



**Verified Carbon
Standard**

SONG ONG HYDROPOWER PROJECT



Document Prepared By: LGAI Technological Center, S.A. (Applus+ Certification)

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Summary:

Verification purpose: The main purpose of this project activity is to generate clean form of electricity through Hydro power source. Song Ong Hydropower Joint Stock Company has set up a 8.1 MW (3 X 2.7 MW) hydro power project across Ong river in Quang Son commune, Ninh Son district in Ninh Thuan province of Vietnam.. The project activity started supplying electricity to the national grid on 24/03/2009. The electricity generated from the project activity is supplied to Vietnam National Grid as per Power Purchase Agreement signed with the Electricity Corporation of Vietnam (EVN).

Start date of the project activity is 24/03/2009. This is the day on which the project has accounted for emission reductions as per the registered VCS PD dated 29/03/2012 and final validation report version 02 dated 29/03/2012. An undertaking has been submitted by PP for double counting would never happens with the any other GHG program. During the current monitoring period, project activity undergoes continued operation and no major breakdown had taken place.

This is 2nd monitoring under VCS and covers this activity from 01/03/2012 to 28/02/2018 (inclusive both days). During the Current Monitoring Period the project activity has supplied 237,409.90 MWh of electricity to the national grid, and thus contributing to the GHG reductions 127,120 tCO_{2e}.

Thus, VCS crediting period is of 10 years. The start date of crediting period is 24/03/2009¹ and 23/03/2019 is the end date of the crediting period.

A risk-based approach has been followed to perform this verification activity. In the course of verification, 05 Corrective Action requests (CAR), 00 Clarification Requests (CLs) and 00 Forward action requests (FARs) were raised and successfully closed. The review of the Monitoring report and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and PP have provided DOE with sufficient evidence to verify the fulfilment of the stated criteria of VCS.

LGAI Technological Center S.A. (Applus+ Certification) (Hereafter referred as Applus+ Certification) has been appointed by “Song Ong Hydropower Joint Stock Company” to perform the 2nd periodic verification of the “Song Ong Hydropower Project” under VCS standard and guideline version 4.0. The objective of this verification activity is to have an independent third party for the assessment of the project design, monitoring report and Final Verification report and to ensure a thorough assessment of the proposed project activity against the applicable CDM and VCS requirements. In particular;

¹ As per VCS PD

- the project's baseline is assessed against “AMS-I.D version 16”
- the project’s monitoring plan is assessed against “AMS-I.D version 16”
- the projects compliance with, the requirements of Article 12 of the Kyoto Protocol, the CDM Modalities and Procedures as agreed in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other relevant rules, including the Host Country legislation and sustainability criteria along with VCS guideline and standard, version 4.0
- CDM Validation and Verification Standard for project activities, version 02.0
- CDM Project Standard for project activities, version 02.0
- CDM project cycle procedure for project activities, version 02.0
- VCS standard, version 4.0
- VCS guideline, version 4.0

Verification is a requirement for all VCS projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of verified emission reductions (VERs).

The scope of the verification is the independent and objective review of the monitoring report (MR). The MR is reviewed against the relevant criteria (see above) and decisions by the CDM Executive Board and VCS executive board, including the approved baseline and monitoring methodology. The verification was based on the guidance given in the CDM Validation and Verification Standard for the project activities, version 02.0, review against registered PD and Final Validation report, CDM Project Standard for project activities, version 02.0; CDM Project Cycle Procedure for project activities, version 02.0 and VCS program guideline and standard version 4.0.

The assessment team has employed a risk-based approach to assess the completeness and accuracy of the claims and conservativeness of the assumptions in the MR. The main focus of the assessment team is to identify the significant risks for the project implementation and the generation of VERs. The verification is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the monitoring report combined.

The only purpose of the verification is its usage during the issuance process as part of the VCS project cycle. Therefore, LGAI Technological Center S.A. (Applus+ Certification) can't be held liable by any party for decisions made or not made based on the verification opinion, which will go beyond that purpose.

The verification has been planned and organized to achieve a Reasonable Level of assurance as per the requirement of VCS. No sampling procedure applied for site visit or document verifications. The entire documents checked/plant verification conducted to arrive at positive verification conclusions.

