on 2011-06-22/PPA/. The operation dates have been indicated in the MR and are assessed as reliable by the verification team/LOG/&/NAEP/.

Jiangsu Suqian Phase I Project

Jiangsu Suqian Phase I project includes two parts. One part is installed on the roof of Shuanggou Distillery and the other part is installed on the roof of Yanghe Distillery.

For the metering purpose two bidirectional sealed meters are installed. Main meter M1 is installed at the gate way of the project site in Yanghe Distillery and Main meter M3 is installed at the gate way of the project site in Shuanggou Distillery. In addition, back-up meters M1' and M3' are installed at the same place of meter M1 of M3. Meters M1 (new one) and M1' have an accuracy of 0.5s, M3 and M3' have an accuracy of 0.2s. Original meter M1, accuracy 0.2S, was exchanged by a new one during this monitoring period /RCM/, due to an unified management request by the grid company/RCM/. Although the new meter has the accuracy of 0.5s which is not same with the original one (0.2S)/CAL/, it still fulfils the requirements of the PDD. Furthermore, it is confirmed that there is no negative impact on the emission reduction calculation. Also the monitoring system is still in line with the methodology and the registered PDD.

Main meter M1 and M3 serve as invoice meter for electricity imports and exports. The meter readings are reported at 24:00 h on the last day of each month during this monitoring period as the requirements of the Grid Company/PPA/.

The unidirectional meters M2 and M4 with accuracy of 0.5s are installed at the back up line of the project site of Yanghe Distillery and Shuanggou Distillery separately. M2 and M4 are served as invoice meter for electricity imports. The meters are used to additionally measure the electricity imports from the grid when the project is not in operation.

Suqian Phase II Project

For the metering purpose one bidirectional sealed meter, Main meter M5, is installed at the gate way of the project site. In addition back-up meter M5' is installed at the same place of meter M5. Both meters M5 and M5' have an accuracy of 0.2s.

Main meter M5 serves as invoice meter for electricity imports and exports. The meter readings are reported at 24:00 h on the last day of each month as per requirements of the Grid Company/PPA/.

The unidirectional meter M6 with accuracy of 1.0 is installed at the back up line of the project site. M6 serves as invoice meter for electricity imports. The meter is used to additionally measure the electricity imports from the grid when the project is not operated.

Huaining Project

For the metering purpose one bidirectional sealed meter, Main meter M7, is installed at the gate way of the project site. In addition back-up meter M7' is installed at the same place of meter M7. Both meters M7 and M7' have an accuracy of 0.2s.

Main meter M7 serves as invoice meter for electricity imports and exports. The meter readings are reported at 24:00 h on the last day of each month as per requirements of the Grid Company/PPA/.

The unidirectional meter M8 with accuracy of 1.0 is installed at the back up line of the project site. M8 serves as invoice meter for electricity imports. The meter is used to additionally measure the electricity imports from the grid when the project is not operated.

Summary

All required equipments and procedures are available and implemented in an appropriate manner.

All necessary monitoring instruments are installed. The measuring devices are well known and state-of-the-art. All required instruments including stand by and operating procedures for the same have been implemented in an appropriate manner.

All the meters above mentioned of the project are duly calibrated by a qualified third party institute /CAL/&/CMA/.

Neither mistakes nor malfunction of main meters and back-up meters have been observed during this monitoring period. The DOE has checked all related calibration certificates and can confirm that the calibration of each meter is valid for the entire 1st monitoring period/CAL/.

Please refer to table 5-2 for detailed meter information

Table 5-2: Meters information

	Main meter M1 (new)	Main meter M1 (original)	Back-up meter M1'	M2
Type	DTZ719	ZMD402CT44.0457	ZMD405CR44.0007	DTSD341
Serial No.	0300763007	95411219	96336841	1011048976000002
Manufacturer	Shenzhen Kelu Electronic Technology Co., Ltd.	Landis+Gyr	Landis+Gyr	Wasion Group
Accuracy	0.5s	0.2s	0.5s	0.5S
Calibration date	2012-10-16	2012-03-20	2012-03-20 2013-03-18	2012-03-20 2013-03-18
Validity	2013-10-15	2013-03-19	2014-03-17	2014-03-17

	Main meter M3	Back-up meter M3'	M4
Type	ZMD402CT44.0457	ZMD402CT44.0457	DTSD341
Serial No.	97551690	96213047	1011048976000001
Manufacturer	Landis+Gyr	Landis+Gyr	Wasion Group
Accuracy	0.2S	0.2S	0.5S
Calibration date	2012-03-20 2013-03-18	2012-03-20 2013-03-18	2012-03-20 2013-03-18
Validity	2014-03-17	2014-03-17	2014-03-17

	Main meter M5	Back-up meter M5'	M6
Type	DTZ876	DTZ876	DTZY532-A

Serial No.	1400341751	1400341777	1400205838
Manufacturer	Shenzhen Hangtian Tairuijie Electronic Co., Ltd.	Shenzhen Hangtian Tairuijie Electronic Co., Ltd.	Hangzhou Baifu Electronic Technology Co., Ltd.
Accuracy	0.2S	0.2S	1.0
Calibration date	2012-03-20 2013-03-18	2012-03-20 2013-03-18	2011-09-22 2012-09-20
Validity	2014-03-17	2014-03-17	2013-09-19

	Main meter M7	**Back-up meter M7'**	**M8**
Type	AINRTAL/3×100V、3×1(10)A	AINRTAL/3×100V、3×1(10)A	DTSD341
Serial No.	02081993	02082012	1012050835000020
Manufacturer	ELSTER	ELSTER	Wasion Group
Accuracy	0.2S	0.2S	1.0
Calibration date	2012-01-27 2013-01-14	2012-01-27 2013-01-14	2011-10-21 2012-10-19
Validity	2014-01-13	2014-01-13	2013-10-18

The calibration reports/CAL/ have been checked by the verification team. It is confirmed that there were no errors in the measuring equipments.

The power purchase agreement/PPA/ clearly states that the payments shall be made through the Main meter M1, M3, M5, M7 readings. In the event of Meter M1, M3, M5, M7 failure, the recording shall be done based on Back-up meter M1', M3', M5', M7'. M1, M3, M5, M7 and M1', M3', M5', M7' record the power supplied to and from the grid for the project. Meter M2, M4, M6, M8 recorded the power supplied from the grid to the project through the backup line.

The submitted monitoring report which forms the basis of verification was prepared by summarizing monthly data and daily data from 2012-04-01 to 2013-03-31/EBS/ for the whole monitoring period in accordance with the monitoring plan of the PDD.

Through interviews with operation personnel/IM01/, checking the operation log/LOG/ and maintenance records/O&M/, the verification team can confirm that no significant incident, deviant operation modes and/or downtimes of the equipments occurred.

5.3. Project history

The project was registered as CDM project on 2012-03-19 and registered as GS project on 2013-08-26. According to Para V.a.2.3 of Gold Standard Requirements Version 2.2, "Project activities proceeding under the retroactive project cycle, may be eligible for retroactive crediting for realized emission reductions prior to Gold Standard registration of a maximum period of two years", the project is a retroactive

project, hence, the PP choose the start of The Gold Standard crediting period as 2012-04-01.

This is the GS CER 1st periodic verification. During the GS validation the validating DOE did not raise issues that could not be closed or resolved during the validation stage/VAL/.

5.4. Post registration changes

No post registration changes applicable for this monitoring period have been observed during the monitoring period.

5.5. Compliance with the monitoring plan

The monitoring system and all applied procedures are completely in compliance to the registered monitoring plan/PDD/.

5.6. Compliance with the monitoring methodology

The monitoring system is in compliance with the applied monitoring methodology (AMS-I.D version 17.0).

5.7. Monitoring parameters

During the verification all relevant monitoring parameters (as listed in chapter 7.1 of the PDD and Section G of the passport) have been verified with regard to the appropriateness of the applied measurement / determination method, the correctness of the values applied for ER calculation, the accuracy, and applied QA/QC measures. The results as well as the verification procedure are described parameter-wise in the project specific verification checklist.

Parameters for Emission Reduction

The monitoring parameters are:

Quantity of net electricity supplied to the Grid by Suqian Phase I Project	$EG_{facility,y,Suqian\ phase\ I}$
Electricity supplied to the grid by Suqian Phase I Project	$EG_{ex,y,Suqian\ phase\ I}$
Electricity consumed by Suqian Phase I Project importing from the grid	$EG_{in,y,Suqian\ phase\ I}$
Quantity of net electricity supplied to the Grid by Suqian Phase II Project	$EG_{facility,y,Suqian\ phase\ II}$
Electricity supplied to the grid by Suqian Phase II Project	$EG_{ex,y,Suqian\ phase\ II}$
Electricity consumed by Suqian Phase II Project importing from	$EG_{in,y,Suqian\ phase\ II}$

the grid

Quantity of net electricity supplied to the Grid by Huaining Project $EG_{facility,y,Huaining}$

Electricity supplied to the grid by Huaining Project $EG_{ex,y,Huaining}$

Electricity consumed by Huaining Project importing from the grid $EG_{in,y,Huaining}$

It can be confirmed that all monitoring parameters have been measured / determined without material misstatements and in line with all applicable standards and relevant requirements.

SD Indicators

According to the requirements of the Gold Standard vesrion 2.2 and the registered GS passport, during the monitoring period, there are 6, 6 and 7 sustainable development indicators for the Suqian phase I project, Suqian phase II project and Huaining Project respectively.

1. Quality of employment (Suqian phase I project & phase II project & Huaining Project)

The operation and maintenance regulations have been established and the trainings have been conducted including knowledge about CDM, the operation of project equipments/computer operations, emergency and safety procedures.
The regulations and training records have been checked/O&M/&/TCR/. The parameter has been monitored in line with the Gold Standard version 2.2 and the registered GS passport.

2. Access to affordable and clean energy services(Suqian phase I project & phase II project & Huaining Project)

The annual net electricity supplied to the grid by the Suqian Phase I Project & phase II project & Huaining Project has been recorded through meters readings at 24:00 of the last day every month. The monthly meter reading records have been checked/EBS/&/MRD/. The parameter has been monitored in line with the Gold Standard version 2.2 and the registered GS passport.

3. Quantitative employment and income generation(Suqian phase I project & phase II project & Huaining Project)

Suqian Phase I & Phase II Project: 16 full time job positions were employed by the projects company for the operation and maintennance of the two projects. During this monitoring period, by means of check the record of salary payment and Labor contract/RSP/, it is confirmed that the annual average salary is 66,000 RMB/person. The salary is above the Jiangsu Province average salary level for towner of 45,487 RMB/year/person /jasl/.

Huaining Project: 5 full time job positions were employed by the project company for the operation and maintennance of the project. During this monitoring period, by means of check the record of salary payment and Labor contract/RSP/, it is confirmed that the annual average salary is 60,000 RMB/person. The salary is above the Anhui Province average salary level for towner of 39,352 RMB/year/person/asl/.

The operation staffs have been interviewed/IM01/. The organization chart is also checked by DOE/BL/. The parameter has been monitored in line with the Gold Standard version 2.2 and the registered GS passport.

4. Air quality(Suqian phase I project & phase II project & Huaining Project)

The mitigation measures including wet damping and sprinkler are applied to control the dust emission during the construction have been checked and examined by the local Environmental Protection Bureau.

The validation team has checked the Examination and Acceptance of Environmental Protection for the Suqian Phase I Project issued by the Suqian City Environmental Protection Bureau on 2011-05-09/EAEP/, Examination and Acceptance of Environmental Protection for the Suqian Phase II Project issued by the Suqian City Environmental Protection Bureau on 2012-05-07/EAEP/ and Examination and Acceptance of Environmental Protection for the Huaining Project issued by the Anhui Province Environmental Protection Bureau on 2011-11-29/EAEP/.

The parameter has been monitored in line with the Gold Standard version 2.2 and the registered GS passport.

5. Water quality and quantity(Suqian phase I project & phase II project & Huaining Project)

The mitigation measure i.e. washing wastewater is treated in waste water management system before discharged has been checked and examined by the local Environmental Protection Bureau.

The validation team has checked the Examination and Acceptance of Environmental Protection for the Suqian Phase I Project issued by the Suqian City Environmental Protection Bureau on 2011-05-09/EAEP/, Examination and Acceptance of Environmental Protection for the Suqian Phase II Project issued by the Suqian City Environmental Protection Bureau on 2012-05-07/EAEP/ and Examination and Acceptance of Environmental Protection for the Huaining Project issued by the Anhui Province Environmental Protection Bureau on 2011-11-29/EAEP/.

The parameter has been monitored in line with the Gold Standard version 2.2 and the registered GS passport.

6. Other pollutants(Suqian phase I project & phase II project & Huaining Project)

The mitigation measures (i.e. construction operations and movement of traffic are restricted to daylight hours to avoid any discomfort for the nearby resident, and use equipment with low noise emissions during the construction) have been checked and examined by the local Environmental Protection Bureau.

The validation team has checked the Examination and Acceptance of Environmental Protection for the Suqian Phase I Project issued by the Suqian City Environmental Protection Bureau on 2011-05-09/EAEP/, Examination and Acceptance of Environmental Protection for the Suqian Phase II Project issued by the Suqian City Environmental Protection Bureau on 2012-05-07/EAEP/ and Examination and Acceptance of Environmental Protection for the Huaining Project issued by the Anhui Province Environmental Protection Bureau on 2011-11-29/EAEP/.

The parameter has been monitored in line with the Gold Standard version 2.2 and the registered GS passport.

7. Soil condition(Huaining project)

The mitigation measure i.e. replantation in the affected places is conducted after the completion of the construction work has been checked and examined by the Anhui Province Environmental Protection Bureau.

The validation team has checked the Examination and Acceptance of Environmental Protection for the Huaining Project issued by the Anhui Province Environmental Protection Bureau on 2011-11-29/EAEP/. The parameter has been monitored in line with the Gold Standard version 2.2 and the registered GS passport.

5.8. Monitoring report

A draft monitoring report was submitted to the verification team by the project participants. The team has made this report publicly available prior to the start of the verification activities. No comments were received.

During the verification, mistakes and needs for clarification were identified. The PP has carried out the requested corrections so that it can be confirmed that the Monitoring report is complete and transparent and in accordance with the registered PDD and other relevant requirements.

5.9. Sampling

5.9.1. Implementation of the sampling plan

No sampling was required to determine the monitored parameters.

5.9.2. Sampling approaches during verification

No sampling approaches were taken during the verification.

5.10. ER Calculation

The ER calculation spreadsheet had been provided by PP and has been verified by verification team as reproducible, thus it is confirmed that the ER calculation is overall correct.

The GHG emission reduction is calculated as baseline emission minus project emission and leakage emission.

For the calculation of baseline emissions the ex-ante determined value of baseline parameters, i.e., ECPG Emission Factor is taken into account which is a validated value.

Baseline Emissions:

The formula used for the determination of baseline emissions is consistent with the PDD:

$$BE_y = EG_{BL,y} \times EF_{CO2,grid,y}$$

$$= \left(EG_{facility,y,\text{Suqian phase I}} + EG_{facility,y,\text{Suqian phase II}} + EG_{facility,y,\text{Huaining}} \right) \times EF_{CO2,grid,y}$$

$$= \left(\left(\mathrm{EG}_{\text{ex,y,Suqian phase I}} - \mathrm{EG}_{\text{in,y,Suqian phase I}} \right) + \left(\mathrm{EG}_{\text{ex,y,Suqian phase II}} - \mathrm{EG}_{\text{in,y,Suqian phase II}} \right) + \left(\mathrm{EG}_{\text{ex,y,Huaining}} - \mathrm{EG}_{\text{in,y,Huaining}} \right) \right) \times EF_{CO_2,grid,y}$$

$$= 9{,}694.546 \text{ MWh} \times 0.7905 \text{ tCO}_2\text{e/MWh}$$

$$= 7{,}663 \text{tCO}_2\text{e}$$

Where:

BE_y	Baseline emission (tCO_2e)
$EG_{BL,y}$	Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity(MWh)
$EF_{CO2,grid,y}$	CO_2 Emission Factor of the grid (0.7905tCO_2/MWh, corresponds to $EF_{grid,CM,y}$).
$EG_{facility,y,Suqian\ phase\ I}$	Net electricity supplied to the grid by Suqian Phase I Project (MWh)
$EG_{facility,y,\ Suqian\ phase\ II}$	Net electricity supplied to the grid by Suqian Phase II Project (MWh)
$EG_{facility,y,\ Huaining}$	Net electricity supplied to the grid by Huaining Project (MWh)
$EG_{ex,y,Suqian\ phase\ I}$	Electricity supplied to the grid by Suqian Phase I Project (MWh)
$EG_{in,y,Suqian\ phase\ I}$	Electricity consumed by Suqian Phase I Project importing from the grid(MWh)

$EG_{ex,y,Suqian\ phase\ II}$	Electricity supplied to the grid by Suqian Phase II Project (MWh)
$EG_{in,y,Suqian\ phase\ II}$	Electricity consumed by Suqian Phase II Project importing from the grid(MWh)
$EG_{ex,y,Huaining}$	Electricity supplied to the grid by Huaining Project (MWh)
$EG_{in,y,\ Huaining}$	Electricity consumed by Huaining Project importing from the grid(MWh)

Project Emission & Leakage:

According to methodology, Project emission (PE_y) is 0 tCO_2e, and no leakage emissions (LE_y) are considered.

Emission Reduction:

Summary of emission reductions during the monitoring period:

$$ER_y = BE_y - PE_y - LE_y$$
$$= BE_y - 0 - 0$$
$$= BE_y$$

Table 5-3: Emission reduction calculation

Parameters	Baseline Emissions					ER_y
	$EG_{facility,y,Suqian\ phase\ I}$	$EG_{facility,y,Suqian\ phase\ II}$	$EG_{facility,y,Huaining}$	$EF_{CO2,grid,y}$	BE_y	
	(MWh)	(MWh)	(MWh)	(tCO_2e/MWh)	(tCO_2e)	(tCO_2e)
01/04/2012-30/04/2012	206.807	397.193	187.802	0.7905	625.919	625.919
01/05/2012-31/05/2012	232.876	550.160	210.224	0.7905	785.173	785.173
01/06/2012-30/06/2012	164.095	410.257	197.371	0.7905	610.047	610.047
01/07/2012-31/07/2012	199.867	498.772	272.141	0.7905	767.401	767.401
01/08/2012-31/08/2012	185.846	449.608	209.003	0.7905	667.543	667.543
01/09/2012-30/09/2012	204.053	541.616	210.385	0.7905	755.761	755.761
01/10/2012-31/10/2012	174.417	420.568	177.099	0.7905	610.332	610.332
01/11/2012-30/11/2012	149.164	427.471	144.482	0.7905	570.043	570.043
01/12/2012-31/12/2012	113.470	305.977	97.480	0.7905	408.631	408.631
01/01/2013-31/01/2013	146.752	400.970	102.686	0.7905	514.148	514.148
01/02/2013-28/02/2013	118.772	375.531	85.432	0.7905	458.281	458.281

Parameters	Baseline Emissions					ER_y
	$EG_{facility,y,Suqian\ phase\ I}$	$EG_{facility,y,Suqian\ phase\ II}$	$EG_{facility,y,Huaining}$	$EF_{CO2,grid,y}$	BE_y	
01/03/2013-31/03/2013	210.580	740.083	175.536	0.7905	890.260	890.260
Total	**2,106.699**	**5,518.206**	**2,069.642**	**-**	**7,663**	**7,663**

To re-produce the emission reductions, following documents/records were verified by the audit team:

- Meter readings of Main meters M1, M3, M5, M7, Back-up meters M1', M3', M5', M7' and Meters M2, M4, M6, M8/EBS/
- Monthly invoices raised via Main meters M1, M3, M5, M7 and Meters M2, M4, M6, M8/EBS/
- Monthly and Daily electricity balance sheet of Meters M1, M3, M5, M7/EBS/
- Monthly and Daily electricity balance sheet of Meters M1', M3', M5', M7'/EBS/
- Monthly and Daily electricity balance sheet of Meters M2, M4, M6, M8/EBS/
- Meters calibration records (covering the monitoring period)/CAL/

All the figures as per the monitoring report were cross-checked by the verification team against basic monitored data.

No malfunction of Main meters M1, M3, M5, M7 and Meters M2, M4, M6, M8 was detected during the monitoring period and the backup system as indicated in the PDD and monitoring report was not adopted.

5.11. Quality Management

The key monitoring parameter with influence on the calculation of the emission reductions is the $EG_{facility,y,Suqian\ phase\ I}$, $EG_{facility,y,Suqian\ phase\ II}$ and $EG_{facility,y,Huaining}$ which is calculated.
During this monitoring period, the power was measured with high accuracy (0.2s, 0.5s or 1.0) and duly calibrated power meters. All meters readings are carried out at 24:00h on the last day of every month. Meter readings M1, M3, M5, M7 and Meters M2, M4, M6, M8 are the basis for the invoices. All relevant evidence was fully checked by the verification team during the on-site visit/EBS/. All evidence is clearly identifiable and assessed to be correct.
A monitoring team has been set up and trained to conduct the monitoring. The monitoring procedures have been defined in the Project Management procedures/QA/&/O&M/. The Internal Audit for monitoring work has been carried out/TCR/. No major non-conformity was found in the internal audit which was checked via on-site interviews.
Quality Management procedures for measurements, collection and compilation of data, data storage and archiving, calibration, maintenance and training of personnel in the framework of this CDM project activity have been defined. The procedures

defined can be assessed as appropriate for the purpose. No significant deviations thereof have been observed during the verification.

5.12. Actual emission reductions during the first commitment period and the period from 1 January 2013 onwards

The MR includes actual ER values achieved up to 31 December 2012 and actual values achieved from 1 January 2013 onwards as follows:

Table 5-2: Emission reductions before and after the end of 2012

	until 2012-12-31 [1)]	from 2013-01-01 [1)]	Sum
Emission reductions [tCO_{2e}]	**5,800**	**1,863**	**7,663**

[1)] Both days included

5.13. Comparison with ex-ante estimated emission reductions

During the monitoring period (from 2012-04-01 to 2013-03-31) the actual ER of the project is 7,663tCO_2e, which is lower than the estimation in the registered PDD of 8,770 tCO_2e annually.

For each sub-project:

Suqian Phase I Project

During the monitoring period (from 2012-04-01 to 2013-03-31) the actual ER of the Jiangsu Suqian Phase I project is 1,665 tCO_{2e}, which is 7% higher than the estimation in the registered PDD of 1,556 tCO_{2e} annually.

The estimated emission reduction in PDD is calculated based on an average electricity generation in FSR. By means of checking the FSR/FSR/, it is confirmed that the power generation of this solar project will decrease year by year about 0.93% (20% during 25 year). Therefore the power generation used for ERs calculation in the registered PDD is the average generation value for 25 years. Via checking the registered PDD, the power generation of Jiangsu Suqian Phase I project is 2,432.4MWh in the first year. Based on the FSR calculation, it is confirmed that 2404.1MWh is estimated would be generated in this monitoring period, as the project was commissioned in December 2010. Hence, the estimated electricity supplied by the project is calculated as 2,283.9MWh with the ex-ante self-used rate 5%. While the actual electricity supplied by the project in this monitoring period is 2,147MWh, which is lower than the estimation.

Hence, the actual amount in the monitoring report is lower than the estimated value in the FSR during this monitoring period.

Suqian phase II Project

During the monitoring period (from 2012-04-01 to 2013-03-31) the actual ER of the project is 4,362 tCO_2e, which is lower than the estimation in the registered PDD of 5,522 tCO_{2e} annually.

Huaining Project

During the monitoring period (from 2012-04-01 to 2013-03-31) the actual ER of the project is 1,636 tCO_2e, which is lower than the estimation in the registered PDD of 1,692 tCO_{2e} annually.

Therefore, the verification team concludes that there is no risk of the great increase.

5.14. Overall Aspects of the Verification

All necessary and requested documentation was provided by the project participants so that a complete verification of all relevant issues could be carried out.

Access was granted to all installations of the plant which are relevant for the project performance and the monitoring activities.

No issues have been identified indicating that the implementation of the project activity and the steps to claim emission reductions are not in compliance with the UNFCCC criteria and relevant guidance provided by the COP/CMP and the CDM EB (clarifications and/or guidance).

5.15. Hints for next periodic Verification

No Hints for next periodic Verification.

6. VERIFICATION AND CERTIFICATION STATEMENT

Innovative Carbon Investment Corporation has commissioned the TÜV NORD JI/CDM Certification Program to carry out the GS CER 1st periodic verification of the project: "Everbright Suqian & Huaining Bundled Solar PV Power Generation Project", with regard to the relevant requirements for GS/CDM project activities. The project reduces GHG emissions due to the displacement of fossil-fuel based grid connected power generation. This verification covers the period from 2012-04-01 to 2013-03-31 (including both days).

In the course of the verification no Corrective Action Requests (CARs) and no Clarification Requests (CLs) were raised. The verification is based on the draft monitoring report, revised monitoring report, the monitoring plan as set out in the registered PDD, the validation report, emission reduction calculation spreadsheet and supporting documents made available to the TÜV NORD JI/CDM CP by the project participant.

As a result of this verification, the verifier confirms that:

- all operations of the project are implemented and installed as planned and described in the validated project design document.
- the monitoring plan is in accordance with the applied approved CDM methodology, i.e., AMS-I.D ver 17.0.
- the installed equipment essential for measuring parameters required for calculating emission reductions are calibrated appropriately.
- the monitoring system is in place and functional. The project has generated GHG emission reductions and supported the sustainable development.