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1 INTRODUCTION

1.1 Objective

LGAI Technological Center S.A. (Hereinafter referred as Applus+ Certification) has been appointed by “Song Ong Hydropower Joint Stock Company” to perform the 2nd periodic verification of the project entitled “Song Ong Hydropower Project” under VCS standard and guideline version 4.0. The objective of this verification activity is to have an independent third party for the assessment of the project design, monitoring report and final verification report and to ensure a thorough assessment of the proposed project activity against the applicable CDM and VCS requirements. In particular;

- the project's baseline is assessed against “AMS-I.D version 16”
- the project's monitoring plan is assessed against “AMS-I.D version 16”
- the project's compliance with the requirements of Article 12 of the Kyoto Protocol, the CDM Modalities and Procedures as agreed in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other relevant rules, including the Host Country legislation and sustainability criteria along with VCS guideline and standard version 4.0
- CDM Validation and Verification Standard for project activities, version 02.0
- CDM Project Standard for project activities, version 02.0
- CDM project cycle procedure for project activities, version 02.0
- VCS standard, version 4.0
- VCS guideline, version 4.0

Verification is a requirement for all VCS projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of estimated verified emission reductions (VERs).

1.2 Scope and Criteria

The scope is defined as an independent and objective review of the Monitoring report (MR) prepared as per the registered PD and registered approved methodology AMS-I.D version 16. The MR is reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords and the relevant decisions by the CDM Executive Board and VCS standard and guideline version 4.0, including the approved baseline and monitoring methodology AMS-I.D version 16.0. The verification was based on the requirements in the CDM validation and verification standard for project activities, Version 02.0, CDM Project Standard for project activities, version 02.0, CDM project cycle procedure for project activities, version 02.0 and VCS program guideline and standard version 4.0

The verification is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the Monitoring report. In line with Guidelines for Application of materiality in verifications, the verification team has conducted a complete verification of all the information presented in the monitoring report and data monitored as presented in the emission reduction calculation spread sheet. It invoices follows the paper trail back to the raw data such as meter reading records and invoices. There are no material errors, overestimation of ER, omission or misstatement. The verification team has reviewed all the documents like commissioning certificates, Joint Balance Sheet, invoices etc.

1.3 Level of Assurance

The verification has been planned and organized to achieve a Reasonable Level of assurance as per the requirement of VCS. The entire documents checked/Power plant verification conducted to arrive at positive verification conclusions

1.4 Summary Description of the Project

The main purpose of this project activity is to generate clean form of electricity through Hydro power source. Song Ong Hydropower Joint Stock Company has set up a 8.1 hydro power project across river *Ong river* in Quang Son commune, Ninh Son district in Ninh Thuan province of Vietnam . The electricity generated from the project activity is supplied to Vietnam National Grid The project activity was commissioned on 24/03/2009. The Power house of the project activity lies between Lat. 11°44'-56N and Long. 108°49'-20' E and Water Intake lies between Lat.11°45'-13'' N and Long. 108°48'-19'E

The Project activity is a hydropower, a renewable energy generation and the electricity generated by the project activity is exported to the National grid. The project will therefore displace an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid. The PP has entered into long term power purchase agreement with the Electricity Corporation of Vietnam (EVN) and electricity is being sold to EVN. The electricity generated by the project activity is supplied to the national grid via a 22 kV line which connects the plant with the Ninh Son 110/22 kV transformer station.

During the Current Monitoring Period from 01/03/2012 to 28/02/2018 (First and last date included) the project activity has supplied 237,409.90 MWh of electricity, and thus contributing to the GHG reductions 127,120 tCO_{2e}.

2 VERIFICATION PROCESS

2.1 Method and Criteria

Verification Process: The project assessment is based on the Clean Development Mechanism Validation and Verification Standard for project activities, version 02.0 and VCS standard and guideline, version 4.0 and is conducted using standard auditing techniques to assess the correctness of the information provided by the project participants. Before the assessment begins, members of the team covering the technical scope(s), sectoral scope(s), and relevant host country experience for evaluating the VCS project activity are appointed.

Once the project is received by the assessment team, the members of the assessment team carried out:

- I. A desk review of the monitoring Report against the registered PD;
- II. Follow-up interviews with project participant;
- III. The resolution of outstanding issues and the issuance of the final verification report and opinion.

The prepared verification report and other supporting documents then undergo an internal quality control at the HQ (Accredited office) before being submitted to the VCS executive board.

In order to ensure transparency, assumptions must be clear and stated explicitly and background material must also be referenced. LGAI Technological Center, S.A. (Applus+ Certification) has developed a specific checklist customized for the project. The checklist demonstrates, in a transparent manner, the project criteria (requirements), discussion on each criterion by the assessment team, and the results from verifying the identified criteria.

Appointment of the assessment team

According to the sectoral scope / technical area and experience in the sectoral or national business environment, LGAI Technological Center S.A. (Applus+ Certification) has composed a project assessment team in accordance with the appointment rules in the internal Quality Management System of LGAI Technological Center S.A. (Applus+ Certification).