As the result of the GS CER 1st periodic verification, the verifier confirms that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. TÜV NORD JI/CDM CP herewith confirms that the project has achieved emission reductions in the above mentioned reporting period as follows:

Emission reductions: **7,663** t CO_{2e}

Shanghai, 2013-09-13	Essen, 2013-09-13
Zhao Xuejiao	Dr. Jochen Schubert
TÜV NORD JI/CDM Certification Program	TÜV NORD JI/CDM Certification Program
Verification Team Leader	Final Approval

7. REFERENCES

Table 7-1: Documents provided by the project participant(s)

Reference	Document
/**BL**/	Business License of Everbright Photovoltaic Energy (Suqian) Limited & Everbright Photovoltaic Energy (Huaining) Limited Organization chart of Everbright Photovoltaic Energy (Suqian) Limited & Everbright Photovoltaic Energy (Huaining) Limited
/**CAL**/	Calibration certificates covering monitoring period (2012-04-01 to 2013-03-31) 1. Calibration Certificate of Original Main meter M1, dated on 2012-03-20 valid to 2013-03-19 issued by Suqian Power Supply Company of Jiangsu Province Power Grid Company. 2. Calibration Certificate of New Main meter M1, dated on 2012-10-16 valid to 2013-10-15 issued by Suqian Power Supply Company of Jiangsu Province Power Grid Company. 3. Calibration Certificate of Backup Meter M1' and Meter M2, dated on 2012-03-20 and 2013-03-18 valid to 2014-03-17 issued by Suqian Power Supply Company of Jiangsu Province Power Grid Company. 4. Calibration Certificate of Main Meter M3, Backup Meter M3' and Meter M4, dated on 2012-03-20 and 2013-03-18 valid to 2014-03-17 issued by Suqian Power Supply Company of Jiangsu Province Power Grid Company. 5. Calibration Certificate of Main Meter M5, Backup Meter M5', dated on 2012-03-20 and 2013-03-18 valid to 2014-03-17 issued by Suqian Power Supply Company of Jiangsu Province Power Grid Company. 6. Calibration Certificate of Meter M6, dated on 2011-09-22 and 2012-09-20 valid to 2013-09-19 issued by Suqian Power Supply Company of Jiangsu Province Power Grid Company. 7. Calibration Certificate of Main Meter M7, Backup Meter M7', dated on 2012-01-27 and 2013-01-14 valid to 2014-01-13 issued by Measuring Centre of Anqing Power Supply Company. 8. Calibration Certificate of Meter M8, dated on 2011-10-21 and 2012-10-19 valid to 2013-10-18 issued by Measuring Centre of Huaining Power Supply Company. 9. Procedure of control of monitoring meters. 10. Calibration Certificate for PT & CT of Jiangsu Suqian Phase I project issued by Suqian Power Supply Company of Jiangsu Province Power Grid Company on 2010-12-01, valid period is ten years. 11. Calibration Certificate for PT & CT of Suqian phase II project issued by Suqian Power Supply Company of Jiangsu Province Power Grid Company on 2011-11-21, valid period is ten years. 12. Calibration Certificate for PT & CT of Huaining project issued by Measuring Centre of Anqing Power Supply Company on 2011-05-16,

Reference	Document
	valid period is ten years.
/**CMA**/	Certificate of Metrological Authorization of Suqian Power Supply Company of Jiangsu Province Power Grid Company on 2010-05-31 issued by Jiangsu Province Bureau of Quality & Technical Supervision, the valid period is to 2013-05-30. Certificate of Metrological Authorization of Measuring Centre of Anqing Power Supply Company on 2009-12-24 and 2012-12-24 issued by Anhui Province Bureau of Quality & Technical Supervision, the valid period is to 2015-12-23. Certificate of Metrological Authorization of Measuring Centre of Huaining Power Supply Company on 2009-09-17 and 2012-01-01 issued by Anqing City Bureau of Quality & Technical Supervision, the valid period is to 2013-12-31.
/**EAEP**/	Examination and Acceptance of Environmental Protection for the Suqian phase I Project issued by the Suqian City Environmental Protection Bureau on 2011-05-09. Examination and Acceptance of Environmental Protection for the Huaining Project issued by the Suqian City Environmental Protection Bureau on 2012-05-07. Examination and Acceptance of Environmental Protection for the Huaining Project issued by the Anhui Province Environmental Protection Bureau on 2011-11-29.
/**EBS**/	Electricity Balance Sheet covering the monitoring period • Monthly and Daily electricity balance sheet of Meters M1, M3, M5, M7 • Monthly and Daily electricity balance sheet of Meters M1', M3', M5', M7' • Monthly and Daily electricity balance sheet of Meters M2, M4, M6, M8 • Electricity Sales and Purchase Invoices
/**FSR**/	Jiangsu Suqian Phase I project 1. FSR was carried out by China Electronics Engineering Design Institute in Sep. 2010. 2. The China Electronics Engineering Design Institute has the qualification certificate Class-A on Electronics System engineering, Construct and Environmental Engineering. Certificate No. Gong Zi Jia 20120070113.
/**LOG**/	Log of each sub-project • Power plant daily operation log. • Power plant daily dispatch log. • Maintenance plan and records. • Electric equipments operation records. • Duty shift records. • Hourly power generation statistics from DCS.

Reference	Document
	• Daily power generation statistics from DCS. • Monthly power generation statistics from DCS.
/**MM**/	Monitoring Manuals for the project site of each sub-project
/**MR**/	Carbon Monitoring Report(CMR) of Everbright Suqian & Huaining Bundled Solar PV Power Generation Project, in P.R. China for GSC, dated 2013-08-30, version 01 Sustainability Monitoring Report(SMR) of Everbright Suqian & Huaining Bundled Solar PV Power Generation Project, in P.R. China for GSC, dated 2013-08-30, version 01
/**MRD**/	Meter Reading Records of Main Meters M1, M3, M5, M7, Backup Meters M1', M3', M5', M7' and Meters M2, M4, M6, M8 (2012-04-01 to 2013-03-31)
/**NAEP**/	Notification of approval to the environmental protection of the project started commissioned for Suqian I project issued by Suqian City Environmental Supervision Team dated on 2010-12-06. Notification of approval to the environmental protection of the project started commissioned for Suqian II project issued by Suqian City Environmental Supervision Team dated on 2011-11-22.
/**O&M**/	Project Operation and Maintenance Records of each sub-project 1. Sample copy of O&M records 2. Solar PV power Operation Safety Management Regulations
/**PHT**/	Photographs of Project Site, Central Control Room, DCS System, all the meters and nameplate of the equipments of each sub-project.
/**PPA**/	Jiangsu Suqian Phase I and II project Power Purchase Agreement signed by PP and Jiangsu Power (Group) Co., Ltd. for year 2012 and 2013. Huaining project Power Purchase Agreement signed by PP and Anhui Power (Group) Co., Ltd. for year 2012 and 2013.
/**PWD**/	Power Wiring Diagrams of each sub-project
/**QA**/	Monitoring manual and QA/QC procedures of each sub-project
/**RCM**/	Record of Change Meter of Main Meter M1, issued by Suqian Power Supply Company of Jiangsu Province Power Grid Company dated on 2012-11-30.
/**RSP**/	Monthly record of salary payment during this monitoring period for the Suqian phase I project & phase II project and Huaining Project. Sample Copy of Labor contracts for the Suqian phase I project & phase II project and Huaining Project

Reference	Document
/**TCR**/	Project Responsibilities, Training and Competence Records of each sub-project 1. Project Organization Chart and responsibilities 2. Staff Training Records 3. Sample Copy of Operator Certificates 4. Internal audit record covering this monitoring period
/**TP**/	Technical Particulars of Solar PV cell and Inverter – the annex of equipment purchase contract of each sub-project
/**XLS**/	Emission Reduction Calculation sheets provided by the project participant(related to MR) dated 2013-08-30, version 01

Table 7-2: Background investigation and assessment documents

Reference	Document
/**AMS-I.D**/	AMS-I.D Ver.17.0: Grid connected renewable electricity generation
/**Annex-GS**/	Gold Standard Annexes http://www.cdmgoldstandard.org/project-certification/rules-and-toolkit
/**CDM-PDD**/	UNFCCC registered Project Design Document named “Everbright Suqian & Huaining Bundled Solar PV Power Generation Project” ver. 2.0. dated 2012-03-01
/**CPM**/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
/**GCT**/	Glossary of CDM terms (Ver.7)
/**GLMP**/	Guidelines for completing the monitoring report form (Version 03.2, EB70)
/**GSP**/	Gold Standard Passport for GS project: “Everbright Suqian & Huaining Bundled Solar PV Power Generation Project ” dated 2013/08/27, version 2.0
/**GSR**/	Gold Standard Requirement version 2.2
/**GSTK**/	Gold Standard Toolkit version 2.2
/**IPCC-GP**/	IPCC Good Practice Guidance & Uncertainty Management in National Greenhouse Gas Inventories, 2000
/**IPCC-RM**/	Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories:

Reference	Document
	Reference Manual
/**JJG**/	Verification regulation of electric watt-hour meters (JJG596-1999)
/**KP**/	Kyoto Protocol (1997)
/**MA**/	Decision 3/CMP. 1 (Marrakesh – Accords)
/**MRT**/	Monitoring Report Form (F-CDM-MR) Version 03.1
/**NS-METER**/	DL/T 448-2000 technical administration code of electricity energy metering
/**PDD**/	Project Design Document for GS project: "Everbright Suqian & Huaining Bundled Solar PV Power Generation Project " dated 2013/05/27, version 1.0
/**PS**/	Project Standard (Version 04.0)
/**TEF**/	Tool to calculate the emission factor for an electricity system(version 03.0.0)
/**VAL**/	Validation Report for GS project "Everbright Suqian & Huaining Bundled Solar PV Power Generation Project" dated 2013-06-18
/**VVS**/	CDM Validation and Verification Standard (Version 04.0 VVS)

Table 7-3: Websites used

Reference	Link	Organisation
/**dna-HP**/	www.cdm.ccchina.gov.cn	DNA of China
/**dna-SP**/	http://www.environmentagency.gov.uk/business/topics/pollution/129666.aspx	DNA of United Kingdom of Great Britain and Northern Ireland
/**ipcc**/	www.ipcc-nggip.iges.or.jp	IPCC publications
/**asl**/	http://www.stats.gov.cn/tjsj/ndsj/2012/indexch.htm.	National Bureau of Statistics of China (Jiangsu Province and Anhui Province average salary level)
/**mep**/	http://www.zhb.gov.cn/	Ministry of Environmental Protection of China

Reference	Link	Organisation
/**unfccc**/	http://cdm.unfccc.int	UNFCCC

Table 7-4: List of interviewed persons

Reference	MoI[1]		Name	Organisation / Function
/**IM01**/	V	☐ Mr. ☒ Ms	Sun Ao	Everbright Environmental Protection Science and Technology Development (Beijing) Co., Ltd. / Staff
/**IM01**/	V	☐ Mr. ☒ Ms	Liu Liqiong	Everbright Photovoltaic Energy (Suqian) Limited/ Chief Manager
/**IM01**/	V	☒ Mr. ☐ Ms	Zhang Chen	Everbright Photovoltaic Energy (Suqian) Limited/ Chief Manager
/**IM01**/	V	☒ Mr. ☐ Ms	Li Guo	Everbright Photovoltaic Energy (Suqian) Limited/ Operation Staff
/**IM01**/	V	☒ Mr. ☐ Ms	Chang Hua	Everbright Photovoltaic Energy (Huaining) Limited/ General Manager
/**IM01**/	V	☒ Mr. ☐ Ms	Zhang Haiyang	Everbright Photovoltaic Energy (Huaining) Limited/ Operation Staff
/**IM02**/	V	☐ Mr. ☒ Ms.	Yang Sui	Innovative Carbon Investment Corporation /Consultant
/**IM02**/	V	☐ Mr. ☒ Ms.	Liu Jingrui	Innovative Carbon Investment Corporation /Consultant
/**IM03**/	V	☐ Mr. ☒ Ms.	Liu Xiaoxiao	Suqian College Trade Union/ Vice president
/**IM03**/	V	☐ Mr. ☒ Ms.	Fan Dongling	Suqian City EPB /Engineering
/**IM03**/	V	☐ Mr. ☒ Ms.	Gao Nana	Suqian City DRC/Officer
/**IM03**/	V	☒ Mr. ☐ Ms	Zhu Hongsheng	Suqian Local Residents/Worker
/**IM03**/	V	☒ Mr.	Han Shenghong	Huaining County DRC/Director

Reference	MoI[1]		Name	Organisation / Function
		☐ Ms		
/**IM03**/	V	☒ Mr. ☐ Ms	Sun Lin	Huaining County DRC/Vice Director
/**IM03**/	V	☒ Mr. ☐ Ms	Tong Shixiang	Huaining County EPB/ Director
/**IM03**/	V	☒ Mr. ☐ Ms	Ding Xianding	Huaining County Power Supply Company/ Member
/**IM03**/	V	☒ Mr. ☐ Ms	Li Yuhua	Huaining Local Residents/Farmer

[1)] Means of Interview: (**T**elephone, **E**-Mail, **V**isit)

ANNEX

A1: Verification Protocol

A2: Statements of Competence of involved Personnel

ANNEX 1: VERIFICATION PROTOCOL

Table A-1: GHG calculation procedures and management control testing / detailed audit testing of residual risk areas and random testing

Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	Additional verification testing	Conclusions and Areas Requiring Improvement (including *Forward Action Requests*)
Raw data generation				
• Installation of measuring equipment • Dysfunction of installed equipment • Maloperation by operational personnel • Downtimes of equipment • Exchange of equipment • Change of measurement equipment characteristic • Insufficient accuracy • Change of technology	• Installation of modern and state of the art equipment • Process control automation • Internal data review • Regular visual inspect-ions of installed equip-ment • Only skilled and trained personnel operates the relevant equipment • Daily raw data checks • Immediate exchange of dysfunctional equipment • Stand-by duty is	• Inadequate installation / operation of the monitoring equipment • Inadequate exchange of equipment • Change of personnel • Undetected measurement errors • Inappropriateness of Management system procedures w.r.t. monitoring plan requirements (e.g. substitute value strategies) • Non-application of management system procedures • Insufficient accuracy • Inappropriate QA/QC	• Site – visit • Check of equipment • Check of technical data sheets • Check of suppliers information / guarantees • Check of calibration records, if applicable • Check of maintenance records • Counter-check of raw data and commercial data • Check of CDM management system • Check of CDM related procedures	• **See Table A-2**

Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	Additional verification testing	Conclusions and Areas Requiring Improvement (including *Forward Action Requests*)
• Accuracy of values supplied by Third Parties	organized • Training • Internal audit procedures • Internal check of QA/QC measures of involved Third Parties	measures of Third Parties	• Application of CDM management system procedures • Check of trainings • Check of responsibilities • Check of QA/QC documentation / evidences of involved Third Parties	
Raw data collection and data aggregation				
• Wrong data transfer from raw data to daily and monthly aggregated reporting forms • IT Systems • Spread sheet programming • Manual data transmission • Data protection • Responsibilities	• Cross-check of data • Plausibility checks of various parameters. • Appropriate archiving system • Clear allocation of responsibilities • Application of CDM Management system procedures • Usage of standard software solutions	• Unintended usage of old data that has been revised • Incomplete documentation • Ex-post corrections of records • Ambiguous sources of information • Non-application of management system procedures • Manual data transfer mistakes	• Check of data aggregation steps • Counter-calculation • Data integrity checks by means of graphical data analysis and calculation of specific performance figures • Check of management system certification • Check of data archiving system	• **See Table A-2**

Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	Additional verification testing	Conclusions and Areas Requiring Improvement (including *Forward Action Requests*)
	(Spreadsheets) • Limited access to IT systems • Data protection procedures	• Unintended change of spread sheet programming or data base entries • Problems caused by updating/upgrading or change of applied software	• Check of application of Management system procedures	
Other calculation parameters				
• Emission factors, oxidation factors, coefficients	• The values and data sources applied are defined in the PDD and monitoring plan	• Unintended or intended Modification of calculation parameters • Wrong application of values • Misinterpretations of the applied methodology and/ or the PDD • Missing update of applicable regulatory framework (e.g. IPCC values)	• Update-check of regulatory framework • Countercheck of the applied MP in the MR against the methodology and the PDD	• **See Table A-2**
Calculation Methods				

Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	Additional verification testing	Conclusions and Areas Requiring Improvement (including *Forward Action Requests*)
• Applied formulae • Miscalculation • Mistakes in spread-sheet calculation	• Advanced calculation and reporting tools • A CDM coordinator is in charge of the CDM related calculations • Usage of tested / counterchecked Excel spreadsheets • Involvement of external consultants	• The danger of miscal-culation can only be minimized.	• Countercheck on the basis of own calculation. • Spread sheet walk-trough. • Plausibility checks • Check of plots	• **See Table A-2**
Monitoring reporting				
• Data transfer to the author of the monitoring report • Data transfer to the monitoring report • Unintended use of outdated versions	• An experienced CDM consultant is responsible for monitoring reporting. • CDM QMS procedures are defined	• The danger of data transfer mistakes can only be minimized • Inappropriate application of QMS procedures	• Counter check with evidences provided. • Audit of procedure application	• **See Table A-2**

Table A-2: (Project specific) Periodic Verification Checklist

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
A. Description of the project activity				
A.1. Purpose and general description of the project activity ***(EB 70 Annex 11, A.1)*** *Check if section A.1 of the MR includes the following:* - *Purpose of the PA and the measures taken to reduce GHG emissions* - *Brief description of the installed technology and equipment* - *Relevant dates for the project activity (e.g. construction, commissioning, continued operation periods etc.)* - *Total emission reductions achieved in this monitoring period*	/MR/ /TP/ /XLS/	The verification team has checked section A.1 of the MR and confirms that the information provided is complete and correct with regards to the following: ☒ Purpose of the PA and the measures taken to reduce GHG emissions ☒ Brief description of the installed technology and equipments ☒ Relevant dates for the project activity (e.g. construction, commissioning, continued operation periods etc ☒ Total emission reductions achieved in this monitoring period	OK	OK
A.2. Location of project activity ***(EB 70 Annex 11, A.2)*** *Check if section A.2 of the MR reflects correctly the following:* - *Host Party(ies)* - *Region / State / Province etc.* - *City / Town / Community etc.*	/MR/ /PDD/ /IM01/	The verification team has checked section A.2 of the MR and confirms by means of comparison with the information given in the PDD and information gathered during the site visit that the information provided is complete and correct with regards to the following: ☒ Host Party(ies) ☒ Region / State / Province ☒ City / Town / Community	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
- *Physical / geographical location (e.g. Latitude and Longitude)*		☒ Physical / Geographical location		
A.3. Parties and Project Participants ***(EB 70 Annex 11, A.3)*** *Check if section A.3 of the MR includes the following:* - *All PPs as displayed on the UNFCCC website* - *A correctly filled table as per the MR template*	/MR/ /unfccc/	The verification team has checked section A.3 of the MR as well as the UNFCCC website and confirms that: ☒ all PPs as displayed on the project related UNFCCC website are correctly listed ☒ the table as per the template MR has been correctly filled	OK	OK
A.4. Reference of applied methodology ***(EB 70 Annex 11, A.4)*** *Check if section A.4 of the MR correctly describes / includes the following:* - *Reference to the applicable version of the methodology* - *Reference to the applicable version(s) of relevant methodological tools* - *Relevant EB decisions, if applicable*	/MR/ /PDD/ /unfccc/	The verification team has checked section A.4 of the MR and confirms by means of comparison with the information given in the PDD and displayed on the UNFCCC website that the information provided is complete and correct with regards to the following: ☒ Number, title and version of the applicable CDM Methodology ☒ Name and version of applicable CDM methodological tools ☒ Relevant EB decisions	OK	OK
A.5. Crediting period of project activity ***(EB 70 Annex 11, A.5)*** *Check if section A.5 of the MR correctly includes the following:* - *Start date of the crediting period. In this context please check, if applicable, whether post*	/MR/ /unfccc/	The verification team has checked section A.5 of the MR and confirms by means of comparison with the information displayed on the UNFCCC website that the information provided is complete and correct with regards to the following: ☒ Start date of the crediting period. ☒ Type and length of the crediting period	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
registration changes to the start date have been accepted by the EB. - *Length and type of the crediting period*				
A.6. Publication of the Monitoring Report ***(VVS, §207)*** *Check if the monitoring report has been made publicly available on the UNFCCC website before the verification commenced.* *Check if comments have been received and if yes, how they have been addressed.*	/unfccc/	The verification team has ensured and confirms by means of checking the respective project information on the UNFCCC website that: ☒ The draft monitoring report, as received from the project participants, has been made publicly available prior to the start of the verification activities. ☒ No comments have been received.	OK	OK
A.7. Compliance with standardized format of the Monitoring Report ***(VVS, §212e)*** *Check (only) if the latest applicable MR template has been used.For compliance assessment with the MR guideline pl. refer to the respective MR sections.*	/MRT/	The verification team has checked all sections of the MR and confirms by means of comparison with the MR template that: ☒ the standardized MR template has been used	OK	OK
B. Implementation of project activity				
B.1. Description of implemented registered project activity ***(EB 70 Annex 11, B.1)*** *Check if section B.1 of the MR correctly describes / includes the following:*	/MR/ /PDD/ /PS/ /IM01/	The verification team has checked section B.1 of the MR and confirms by means of comparison with the information given in the PDD, the project standard and information gathered during the site visit that: ☒ the description of the implementation status of the PA is in line with the applicable provisions of the project standard	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
- *Implementation status of the PA* - *Detailed description of installed technology(ies) / technical processes and equipment applied* - *Diagrams (where appropriate)*		☒ an appropriate description of the installed technology(ies), technical process and equipment incl. diagrams, where applicable, has been included In this context the following findings have been identified: N/A		
B.1.1. Initial project implementation ***(VVS; § 225 a, 226)*** *Assess whether the project has been implemented and operated as per the registered PDD and are all physical features of the project in place?* *Further focus on the potential phase wise implementation and check the reporting on the corresponding status and starting dates accordingly.* *Also, discuss – if applicable – any approvals of the necessary request of notification or request for approval of changes from the project activity as described in the registered PDD (EB 48 Annex 66/67).*	/IM01/ /PDD/ /LOG/ /TP/ /PPA/ /MR/ /unfccc/	*Description:* Jiangsu Suqian Phase I Project was commissioned on 2010-12-06. Suqian Phase II Project was commissioned on 2011-11-22. Huaining Project was commissioned on 2011-06-22. The main constructions and equipment, for instance the solar PV cells, inverters, main transformer and the power connection system have been implemented according to the PDD and equipments contracts. No deviations or changes were observed. *Verifier´s action:* On-site observation, interview and cross check the PDD, the equipment contracts and project information on UNFCCC website. *Conclusion:* The project has been implemented and operated as per the registered PDD and all physical features of the project are in place.	OK	OK
B.1.2. Technical equipment changes ***-(VVS; § 225 a, 226)*** *Check if relevant technical equipment of the project activity has been exchanged or modified during the*	/IM01/ /PDD/ /TP/ /PHT/	*Description:* The technical equipment, which including solar PV cells, inverters, main transformer and the meters are consistent within the PDD, equipments specification and MR.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
monitoring period. Further ensure that consistent notations of key equipment (meters etc.) in PDD, MR and calculation spreadsheet are applied *Consider e.g. interviews with operational personnel, QMS records, maintenance records, instrument specifications.* *In case of changes, check whether the project is still in line with the registered PDD and assure that these changes have been considered in the monitoring report and the emission reduction calculation.* *In case of post registration changes pl. refer to chapter B.2.*	/PPA/	*Verifier´s action:* By means of cross check the nameplate of key equipment, record of change meter, instrument specification against PDD and MR and information published on UNFCCC website, and further evidenced by on-site interview and observation. *Conclusion:* No relevant equipment was exchanged or modified within the monitoring period.		
B.1.3. Operation of the project activity ***-(VVS; § 225 a, 226)*** *Check if relevant operation modes of the project activity have been exchanged or modified during the monitoring period.* *Consider e.g. interviews with operational personnel, operation log sheets, data management system records.* *In case of changes, check whether the project is still in line with the registered PDD and assure that these changes have been considered in the monitoring report and the emission reduction calculation.* *In case of post registration changes pl. refer to*	/IM01/ /PDD/ /PWD/ /PPA/ /LOG/	*Description:* The operation modes, i.e. power generation, transmission, connection and supplying are in line with the modes described in the registered PDD. *Verifier´s action:* It was verified by means of random sampling and cross check with operation log sheets, data management system records covering this monitoring period and cross evidenced by on-site operator interview. *Conclusion:* No modification and exchanges on operation modes were detected during this monitoring period.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
chapter B.2.				
B.1.4. Incidents ***(VVS; § 225 a, 226)*** *Identify if there have been any significant incidents, deviant operation modes and / or downtimes of the equipment?* *Consider e.g. interviews with operational personnel, operational log sheets, analysis of performance data.*	/IM01/ /LOG/ /O&M/ /PDD/	*Description:* No significant incidents, deviant operation modes and/or downtimes of the equipment have occurred. *Justification of evidences:* It was verified by means of site observation, the plant operation logs check, equipments check & maintenance log check, and could be cross evidenced by interviewing with the plant operators. *Conclusion:* Incidents during the monitoring period have not been observed.	OK	OK
B.1.5. Legislation Find out – esp. in the context of methodological requirements - whether relevant legislation with effect on the project activity in the host country has been changed. Assess, in case of changes, whether consequences for the PA with regard to relevant CDM requirements have been accounted for. In case of changes data sources shall be referenced.	/IM01/ /dna-HP/ /mep/	*Description:* Relevant legislation incl. electricity generation and transmission, related environmental protection laws, sectoral policies and relevant regulations did not change. *Verifier´s action:* It was verified through consulting official governmental website and as per the local and sectoral expertise of the verification team. *Conclusion:* No relevant changes since the validation were identified.	OK	OK
B.1.6. Open issues from validation ***-(VVS; § 213)*** *Check (esp. in case of GS Pre-CDM VER verification)*	/VAL/	☒ There were no open issues addressed in the validation report ☐ All open issues from the validation have been	OK	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
whether there are any open issues indicated in the validation report (e.g. FAR)?		appropriately addressed. ☐ The following issues related to the validation have not yet been appropriately addressed:		
B.1.7. Open issues from previous verification ***-(VVS; §§ 213; 284 h)*** *Check in case of further periodic verifications whether there are any open issues indicated in previous verification reports (FAR) and take into consideration the guidance as specified in VVS.*		☐ There were no open issues addressed in the previous verification report ☐ All open issues from the previous verification have been appropriately addressed. ☐ The following issues related to the previous verification have not yet been appropriately addressed: This is the GS CER 1st periodic verification	OK	OK
B.2. Post registration changes				
B.2.1. Are post registration changes applicable to the proposed project activity?		☒ No, by means of site visit, document check and interview it could be verified that the project is implemented and operated in line with the registered PDD and the applied methodology. (*Please proceed with section C*) ☐ Yes, post registration changes have been identified and are assessed in detail in the subsequent steps. (*Please proceed with B.2.2.*)	OK	OK
B.2.2. Temporary deviations from the registered monitoring plan or applied methodology (TDfrMP; TDfMM) ***(EB 70 Annex 11, B.2.1; VVS; §§ 251 - 256)***	/PS/ /unfccc/	☒ No TDfrMP or TDfMM.have been submitted to the UNFCCC prior to the current monitoring period	N/A	N/A