The composition of audit team shall be approved by the LGAI Technological Center S.A. (Applus+ Certification) ensuring that the required skills are covered by the team.

The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A) / Auditor in Training (AiT).
- Technical Expert (TE).
- Technical Reviewer (TR).

The sectoral scope / technical area knowledge linked to the applied methodology/ies shall be covered by the assessment team.

Name	Role	SS Coverage	TA Coverage	Financial aspect	Host country experience
Pankaj Kumar	LA/TE	YES	YES	NA	YES
Mr. Simon Shen	TR	YES	YES	NA	NA

The complete list of CVs is included as Appendix 3 of this report.

Document review

The Monitoring Report version 1 submitted by the PP was reviewed against the approved methodology, registered PD, final validation report and other relevant criteria to verify the correctness, credibility, and interpretation of the presented information. Furthermore, a cross-check between information provided and information from other sources has been done. A complete list of all documents and evidence material reviewed is included in this report below in appendix 1.

Follow-up interviews

A remote audit was conducted by LGAI Technological Center S.A. (Applus+ Certification) who performed interviews, telephone conferences with project stakeholders to confirm selected information and to resolve issues identified in the document review. The detail is provided in this report in the below sections.

Resolution of Clarification and Corrective Action Request

The objective of this phase of the Verification was to resolve the requests for corrective actions and clarification and any other outstanding issues which need to be clarified for Applus+ Certification positive conclusion on the Monitoring report. The Corrective Action Requests and Clarification Requests raised by Applus+ Certification were resolved during communications between the Client and Applus+ Certification to guarantee the transparency of the verification process, the concerns raised and responses given are summarized below in the Appendix 2.

The final MR Version 02 submitted by PP on 31/10/2020 serves as the basis for the final assessment presented. Additional changes to the project during the verification process are not considered to be significant with respect to the main CDM/VCS objectives. The two CDM/VCS main objectives are the reduction of anthropogenic GHG emissions and the contribution of sustainable development to the host country

Internal quality control

As final step of a verification of the final documentation including the final verification report and the checklist have to undergo an internal quality control by the technical review committee, i.e. each report has to be finally approved either by the head of the technical review committee

or the deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one to avoid any conflict of Interest.

After confirmation of the project owners the positive verification opinion and relevant documents are submitted to the VCS secretariat through the VCS web-platform.

2.2 Document Review

The details of the document observed during the verification process are listed below in appendix 1 of this report.

2.3 Interviews

A remote audit was conducted for the project activity on 24/10/2020. Remote audit was conducted due to on going COVID-19 pandemic situation in the entire state of India. Taking into account the rules of relevant national and local authorities (local to the DOE offices as well as to locality of the site visits), World Health Organization (WHO) recommendations, policies of the DOE and other relevant travel restrictions and guidance (for example, a requirement to self-isolate upon return). Moreover, The VCS Program does not explicitly mandate site visits as part of the validation and verification process, only that VVBs must achieve a reasonable level of assurance on all validations and verifications (per Section 4.1.2 of the VCS Standard, v4.0).

The DOE has taken alternative measures to reach reasonable level of assurance and conducted remote audit through Skype/Telephone with site personal & consultant (refer section 2.3) with the PP representative. This is also in line with the COVID-19 travel guidance for projects of VERRA².

Technical details & metering/monitoring arrangement verified through onsite photographs/name plates and calibration certificates shared by PP. All the documents were cross checked to ensure conservative estimation of emission reduction.

During the remote audit, the PP representatives were questioned about the implementation of the project activity. Several topics like the verification of commissioning date of meters, the generation, recording, and monitoring of the data and the error accountability were discussed. To cross check the information provided by PP, various documents like technical specifications, commissioning certificates, PPA, JMR sheets, invoice, calibration certificates, s, etc. were also verified. The names of the persons interviewed during remote audit through Skype/9/telephonic interview is given below;

² <https://verra.org/covid-19-travel-guidance/>

Organization	Name of Persons/Designation	Topics discussed	Team Member
Song Ong Hydropower Joint Stock Company	Mr. Le Van Khiem, Production Manager	Project activity implementation	Pankaj Kumar
	Mr. Nguyen Van Phe, Technician	Operation, Calibration, O&M practices, JMR etc.	
	Ms. Dang Minh Hue	LSC mechanism Mechanical maintenance Electrical maintenance Project description Invoicing practices	
EKI Energy	Mr. Prakash Kumar, Manager	MR, ER calculations etc.	
	Mr. Barun Sharma, GM	MR, ER calculations etc.	
	Mr. Tien Do Duc	MR, ER calculations etc.	