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
Indicate whether any temporary deviations have been applied during this monitoring periods. *In cases where approval has been sought from the EB please provide reference.* *If applied, provide a description of the deviation(s).* *This should include the reasons for the deviation(s), how it deviates from the monitoring plan and/or applied methodology(ies), the duration for which the deviation(s) is(are) applicable and justification on the conservativeness of the approach. Indicate if the deviation will lead to a reduction in the accuracy and if so, which conservative assumptions and discount factors have been applied.* *For deviation(s) that require prior approval by the Board, include the date of approval and reference number.*		☐ The following TDfrMP or TDfMM have been approved or are under approval by the UNFCCC 1 Title Status ☐ under approval; ☐ approved Appr.date Ref. No. 2 Title Status ☐ under approval; ☐ approved Appr.date Ref.No. ☒ During the verification of the current MP no need for a TDfrMP or TDfMM has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA ☐ An approval of the following TDfrMP or TDfMM is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply. 1 Issue: 2 Issue: ☐ The following TDfrMP or TDfMM for which appendix 1 of the PS is applicable have been applied: 1 Issue:		

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		☐ 2 Issue:		
B.2.3. Corrections ***(EB 70 Annex 11, B.2.2; VVS; §§ 257 - 259)*** *Indicate whether any corrections to project information or parameters fixed at validation have been approved during this monitoring period or submitted with this monitoring report.* *In cases where the correction(s) and the revised PDD are approved prior to the submission of this monitoring report for request for issuance, provide the approval date and reference number. Otherwise, provide the version number and the completion date of the revised PDD.* *Please check and report that the corrected information is an accurate reflection of the actual project information and that the corrected parameters are in accordance with the applied methodology and the monitoring plan.*		☒ During the verification of the current MP no need for corrections has been identified. ☐ The following corrections have been applied: 1 Issue: 2 Issue:	N/A	N/A
B.2.4. Permanent changes from the registered monitoring plan or applied methodology (PCfrMP; PCfMM) ***(EB 70 Annex 11, B.2.3; VVS; §§ 262 - 268)*** *Indicate whether any permanent changes from the registered monitoring plan or applied methodologies have been approved during this monitoring period or submitted with this monitoring report.*		☒ No PCfrMP or PCfMM.have been submitted to the UNFCCC prior to the current monitoring period ☐ The following PCfrMP or PCfMM have been approved or are under approval by the UNFCCC 1 Title Status ☐ under approval; ☐ approved	N/A	N/A

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
In cases where the change(s) and the revised PDD are approved prior to the submission of this monitoring report for request for issuance, provide the approval date and reference number. Otherwise, provide the version number and the completion date of the revised PDD.		Appr.date Ref. No. 2 Title Status ☐ under approval; ☐ approved Appr.date Ref.No. ☒ During the verification of the current MP no need for a PCfrMP or PCfMM has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA ☐ An approval of the following PCfrMP or PCfMM is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply. 1 Issue: 2 Issue: ☐ The following PCfrMP or PCfMM for which appendix 1 of the PS is applicable have been applied: 1 Issue: 2 Issue:		
B.2.5. Changes to the project design of the registered project activity			N/A	N/A

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
(CoPD) ***(EB 70 Annex 11, B.2.4; VVS; §§ 269 - 282)*** *Indicate whether any changes to the project design of the project activity have been approved during this monitoring period or submitted with this monitoring report.* *In cases where the change(s) and the revised PDD are approved prior to the submission of this monitoring report for request for issuance, provide the approval date and reference number. Otherwise, provide the version number and the completion date of the revised PDD.*		☒ No CoPD has been submitted to the UNFCCC prior to the current monitoring period ☐ The following CoPD has been approved or are under approval by the UNFCCC 1 Title Status ☐ under approval; ☐ approved Appr.date Ref. No. 2 Title Status ☐ under approval; ☐ approved Appr.date Ref.No. ☒ During the verification of the current MP no need for a CoPD has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA ☐ An approval of the following CoPD.is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply. 1 Issue: 2 Issue: ☐ The following CoPD for which appendix 1 of the PS is applicable have been applied:		

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		☐ 1 Issue: ☐ 2 Issue:		
C. Description of monitoring system				
C.1. Monitoring Plan – PDD Compliance ***(VVS, § 233-236)*** *Check if the monitoring plan is in accordance with the monitoring plan contained in the registered PDD (or any accepted revised MP).* *Please check esp. if* - *all parameters stated in the MP of the registered PDD have been monitored and updated as applicable* - *the monitoring equipment has been controlled and calibrated as per the MP* - *the monitoring results are consistently recorded as per the approved frequency* - *QA/QC procedures have been applied in accordance with the MP*	/MR/ /PDD/	By means of comparison of the MR with the registered PDD (or any revisions thereof) the verification team has checked whether the MP is in compliance with the registered PDD. The outcome is as follows: ☒ The MP is completely in accordance with the last registered/approved version of the PDD / MP.	OK	OK
C.2. Monitoring Plan – Meth Compliance ***(VVS, §§ 229-232)*** *Check if the monitoring plan is in accordance with the applied methodology.*	/MR/ /PDD/ /AMS-I.D/ /TEF/	By means of comparison of the MR with the applied CDM methodology and related tools the verification team has checked whether the MP is in compliance with the MP related requirements of the applied methodology. The outcome is as follows:	OK	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
In case the methodology references applicable tools it has to be ensured that the MP is also compliant with those tools. *Also please specify if monitoring aspects have been identified that are not specified in the methodology but may encance the level of accuracy and completeness of the monitoring plan – this esp. applies for SSC PAs.*		☒ The MP is completely in accordance with the approved methodology applied by the CDM project (last registered/approved version of the PDD) ☒ The MP is completely in accordance with the applied tools which the methodology references. A breakdown of the referenced tools is as follows: 1 Title (of the tool): Tool to calculate the emission factor for an electricity system Version: 03.0.0 MP compliance: ☐ full compliance ☐ findings have been raised ☒ N/A (for MP) 2 Title (of the tool): Version: MP compliance: ☐ full compliance ☐ findings have been raised ☐ N/A (for MP)		
C.3. Management System ***(VVS, § 217 (iii))*** *Check if the GHG data monitoring system can be assessed as appropriate.* *In case reference is made to a (certified) company*	/QA/ /IM01/ /IM02/ /LOG/	*Description:* All applicable procedures within the GHG monitoring system have been summarized in relevant QC/QA procedures, which addresses the operational manager of solar PV station collects the information and data required by the Monitoring Plan. The collected information is documented and sent to the CDM	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
quality management system, check if all CDM related monitoring procedures have been fully integrated in the project participant's quality management system. *In case of a stand-alone system, check how the GHG management system has been implemented and effectiveness is ensured.*	/MM/ /O&M/	project manager and responsible staffs of the Everbright Photovoltaic Energy (Suqian) Limited monthly. The CDM project manager is in charge of the implementation of the Monitoring Plan and report to the General Manager of the company. The General Manager of the company makes the confirmations on monitoring, calculation data and reports. *Verifier´s action:* The QA/QC Procedure, Log, Monitoring Manual, Operation and Maintenance Records were checked by the verification team during on site visit. *Conclusion:* The GHG data monitoring system is assessed as appropriate.		
C.4. Metering diagram ***(EB 70 Annex 11, C; PS §193)*** *Check first if the MR includes a metering diagram showing all relevant monitoring points.* *Check further if this diagram reflects the actual situation and is in line with the registered PDD and with the requirements of the applied methodology.*	/PS/ /MR/ /IM01/ /PWD/ /PPA/	*Description:* The MR includes metering diagram with all relevant monitoring points, and the diagram reflects the actual situation and is in line with registered PDD and the applied methodology. *Verifier´s action:* The MR has been verified against PDD and on-site observation and interview with project operators. *Conclusion:* It is confirmed that the metering diagram reflects the actual situation and is in line with the registered PDD and with the requirements of the applied methodology.	OK	OK
C.5. Roles and Responsibilities	/PS/	*Description:*	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
(EB 70 Annex 11, C; PS §193) *Check if all roles and positions of each person in the GHG data management process are clearly defined and implemented as stated in the monitoring plan. Please consider the complete data trail from raw data generation to submission of the final data.* *Identify, if relevant personnel w.r.t. monitoring has been exchanged?* *If so, have appropriate training measures been carried out.* *In case of changes, assure that the implemented monitoring procedures have not been affected.*	/IM01/ /QA/ /TCR/ /MR/ /MM/	Roles and responsibilities are clearly stated in the MR. The relevant personnel w.r.t. monitoring was not exchanged during this monitoring period. *Verifier´s action:* The certificates of the appointed person, Monitoring Manual, staff training records have been checked and the roles have been checked against the PDD and MR. *Conclusion:* All roles and positions of each person in the GHG data management process are clearly defined and implemented as stated in the monitoring plan.		
C.6. Emergency procedures for the monitoring system ***(EB 70 Annex 11, C; PS §193)*** *Check, as appropriate, whether relevant emergency procedures for the monitoring system have been included in the MR and assess whether these procedures have been implemented, when required*	/PS/ /QA/ /IM01/ /LOG/ /O&M/ /MM/	*Description:* Emergency procedures for monitoring system are stated in the MR. The emergency procedures of meters have been determined. *Verifier´s action:* The project operation records, Monitoring Manual, LOG and O&M procedure and records have been checked and responsible stuff has been interviewed. *Conclusion:* The relevant emergency procedures for the monitoring system have been included in the MR and assessed as appropriate.	OK	OK
C.7. Data archive and data protection	/QA/	*Description:*	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
(PS §56 b) Check whether all records of monitoring parameters are archived according to the monitoring plan. Assess further whether appropriate measures have been taken in order to avoid unintended or intended manipulation or loss of the measured data.	/IM01/ /EBS/ /PDD/ /LOG/ /PDD/	Data archive and data protection procedure are stated in the MR. The monitoring data including paper and electronic version, electricity sales/purchase receipts of every month and other CDM related documents should be archived by the project owner. And all of the materials will be kept until 2 years after the end of the total credit period of the project. *Verifier´s action:* The records of the monitoring data and the hard & soft copy have been checked. The operational daily log, daily and monthly electricity record, monthly invoices and electricity transaction notes are checked. *Conclusion:* All records of monitoring parameters are archived according to the monitoring plan.		
D. Data and parameters				
D.1. Data and Parameters fixed ex ante				

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
a) Compliance with registered PDD ***(EB 70 Annex 11; D1)*** *Check whether the value applied is in compliance with the registered PDD.*	/PDD/ /MR/	*Description:* The Emission Factor $EF_{CO2,grid,y}$ has been indicated in the registered PDD. This parameter has been involved in the MR as the ex-ante determined value. *Verifier´s action:* The registered PDD and MR have been checked. *Conclusion:* The value applied is in compliance with the registered PDD.	OK	OK
b) Compliance with the applied methodology ***(EB 70 Annex 11; D1)*** *Check whether the value applied is in compliance with the applied methodology or any other tool.*	/PDD/ /MR/ /AMS-I.D/	*Description:* The grid Emission Factor $EF_{CO2,grid,y}$ has been indicated in the registered PDD. This parameter has been involved in MR as the ex-ante determined value. *Verifier´s action:* The registered PDD, applied methodology AMS-I.D and MR have been checked. *Conclusion:* The value applied is in compliance with the applied methodology and tool.	OK	OK
D.2. Data and Parameters monitored				
D.2.1. $EG_{facility,y,Suqian\ phase\ I}$		**Quantity of net electricity supplied to the Grid by Suqian Phase I Project**		

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
a) Measurement / Determination method ***(VVS, §§ 233, 236)*** *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /PDD/ /AMS-I.D/ /XLS/	*Description:* $EG_{facility,y,\ Suqian\ phase\ I}$ is calculated by the following : $EG_{facility,y,Suqian\ phase\ I} = EG_{ex,y,Suqian\ phase\ I} - EG_{in,y,Suqian\ phase\ I}$ Where: $EG_{ex,y,Suqian\ phase\ I}$ = Electricity supplied to the grid by Suqian Phase I Project $EG_{in,y,Suqian\ phase\ I}$ = Electricity consumed by Suqian Phase I Project importing from the grid *Verifier´s action:* The MR is checked against the registered PDD, and cross-check by on-site investigation. *Conclusion:* The measurement method is in line with the registered PDD and the applied methodology AMS-I.D version 17.0.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
b) Accuracy and QA/QC Procedure ***(VVS, §§ 237-241)*** *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.*	/TCR/ /EBS/ /XLS/	*Description:* The value is calculated. QA/QC procedure for calculation is carried out by internal audit. After the operator record the basic data, CDM manager will check the calculation results to confirm if it is OK. *Verifier´s action:* It was verified by cross checking the monthly power invoices, meter readings against the MR, Internal audit record and ER sheet against the MR. *Conclusion:* The QA/QC procedure of the calculation is confirmed as appropriate.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
c) Correctness ***(VVS, §§ 233, 236)*** *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /EBS/ /MRD/ /QA/ /LOG/ /XLS/ /TCR/	☒ Correct ☐ Not correct (initial assessment) *Description:* The electricity of $EG_{facility,y,Suqian\ phase\ I}$ during period 2012-04-01 to 2013-03-31 is reported in the MR based on the calculation of $EG_{facility,y,Suqian\ phase\ I} = EG_{ex,y,Suqian\ phase\ I} - EG_{in,y,Suqian\ phase\ I}$. No incorrect calculation was detected during the monitoring period. *Verifier´s action:* By means of checking the ER-spreadsheet against the monthly invoices, monthly power balance sheets confirmed by grid company and meter reading records, the internal audit record and daily log. *Conclusion:* The value given in the monitoring report is verified as correct.	OK	OK
D.2.2. $EG_{ex,y,Suqian\ phase\ I}$		**Electricity supplied to the grid by Suqian Phase I Project**		
a) Measurement / Determination method ***(VVS, §§ 233, 236)*** *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the*	/IM01/ /PDD/ /AMS-I.D/ /CAL/ /XLS/ /RCM/	*Description:* $EG_{ex,y,Suqian\ phase\ I}$ is measured continuously by Main Meters M1 & M3 and Back-up meters M1' & M3'. Back-up meters M1' and M3' are used as a cross-check to the values measured by the Main meters. The Grid Company and the project owner read the Main Meters jointly, and record the data at 24:00 h on the last day of every month. Then, the electricity balance sheets /EBS/ issued by the grid company are delivered to the project owner. After confirming the electricity quantity, the project owner provides sales invoices to the grid company for the settlement of the electricity revenue /EBS/.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
frequency of measurements as per the requirements. *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*		Neither mistakes nor malfunction of main meters and back-up meters have been observed during this monitoring period. The data aggregation procedure applied by the PP is shown as follow: 1. The $EG_{ex,y,Suqian\ phase\ I}$ is monitored by Meter M1&M3, the operators read the value from the Meter M1&M3 at 24:00 per day. Based on the difference between the two meter values on 0:00 (24:00 of yesterday) and 24:00 for that day the power supplied for that day is determined. Accordingly the operator issues the daily reports. The daily reports record the quantities of gross power supplied per day (DAL-2=ODL). 2. Based on the daily reports for a month, the PP issues a corresponding monthly report. The sum of the quantities of gross power supplied per day is the final result as shown in the monthly report (DAL-1). 3. Based on the monthly reports, the final monthly value was reported in the monitoring report (DAL0). *Verifier´s action:* It was verified by on-site interview and observations and cross checking with calibration records, record of change meter, registered PDD and applied methodology against the ER calculation spreadsheet. Furthermore, the following actions have been taken by the verification team to check the correctness of the data aggregation. The reported value in the MR (DAL0) has been recalculated by the verification team based on the values from the monthly		

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
		reports (DAL-1). Based on monthly reports and the underlying original data (ODL), the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the daily and monthly reports have been verified. The values have been crosscheck with electricity sales invoices. *Conclusion:* The measurement method is in line with the registered PDD and the applied methodology AMS-I.D version 17.0.		
b) Accuracy and QA/QC Procedure ***(VVS, §§ 237-241)*** *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.*	/CAL/ /CMA/ /EBS/ /MRD/ /NS-METER/ /JJG/ /TCR/ /RCM/	*Description:* Meters M1' have an accuracy of 0.5s, M1, M3 and M3' have an accuracy of 0.2s. Back-up meter M1'&M3' is installed at the same location as M1&M3 which records relevant data every day. The calibration of M1&M3 and M1'&M3' was performed yearly by a qualified 3rd party entity according to national industry standard /NS-METER/&/JJG/ /CAL / and records maintained. QA/QC procedure for meter calibration maintenance and recording; procedure for monitoring staff training and competence were established and implemented. The data flow and protection process was observed during the on-site verification. In case the main meter is out of order the backup meter readings will be applied. QA/QC procedure for check the electricity supply was done by the internal audit of the project. *Verifier´s action:* It was verified by cross checking the monthly power invoices,	OK	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		clarification by the grid company, meter readings and calibration records against the MR, Internal audit record and ER sheet against the MR. *Conclusion:* The accuracy of equipment used for monitoring is checked as controlled and calibrated in accordance with the monitoring plan. And the relevant QA/QC procedure has been met.		
c) Correctness ***(VVS, §§ 233, 236)*** *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /EBS/ /MRD/ /QA/ /LOG/ /XLS/	☒ Correct ☐ Not correct (initial assessment) *Description:* The power supplied to the grid by the Project Suqian phase I ($EG_{ex,y,Suqian\ phase\ I}$) during period 2012-04-01 to 2013-03-31 is reported in the MR based on the monthly reports. The sales invoices were used as cross-check. *Verifier´s action:* By means of checking the ER-spreadsheet against the monthly invoices, monthly power balance sheets confirmed by grid company and meter reading records, the internal audit record and daily log. *Conclusion:* The correctness is confirmed.	OK	OK
D.2.3. $EG_{in,y,Suqian\ phase\ I}$		**Electricity consumed by Suqian Phase I Project importing from the grid**		
a) Measurement / Determination method ***(VVS, §§ 233, 236)*** *Describe how the monitoring parameter was*	/IM01/ /PDD/ /AMS-	*Description:* $EG_{in,y,Suqian\ phase\ I}$ is measured continuously by Main meters M1, M3, Backup meters M1' and M3' and Meter M2, M4 (installed at	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)). *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	I.D/ /CAL/ /XLS/	backup lines). Back-up meters M1' and M3' are used as a cross-check to the values measured by the Main meters. The Grid Company and the project owner read the Main Meters M1, M3 and Meters M2, M4 jointly, and record the data at 24:00 h on the last day of every month. Then, the electricity balance sheets/EBS/ issued by the grid company are delivered to the project owner. After confirming the electricity quantity, the project owner provides sales invoices to the grid company for the settlement of the electricity consumed/EBS/. Neither mistakes nor malfunction of main meters and back-up meters have been observed during this monitoring period. The data aggregation procedure applied by the PP is shown as follow: 1. The $EG_{in,y,Suqian\ phase\ I}$ is monitored by Meter M1&M3 and M2&M4, the operators read the value from the Meter M1&M3 and M2&M4 at 24:00 per day. Based on the difference between the two meter values on 0:00 (24:00 of yesterday) and 24:00 for that day the power consumption for that day is determined. Accordingly the operator issues the daily reports. The daily reports record the quantities of gross power consumed per day (DAL-2=ODL). 2. Based on the daily reports for a month, the PP issues a corresponding monthly report. The sum of the quantities of power consumption per day is the final result as shown in the monthly report (DAL-1). 3. Based on the monthly reports, the final monthly value was reported in the monitoring report (DAL0). *Verifier´s action:* It was verified by on-site interview and observations and cross checking with calibration records, registered PDD and applied		

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
		methodology against the ER calculation spreadsheet. Furthermore, the following actions have been taken by the verification team to check the correctness of the data aggregation. The reported value in the MR (DAL0) has been recalculated by the verification team based on the values from the monthly reports (DAL-1). Based on monthly reports and the underlying original data (ODL), the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the daily and monthly reports have been verified. The values have been crosscheck with records for purchased electricity. *Conclusion:* The measurement method is in line with the registered PDD and the applied methodology AMS-I.D version 17.0.		
b) Accuracy and QA/QC Procedure ***(VVS, §§ 237-241)*** *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line*	/CAL/ /CMA/ /EBS/ /MRD/ /NS-METER/ /JJG/ /TCR/	*Description:* Meters M1', M2 and M4 have an accuracy of 0.5s, M1, M3 and M3' have an accuracy of 0.2s. Back-up meter M1' and M3' are installed in the same location with M1 and M3 for back-up and record relevant data every day. The calibration of M1&M3, M1'&M3' and M2, M4 was performed yearly by a qualified 3rd party entity according to national industry standard /NS-METER/&/JJG/ and records maintained. QA/QC procedure for meter calibration maintenance and recording; procedure for monitoring staff training and competence were established and implemented. The data flow	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
with the latest EB guidance.		and protection process was observed during the on-site verification. In case the main meter is out of order the backup meter readings will be applied. QA/QC procedure for check the calculation was done by the internal audit of the project. *Verifier´s action:* It was verified by cross checking the monthly power invoices, clarification by the grid company, meter readings and calibration records against the MR, Internal audit record and ER sheet against the MR. *Conclusion:* The accuracy of equipment used for monitoring is checked as controlled and calibrated in accordance with the monitoring plan. And the relevant QA/QC procedure has been met.		
c) Correctness ***(VVS, §§ 233, 236)*** *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /EBS/ /MRD/ /QA/ /LOG/ /XLS/	☒ Correct ☐ Not correct (initial assessment) *Description:* The power purchased from the grid by the Project Suqian phase I ($EG_{in,y,Suqian\ phase\ I}$) during period 2012-04-01 to 2013-03-31 is reported in the MR based on the monthly reports. The records for purchased electricity were used as cross-check. *Verifier´s action:* By means of checking the ER-spreadsheet against the monthly power balance sheets confirmed by grid company and meter reading records, the internal audit record and daily log. *Conclusion:*	OK	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		The correctness is confirmed.		
D.2.4. $EG_{facility,y,Suqian\ phase\ II}$		**Quantity of net electricity supplied to the Grid by Suqian Phase II Project**		
a) Measurement / Determination method ***(VVS, §§ 233, 236)*** *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /PDD/ /AMS-I.D/ /XLS/	*Description:* $EG_{facility,y,\ Suqian\ phase\ II}$ is calculated by the following : $EG_{facility,y,Suqian\ phase\ II} = EG_{ex,y,Suqian\ phase\ II} - EG_{in,y,Suqian\ phase\ II}$ Where: $EG_{ex,y,Suqian\ phase\ II}$ = Electricity supplied to the grid by Suqian Phase II Project $EG_{in,y,Suqian\ phase\ II}$ = Electricity consumed by Suqian Phase II Project importing from the grid *Verifier´s action:* The MR is checked against the registered PDD, and cross-check by on-site investigation. *Conclusion:* The measurement method is in line with the registered PDD and the applied methodology AMS-I.D version 17.0.	OK	OK
b) Accuracy and QA/QC Procedure ***(VVS, §§ 237-241)*** *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have*	/TCR/ /EBS/ /XLS/	*Description:* The value is calculated. QA/QC procedure for calculation is carried out by internal audit. After the operator record the basic data, CDM manager will check the calculation results to confirm if it is OK. *Verifier´s action:* It was verified by cross checking the monthly power invoices,	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
been made for calculating ERs. *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.*		meter readings against the MR, Internal audit record and ER sheet against the MR. *Conclusion:* The QA/QC procedure of the calculation is confirmed as appropriate.		
c) Correctness ***(VVS, §§ 233, 236)*** *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /EBS/ /MRD/ /QA/ /LOG/ /XLS/ /TCR/	☒ Correct ☐ Not correct (initial assessment) *Description:* The electricity of $EG_{facility,y,Suqian\ phase\ II}$ during period 2012-04-01 to 2013-03-31 is reported in the MR based on the calculation of $EG_{facility,y,Suqian\ phase\ II} = EG_{ex,y,Suqian\ phase\ II} - EG_{in,y,Suqian\ phase\ II}$. No incorrect calculation was detected during the monitoring period. *Verifier´s action:* By means of checking the ER-spreadsheet against the monthly invoices, monthly power balance sheets confirmed by grid company and meter reading records, the internal audit record and daily log. *Conclusion:* The value given in the monitoring report is verified as correct.	OK	OK
D.2.5. $EG_{ex,y,Suqian\ phase\ II}$		**Electricity supplied to the grid by Suqian Phase II Project**		
a) Measurement / Determination method ***(VVS, §§ 233, 236)*** *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied*	/IM01/ /PDD/ /AMS-I.D/ /CAL/	*Description:* $EG_{ex,y,Suqian\ phase\ II}$ is measured continuously by Main Meter M5 and Back-up meter M5'. Back-up meter M5' is used as a cross-check to the values measured by the Main meter. The Grid Company and the project owner read the Main Meter jointly, and	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
data aggregation trails (from ODL to data aggregation level zero (DAL0)). *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/XLS/	record the data at 24:00 h on the last day of every month. Then, the electricity balance sheets/EBS/ issued by the grid company are delivered to the project owner. After confirming the electricity quantity, the project owner provides sales invoices to the grid company for the settlement of the electricity revenue/EBS/. Neither mistakes nor malfunction of main meter and back-up meter have been observed during this monitoring period. The data aggregation procedure applied by the PP is shown as follow: 1. The $EG_{ex,y,Suqian\ phase\ II}$ is monitored by Meter M5, the operators read the value from the Meter M5 at 24:00 per day. Based on the difference between the two meter values on 0:00 (24:00 of yesterday) and 24:00 for that day the power supplied for that day is determined. Accordingly the operator issues the daily reports. The daily reports record the quantities of gross power supplied per day (DAL-2=ODL). 2. Based on the daily reports for a month, the PP issues a corresponding monthly report. The sum of the quantities of gross power supplied per day is the final result as shown in the monthly report (DAL-1). 3. Based on the monthly reports, the final monthly value was reported in the monitoring report (DAL0). *Verifier´s action:* It was verified by on-site interview and observations and cross checking with calibration records, registered PDD and applied methodology against the ER calculation spreadsheet. Furthermore, the following actions have been taken by the verification team to check the correctness of the data		