2.4 Site Inspections

Duration of Remote Audit: 24/10/2020				
No.	Activity performed on-site	Site location	Date	Team member
1.	Assessment team checked the implementation of the project, Baseline emission, Emission reduction calculation, technical description of the project and Monitoring. Assessment team also checked that whether the monitoring plan as described in the VCS PD is actually practised onsite. Also assessment team checked any change in host country criteria which may affect the baseline of the project activity.	Quang Son commune, Ninh Son district in Ninh Thuan province.	24/10/2020	Pankaj Kumar

2.5 Resolution of Findings

The objective of this phase of the verification was to resolve the requests for corrective actions and clarification and any other outstanding issues which need to be clarified for LGAI Technological Center S.A. (Applus+ Certification)'s positive conclusion on the project design and Monitoring report. The Corrective Action Requests and Clarification Requests raised by LGAI Technological Center S.A. (Applus+ Certification) were resolved during communications between the Client and LGAI Technological Center S.A. (Applus+ Certification) to guarantee the transparency of the validation process, the concerns raised and responses given are summarized below in the appendix 2.

The final MR Version 02 submitted by project owners on 31/10/2020 serves as the basis for the final assessment presented. Additional changes to the project during the verification process are not considered to be significant with respect to the main CDM/VCS objectives. The two CDM/VCS main objectives are the reduction of anthropogenic GHG emissions and the contribution of sustainable development to the host country.

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Project design document and Monitoring report	00	01	00
Description of project activity	00	01	00
Application of selected baseline and monitoring methodology and selected standardized baseline			
- Applicability of methodology and standardized baseline	00	00	00
- Deviation from methodology	00	00	00
- Clarification on applicability of methodology, tool and/or standardized baseline	00	00	00
Project boundary	00	00	00
Establishment and description of baseline scenario	00	00	00

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Demonstration of additionality	00	00	00
Emission reductions	00	01	00
Calibration details	00	01	
Monitoring plan	00	00	00
No Net harm assessment	00	00	
Local stakeholder consultation	00	01	
Others (please specify)	00	00	00
Total	00	05	00

The list of findings and their resolution is presented in appendix 2 of this report.

2.5.1 Forward Action Requests

This is 2nd periodic verification of the project activity and no FAR was raised from previous and during this verification process.

2.6 Eligibility for Validation Activities

This section is not applicable for present verification

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The project activity was registered under Clean Development Mechanism (CDM) of UNFCCC (Ref. number 4117) and CERs were issued from the monitoring period of 01/03/2011 to 29/02/2012 under CDM mechanism. As per MR and undertaking provided, PP would not consider the credit from any other mechanism for the current monitoring plan. The undertaking is provided to confirm that there is no any double accounting for current monitoring period. Further, Assessment team confirms that the project activity is not participating in any other form of environmental credits.

3.2 Methodology Deviations

The project activity used AMS-I.D version 16 which is as per the registered VCS PD/CDM PDD and thus no deviation is sought regarding the methodology. The project complies with all the requirement of the methodology and thus deviation to the methodology is not a requirement for the present project activity.

3.3 Project Description Deviations

PP has applied a deviation in length of crediting period as renewable twice due to typo error in VCS PD. In VCS PD, crediting period is mentioned as fixed for 10 years, Assessment team has check the registered CDM PDD and confirms that the crediting period was chosen as renewable. The deviation request is in line with the para 3.8.7 of VCS standard version 4.0. Thus, acceptable to assessment team.

3.4 Grouped Project

The project do not involve any addition of new project activity and thus the project do not falls under grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

During the remote audit (Skype video call), it was concluded that the project is implemented as per the instruction of the VCS PD and this is verified from the commissioning certificate. During the current monitoring period it was observed that no unforeseen situation evolved which can impact the operation of the project activity. The same was verified through the breakdown summary sheet of the project activity. Scheduled maintenance was carried out as per the instruction of the manufacturer and the same is acceptable to the assessment team.