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		aggregation. The reported value in the MR (DAL0) has been recalculated by the verification team based on the values from the monthly reports (DAL-1). Based on monthly reports and the underlying original data (ODL), the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the daily and monthly reports have been verified. The values have been crosscheck with electricity sales invoices. *Conclusion:* The measurement method is in line with the registered PDD and the applied methodology AMS-I.D version 17.0.		
b) Accuracy and QA/QC Procedure ***(VVS, §§ 237-241)*** *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.*	/CAL/ /CMA/ /EBS/ /MRD/ /NS-METER/ /JJG/ /TCR/	*Description:* Meters M5 and M5' have an accuracy of 0.2s. Back-up meter M5' is installed at the same location as M5 which records relevant data every day. The calibration of M5 and M5' was performed yearly by a qualified 3rd party entity according to national industry standard /NS-METER/&/JJG/ and records maintained. QA/QC procedure for meter calibration maintenance and recording; procedure for monitoring staff training and competence were established and implemented. The data flow and protection process was observed during the on-site verification. In case the main meter is out of order the backup meter readings will be applied. QA/QC procedure for check the calculation was done by the internal audit of the project.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
		Verifier´s action: It was verified by cross checking the monthly power invoices, clarification by the grid company, meter readings and calibration records against the MR, Internal audit record and ER sheet against the MR. *Conclusion:* The accuracy of equipment used for monitoring is checked as controlled and calibrated in accordance with the monitoring plan.		
c) Correctness ***(VVS, §§ 233, 236)*** *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /EBS/ /MRD/ /QA/ /LOG/ /XLS/	☒ Correct ☐ Not correct (initial assessment) *Description:* The power supplied to the grid by the Project Suqian phase II ($EG_{ex,y,Suqian\ phase\ II}$) during period 2012-04-01 to 2013-03-31 is reported in the MR based on the monthly reports. The sales invoices were used as cross-check. *Verifier´s action:* By means of checking the ER-spreadsheet against the monthly invoices, monthly power balance sheets confirmed by grid company and meter reading records, the internal audit record and daily log. *Conclusion:* The correctness is confirmed.	OK	OK
D.2.6. $EG_{in,y,Suqian\ phase\ II}$		**Electricity consumed by Suqian Phase II Project importing from the grid**		
a) Measurement / Determination method	/IM01/	*Description:*	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
(VVS, §§ 233, 236) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/PDD/ /AMS-I.D/ /CAL/ /XLS/	$EG_{in,y,Suqian\ phase\ II}$ is measured continuously by Main meters M5, Backup meters M5' and Meter M6 (installed at backup line). Back-up meter M5' is used as a cross-check to the values measured by the Main meter. The Grid Company and the project owner read the Main Meter and Meter M6 jointly, and record the data at 24:00 h on the last day of every month. Then, the electricity balance sheets/EBS/ issued by the grid company are delivered to the project owner. After confirming the electricity quantity, the project owner provides sales invoices to the grid company for the settlement of the electricity consumed/EBS/. Neither mistakes nor malfunction of main meters and back-up meters have been observed during this monitoring period. The data aggregation procedure applied by the PP is shown as follow: 1. The $EG_{in,y,Suqian\ phase\ II}$ is monitored by Meter M5 and M6, the operators read the value from the Meter M5 and M6 at 24:00 per day. Based on the difference between the two meter values on 0:00 (24:00 of yesterday) and 24:00 for that day the power consumption for that day is determined. Accordingly the operator issues the daily reports. The daily reports record the quantities of gross power consumed per day (DAL-2=ODL). 2. Based on the daily reports for a month, the PP issues a corresponding monthly report. The sum of the quantities of power consumption per day is the final result as shown in the monthly report (DAL-1). 3. Based on the monthly reports, the final monthly value was reported in the monitoring report (DAL0). *Verifier´s action:* It was verified by on-site interview and observations and cross		

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
		checking with calibration records, registered PDD and applied methodology against the ER calculation spreadsheet. Furthermore, the following actions have been taken by the verification team to check the correctness of the data aggregation. The reported value in the MR (DAL0) has been recalculated by the verification team based on the values from the monthly reports (DAL-1). Based on monthly reports and the underlying original data (ODL), the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the daily and monthly reports have been verified. The values have been crosscheck with records for power purchased. *Conclusion:* The measurement method is in line with the registered PDD and the applied methodology AMS-I.D version 17.0.		
b) Accuracy and QA/QC Procedure ***(VVS, §§ 237-241)*** *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the*	/CAL/ /CMA/ /EBS/ /MRD/ /NS-METER/ /JJG/ /TCR/	*Description:* Meters M5 and M5' have an accuracy of 0.2s and Meter M6 (installed at backup line) has an accuracy of 1.0. Back-up meter M5' is installed in the same location with M5 for back-up and record relevant data every day. The calibration of M5, M5' and M6 was performed yearly by a qualified 3rd party entity /NS-METER/&/JJG/ according to national industry standard and records maintained. QA/QC procedure for meter calibration maintenance and recording; procedure for monitoring staff training and	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
monitoring equipment has been carried out in line with the latest EB guidance.		competence were established and implemented. The data flow and protection process was observed during the on-site verification. In case the main meter is out of order the backup meter readings will be applied. QA/QC procedure for check the calculation was done by the internal audit of the project. *Verifier´s action:* It was verified by cross checking the monthly power invoices, clarification by the grid company, meter readings and calibration records against the MR, Internal audit record and ER sheet against the MR. *Conclusion:* The accuracy of equipment used for monitoring is checked as controlled and calibrated in accordance with the monitoring plan.		
c) Correctness ***(VVS, §§ 233, 236)*** *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /EBS/ /MRD/ /QA/ /LOG/ /XLS/	☒ Correct ☐ Not correct (initial assessment) *Description:* The power purchased from the grid by the Project Suqian phase II ($EG_{in,y,Suqian\ phase\ II}$) during period 2012-04-01 to 2013-03-31 is reported in the MR based on the monthly reports. The records for purchased electricity were used as cross-check. *Verifier´s action:* By means of checking the ER-spreadsheet against the monthly power balance sheets confirmed by grid company and meter reading records, the internal audit record and daily log. *Conclusion:*	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
		The correctness is confirmed.		
D.2.7. $EG_{facility,y,Huaining}$		**Quantity of net electricity supplied to the Grid by Huaining Project**		
a) Measurement / Determination method ***(VVS, §§ 233, 236)*** *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /PDD/ /AMS-I.D/ /XLS/	*Description:* $EG_{facility,y,Huaining}$ is calculated by the following : $EG_{facility,y,Huaining} = EG_{ex,y,Huaining} - EG_{in,y,Huaining}$ Where: $EG_{ex,y,Huaining}$ = Electricity supplied to the grid by Huaining Project $EG_{in,y,Huaining}$ = Electricity consumed by Huaining Project importing from the grid *Verifier´s action:* The MR is checked against the registered PDD, and cross-check by on-site investigation. *Conclusion:* The measurement method is in line with the registered PDD and the applied methodology AMS-I.D version 17.0.	OK	OK
b) Accuracy and QA/QC Procedure ***(VVS, §§ 237-241)*** *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have*	/TCR/ /EBS/ /XLS/	*Description:* The value is calculated. QA/QC procedure for calculation is carried out by internal audit. After the operator record the basic data, CDM manager will check the calculation results to confirm if it is OK. *Verifier´s action:*	OK	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
been made for calculating ERs. *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.*		It was verified by cross checking the monthly power invoices, meter readings against the MR, Internal audit record and ER sheet against the MR. *Conclusion:* The QA/QC procedure of the calculation is confirmed as appropriate.		
c) Correctness ***(VVS, §§ 233, 236)*** *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /EBS/ /MRD/ /QA/ /LOG/ /XLS/ /TCR/	☒ Correct ☐ Not correct (initial assessment) *Description:* The electricity of $EG_{facility,y,Huaining}$ during period 2012-04-01 to 2013-03-31 is reported in the MR based on the calculation of $EG_{facility,y,Huaining} = EG_{ex,y,Huaining} - EG_{in,y,Huaining}$. No incorrect calculation was detected during the monitoring period. *Verifier´s action:* By means of checking the ER-spreadsheet against the monthly invoices, monthly power balance sheets confirmed by grid company and meter reading records, the internal audit record and daily log. *Conclusion:* The value given in the monitoring report is verified as correct.	OK	OK
D.2.8. $EG_{ex,y,Huaining}$		**Electricity supplied to the grid by Huaining Project**		
a) Measurement / Determination method ***(VVS, §§ 233, 236)*** *Describe how the monitoring parameter was measured / determined. Focus primarily on the*	/IM01/ /PDD/ /AMS-I.D/	*Description:* $EG_{ex,y,Huaining}$ is measured continuously by Main Meter M7 and Back-up meter M7'. Back-up meter M7' is used as a cross-check to the values measured by the Main meter. The Grid Company	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)). *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/CAL/ /XLS/	and the project owner read the Main Meter jointly, and record the data at 24:00 h on the last day of every month. Then, the electricity balance sheets/EBS/ issued by the grid company are delivered to the project owner. After confirming the electricity quantity, the project owner provides sales invoices to the grid company for the settlement of the electricity revenue/EBS/. Neither mistakes nor malfunction of main meter and back-up meter have been observed during this monitoring period. The data aggregation procedure applied by the PP is shown as follow: 1. The $EG_{ex,y,Huaining}$ is monitored by Meter M7, the operators read the value from the Meter M7 at 24:00 per day. Based on the difference between the two meter values on 0:00 (24:00 of yesterday) and 24:00 for that day the power supplied for that day is determined. Accordingly the operator issues the daily reports. The daily reports record the quantities of gross power supplied per day (DAL-2=ODL). 2. Based on the daily reports for a month, the PP issues a corresponding monthly report. The sum of the quantities of gross power supplied per day is the final result as shown in the monthly report (DAL-1). 3. Based on the monthly reports, the final monthly value was reported in the monitoring report (DAL0). *Verifier´s action:* It was verified by on-site interview and observations and cross checking with calibration records, registered PDD and applied methodology against the ER calculation spreadsheet. *Conclusion:* The measurement method is in line with the registered PDD and		

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
		the applied methodology AMS-I.D version 17.0.		
b) Accuracy and QA/QC Procedure ***(VVS, §§ 237-241)*** *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.*	/CAL/ /CMA/ /EBS/ /MRD/ /NS-METER/ /JJG/ /TCR/	*Description:* Meter M7 and M7' have an accuracy of 0.2s. The meter readings are recorded monthly at 24:00h on the last day of each month. Back-up meter M7' is installed at the same location as M7 which records relevant data every day. The calibration of M7 and M7' was performed yearly by a qualified 3rd party entity according to national industry standard /NS-METER/&/JJG/ and records maintained. QA/QC procedure for meter calibration maintenance and recording; procedure for monitoring staff training and competence were established and implemented. The data flow and protection process was observed during the on-site verification. In case the main meter is out of order the backup meter readings will be applied. QA/QC procedure for check the calculation was done by the internal audit of the project. *Verifier´s action:* It was verified by cross checking the monthly power invoices, clarification by the grid company, meter readings and calibration records against the MR, Internal audit record and ER sheet against the MR. *Conclusion:* The accuracy of equipment used for monitoring is checked as controlled and calibrated in accordance with the monitoring plan.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
c) Correctness ***(VVS, §§ 233, 236)*** *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /EBS/ /MRD/ /QA/ /LOG/ /XLS/	☒ Correct ☐ Not correct (initial assessment) *Description:* The power supplied to the grid by the Project Huaining (***$EG_{ex,y,Huaining}$***) during period 2012-04-01 to 2013-03-31 is reported in the MR based on the monthly reports. The sales invoices were used as cross-check. *Verifier´s action:* By means of checking the ER-spreadsheet against the monthly invoices, monthly power balance sheets confirmed by grid company and meter reading records, the internal audit record and daily log. *Conclusion:* The correctness is confirmed.	OK	OK
D.2.9. *$EG_{in,y,Huaining}$*		**Electricity consumed by Huaining Project importing from the grid**		
a) Measurement / Determination method ***(VVS, §§ 233, 236)*** *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination*	/IM01/ /PDD/ /AMS-I.D/ /CAL/ /XLS/	*Description:* ***$EG_{in,y,Huaining}$*** is measured continuously by Main meters M7, Backup meters M7' and Meter M8 (installed at backup line). Back-up meter M7' is used as a cross-check to the values measured by the Main meter. The Grid Company and the project owner read the Main Meter and Meter M8 jointly, and record the data at 24:00 h on the last day of every month. Then, the electricity balance sheets/EBS/ issued by the grid company are delivered to the project owner. After confirming the electricity quantity, the project owner provides sales invoices to the grid company for the settlement of the electricity consumed/EBS/.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
methods have been used. Furthermore, verify the frequency of measurements as per the requirements. *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*		Neither mistakes nor malfunction of main meters and back-up meters have been observed during this monitoring period. The data aggregation procedure applied by the PP is shown as follow: 1. The $EG_{in,y,Huaining}$ is monitored by Meter M7 and M8, the operators read the value from the Meter M7 and M8 at 24:00 per day. Based on the difference between the two meter values on 0:00 (24:00 of yesterday) and 24:00 for that day the power consumption for that day is determined. Accordingly the operator issues the daily reports. The daily reports record the quantities of gross power consumed per day (DAL-2=ODL). 2. Based on the daily reports for a month, the PP issues a corresponding monthly report. The sum of the quantities of power consumption per day is the final result as shown in the monthly report (DAL-1). 3. Based on the monthly reports, the final monthly value was reported in the monitoring report (DAL0). *Verifier´s action:* It was verified by on-site interview and observations and cross checking with calibration records, registered PDD and applied methodology against the ER calculation spreadsheet. Furthermore, the following actions have been taken by the verification team to check the correctness of the data aggregation. The reported value in the MR (DAL0) has been recalculated by the verification team based on the values from the monthly reports (DAL-1). Based on monthly reports and the underlying original data (ODL), the verification team calculated the data		

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
		aggregation completely independent from the calculation provided by the PP. 100% of the daily and monthly reports have been verified. The values have been crosscheck with records for power purchased. *Conclusion:* The measurement method is in line with the registered PDD and the applied methodology AMS-I.D version 17.0.		
b) Accuracy and QA/QC Procedure ***(VVS, §§ 237-241)*** *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.*	/CAL/ /CMA/ /EBS/ /MRD/ /NS-METER/ /JJG/ /TCR/	*Description:* Meter M7 and M7' have an accuracy of 0.2s and M8 has an accuracy of 1.0. The meter readings are recorded monthly at 24:00h on the last day of each month. Back-up meter M7' is installed in the same location with M7 for back-up and record relevant data every day. The calibration of M7, M7' and M8 was performed yearly by a qualified 3rd party entity /NS-METER/&/JJG/ according to national industry standard and records maintained. QA/QC procedure for meter calibration maintenance and recording; procedure for monitoring staff training and competence were established and implemented. The data flow and protection process was observed during the on-site verification. In case the main meter is out of order the backup meter readings will be applied. QA/QC procedure for check the calculation was done by the internal audit of the project. *Verifier´s action:* It was verified by cross checking the monthly power invoices,	OK	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		clarification by the grid company, meter readings and calibration records against the MR, Internal audit record and ER sheet against the MR. *Conclusion:* The accuracy of equipment used for monitoring is checked as controlled and calibrated in accordance with the monitoring plan.		
c) Correctness ***(VVS, §§ 233, 236)*** *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /EBS/ /MRD/ /QA/ /LOG/ /XLS/	☒ Correct ☐ Not correct (initial assessment) *Description:* The power purchased from the grid by the Project Huaining ($EG_{in,y,Huaining}$) during period 2012-04-01 to 2013-03-31 is reported in the MR based on the monthly reports. The records for purchased electricity were used as cross-check. *Verifier´s action:* By means of checking the ER-spreadsheet against the monthly power balance sheets confirmed by grid company and meter reading records, the internal audit record and daily log. *Conclusion:* The correctness is confirmed.	OK	OK
D.3. Sampling				
a) Implementation of sampling plan ***(EB70 Annex 11; D3)*** *Check whether the PP has applied a sampling approach to determine the monitored values (as per section D.2 above).*		☒ No sampling approach has been used by the PP to determine the monitored parameters *Description:* N/A *Verifier´s action:* N/A	N/A	N/A

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
If this is the case, please provide an assessment whether the PPs have correctly and sufficiently described the implemented sampling plan including *a) Description of the implemented sampling design* *b) Collected data* *c) Analysis of collected data* *Demonstration on whether the required confidence/precision has been met.*		*Conclusion:* N/A		
b) Sampling during verification *In case the VT has applied a sampling approach in the course of the verification the approach shall be described for each parameter.*		☒ No sampling approach has been used by the VT to verify the monitored parameters *Description:* N/A *Verifier´s action:* N/A *Conclusion:* N/A	N/A	N/A
E. Calculation of Emission reductions				
E.1. Traceability ***(VVS, §§ 212, 214)*** *Assess if the calculation is fully traceable. In case of complex calculations an Excel calculation spread-sheet shall be used. All applied formulae must be visible.*	/XLS/	*Description:* An unprotected ER calculation spreadsheet has been provided. All applied formulas are visible. *Verifier´s action:* The ER calculation spreadsheet has been checked. *Conclusion:* The calculation is completely traceable.	OK	OK

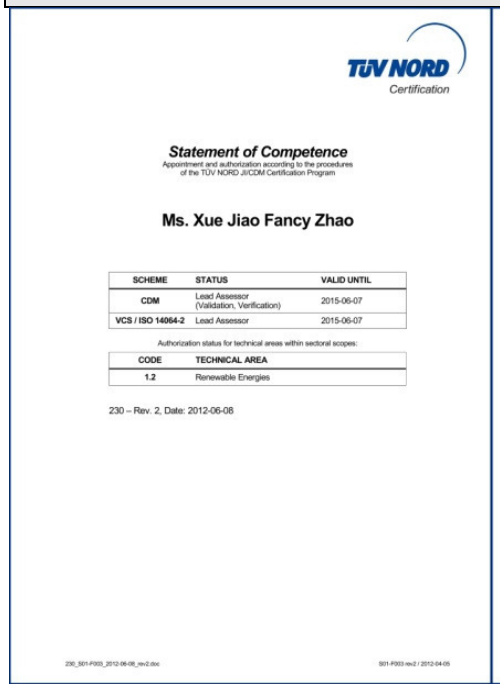
Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
E.2. Parameter consistency ***(VVS, § 214)*** *Assess whether all internal and external parameters and data used for calculation are applied consistently in the monitoring report and the calculation spreadsheet?* *Consider only the correct data exchange between the monitoring report and the calculation spreadsheet (if any). Further ensure the consistency of notations for all parameters in the PDD, MR, calculation spreadsheet.*	/XLS/ /PDD/ /MR/ /CAL/ /EBS/ /MRD/	*Description:* The emission factor is used as combined margin (CM), determined as combination of operating margin (OM) and build margin (BM) and calculated ex-ante in the validated PDD and remains fixed throughout the first crediting period. The actual net electricity supplied by project activity in calculation sheet is consistent with the MR. *Verifier´s action:* The values in the ER calculation spreadsheet were checked against power invoices, meter readings and calibration records, the registered PDD and the MR. *Conclusion:* All parameters and data used for calculation are applied consistently in the monitoring report and the calculation spreadsheet.	OK	OK
E.3. Correctness of calculation ***(VVS, §§ 235-236)*** *Check if the applied formulae and methods for calculating baseline emissions, project emissions and leakage are in accordance with the monitoring plan and / or the approved methodology.* *Assess whether the provided calculations are complete and reflect all requirements of the monitoring plan.* *Check especially that no standard or old values have*	/XLS/ /PDD/ /AMS-I.D/	*Description:* According to applied methodology AMS-I.D. Ver.17.0, the Emission Reduction is calculated as followings: ER_y (tCO_{2e}/y) = $BE_y - PE_y - LE_y$ Where: ER_y are the emission reductions BE_y are the baseline emissions. PE_y are the project emissions LE_y are the leakage emissions Baseline emission: $BE_y = EG_{BL,y} \times EF_{CO2,grid,y}$ Where: $EF_{CO2,grid,y}$ is the grid emission factor in year *y*.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
been used for calculation where calculations based on up-to-date data is required.		$EG_{BL,y}$ is the Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y. Project emission: PE_y=0 Leakage emission: LE_y=0 ER_y (tCO_{2e}/y) = BE_y – 0– 0 = BE_y The emission reduction is based on the monitored data measured during this monitoring period. The baseline emissions are calculated as product of net supplied electricity and the emission factor. The net supplied electricity was calculated through the data of Meter readings monthly. The emission factor is fixed for the first crediting period. *Verifier´s action:* The ER calculation spreadsheet and MR were checked with the MP and applied methodology. The net supplied electricity was cross checked through the monthly invoices and electricity transaction notes confirmed by the grid company. *Conclusion:* The calculation is correct and in line with the registered PDD and methodology AMS-I.D Version 17.0.		
E.4. Emission reductions table ***(EB 70 Annex 11, E.4)*** *Check if the MR includes a summary table of the emission reductions calculation specifiying separately*		☒ The MR includes in section E.4 a summary table of the emission reductions calculation. ☒ The summary table specified the total baseline, project and leakage emissions as well as the total emission reductions separately.	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
- *Total baseline emissions* - *Total project emissions:* - *Total leakage* - *Total emission reductions.* *Assess whether the values are correct or need to be revised as a consequence of issues identified above.*		☒ The values as specified in the ER summary table are correct; no issues have been identified during the verification which require changes in the ER calculation. ☐ During the verification issues with impact on the ER calculation have been identified. Thus subject to the closure of above listed findings the summary table in E.4 needs to be revised.		
E.5. Comparison with ex-ante determined emission reductions ***(EB 70 Annex 11, E.5; E.6)*** *Check if the MR includes a comparison of actual values of the monitoring period with the estimations in the registered PDD.* *Check further whether in case of an increase an appropriate explanation is included in the MR.* *Assess in case of a significant increase whether this is due to technical or organisational changes within or outside the control of the PP which might require a notification / approval of changes (as per EB 48 Annex 66/67).*	/XLS/ /MR/ /PDD/	*Description:* The MR includes a comparison of actual values of the monitoring period with the estimations in the registered PDD. The actual ER is lower than the value estimated in the PDD for the bundled project and the actual ER of each sub-project is also lower than the value estimated in the PDD separately (from 2012-04-01 to 2013-03-31). *Verifier´s action:* By means of MR, ER sheet, Electricity balance sheet and registered PDD check. *Conclusion:* The MR includes a comparison of actual values of the monitoring period with the estimations in the registered PDD and it is concluded that there is no risk of the great increase.	OK	OK
E.6. ER during the 1st commitment period and the period from 1 January 2013 onwards	/XLS/ /MR/	☒ *The MR in section E.7 includes a summary table of the ER breakdown* *a) ER up to 2012-12-31 and*	OK	OK

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
(EB 70, Annex 11, E.7) *Check if the MR includes in chapter E.7 a breakdown of the actual ER into* *a) ER up to 2012-12-31 and* *b) ER from 2013-01-01 onwards* *The ERs for each period should be determined as per the actual generation. In cases where this is not possible or a cap has been applied a proportional (time related) approach should be chosen.*		*b) ER from 2013-01-01 onwards* ☒ *The breakdown of the ERs during the first commitment period and from 2013-01-01 onwards is as follows:* ☐ *The ER have completely been generated during the first commitment period* ☐ *The ERs have completely been generated from 2013-01-01 onwards,* ☒ *The ERs have partly been generated during the first commitment period and partly from 2013-01-01 onwards.* ☒ *The breakdown of the ERs is correct, considering the applicable guidance.*		

ANNEX 2: STATEMENTS OF COMPETENCE OF INVOLVED PERSONNEL



TÜV NORD Certification

Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

Ms. Xue Jiao Fancy Zhao

SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2015-06-07
VCS / ISO 14064-2	Lead Assessor	2015-06-07

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewable Energies

230 – Rev. 2, Date: 2012-06-08

230_S01-F003_2012-06-08_rev2.doc S01-F003-rev2 / 2012-04-05

TÜV NORD Certification

Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

Ms. Miao Yu

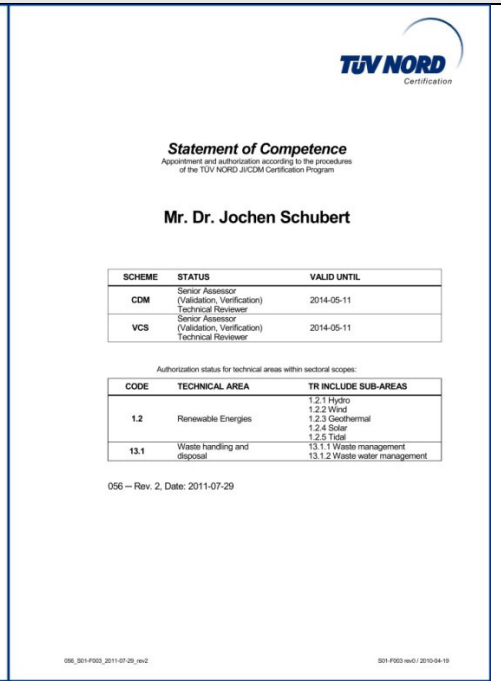
SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2015-06-27
VCS / ISO 14064-2	Lead Assessor	2015-06-27

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewable Energies

164 – Rev. 3, Date: 2012-06-28

164_S01-F003_2012-06-28_rev3.doc S01-F003-rev2 / 2012-04-05



TÜV NORD Certification

Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

Mr. Dr. Jochen Schubert

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2014-05-11
VCS	Senior Assessor (Validation, Verification) Technical Reviewer	2014-05-11

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA	TR INCLUDE SUB-AREAS
1.2	Renewable Energies	1.2.1 Hydro 1.2.2 Wind 1.2.3 Geothermal 1.2.4 Solar 1.2.5 Tidal
13.1	Waste handling and disposal	13.1.1 Waste management 13.1.2 Waste water management

056 – Rev. 2, Date: 2011-07-29

056_S01-F003_2011-07-29_rev2 S01-F003-rev0 / 2010-04-19