Project location is confirmed by the assessment team through interview with PP and monitoring report. Assessment team also checked with the photograph of project site containing latitude and longitude of the project site and confirmed that the details as mentioned in the registered PD are correct. The latitude and longitude of the project activity is given below;

Project component	Song Ong hydropower project	
	Latitude	Longitude
Water intake	11° 45' 13"	108° 48' 19"
Power house	11° 44' 56"	108° 49' 20"

The technical specifications have been verified with the photographs of sites and name plates as well as with the technical specifications of hydro turbine and also cross checked from the technical manual of the Manufactures. The technical specification the project activity is given below:

Main parameters	Units	Values
1.Turbine		
• Manufacture		Chongqing Yunhe Industry (Group) Co., Ltd.
• Type		Francis, vertical axis
• Diameter of Runner	m	1.4
• Rated net head	m	27
• Number of turbine	set	03
• Turbine discharge	m ³ /s	11.57
• Efficiency	%	86.91
• Capacity	MW	2.7

• Annual utilisation hours	hour	5.000
2. Generator		
• Manufacturer		Chongqing Yunhe Industry (Group) Co., Ltd.
• Number	set	03
• Type		SF2700-20/3250
• Rated voltage	kV	6.3
• Rated capacity	MW	2.7
• Efficiency	%	95.2
3. Transformer		
• Manufacturer		ABB Ltd.
• Number	set	03
• Type		3 phases, 2 windings
• Rated capacity	MVA	3.5
• Primary voltage	KV	6.3
• Secondary voltage	KV	24
4. Annual river flow	m ³ /s	5.81
5. Expected lifetime of the project	years	30
6. Plant load factor	%	57.08

The start date of the project activity (date on which the project was commissioned i.e. 24/03/2009. This is connected to National grid) in line with the approved VCS PD and VCS Standard version 4.0. .

Assessment team checked the commissioning certificate of all units and confirms that the commissioning dates are correct.

The assessment team confirmed through interview with O & M personal on Skype that there is no changes in to the project design during this monitoring period. It was found that the monitoring plan was implemented as per the requirement of the VCS PD & approved monitoring Plan and applied methodology AMS-I.D version 16. The organisational role and responsibility as mentioned in the registered VCS PD is followed onsite. The calibration of energy meter is done as per the required frequency mentioned in the VCS PD. All the emergency preparedness as mentioned in the registered VCS PD is followed onsite and no discrepancies were found regarding the same.

The Project participant contribution from the project activity towards sustainable development in accordance to host country as explained below:

Social well-being:

- The project contributes directly to improve the infrastructure systems of the Quang Son commune, where minority ethnics groups are living. The project activity leads to development in infrastructure in the region like development of roads and also may promote business with improved power generation.

Economic well-being:

- The project activity facilitates facilitate the industrialization process of the province and leverage the performance of traditional trade villages as well as tourism industry and services inside the province. Project Activity supplies electricity to speed up the commissioning of other infrastructure projects in the region.

It was observed during the verification process is that rejected by any other GHG program around the world.

The project is not involved in any other form of GHG emission program and VERs generated from this verification will not be used for other trading program to avoid any kind of double counting. The same is confirmed by the PP during the verification remote audit. Assessment team also conducted independent review regarding the same and found that the statement of the PP is accurate and project is not involved in any other kind of GHG trading for the present verifications/monitoring period.

The assessment team observed that the project is in line with the registered PD and applied methodology and thus no clarification/deviation is sought. CAR 01, CAR02 and CAR 03 were raised during the verification process and closed successfully. Please refer below Appendix 2 for the detail closure of the CAR

Assessment team confirms following during the verification remote audit:

1. Start date of the project is 24/03/2009 (as per VCS PD).
2. An undertaking letter dated: 25/10/2020 has been submitted by PP for double counting with any other GHG program. PP also has given a written declaration that project has not claimed other form of GHG credit for the concerned monitoring period.
3. Assessment team confirms that this is the 2nd monitoring under VCS and covers the activity from 01/03/2012 to 28/02/2018(inclusive of both dates). Thus, VCS crediting period should be maximum of 10 years and renewed twice till end date of CDM crediting period. 24/03/2009 is the start date and crediting period ended on 23/03/2019.
The GHG credits from 01/03/2012 to 28/02/2018 will be claimed under VCS only. At any point of time during the crediting period, the project proponent will abide by the “Double Counting”.
4. Assessment team checked and found that the Project proponent of the project activity is as below for the current monitoring period:

Organization name	Song Ong Hydropower Joint Stock Company
Contact person	Mr Nguyen Hai Quynh
Title	General Director
Address	Quang Son commune, Ninh Son district, Ninh Thuan province, Viet Nam
Telephone	+84 683 851 556
Email	thuydienso@yahoo.com.vn

5. The quantified emission reduction calculation for the monitoring period is correct and conservative. Assessment team also compared actual VER with the estimated VER and found that the actual VER is 127,120 tCO₂e which is 1.11% lower than the estimated emission reduction 128,554 tCO₂e (21,416 tCO₂e/ 365 days*2191 days) during this monitoring period which is due to climatic conditions and low PLF attained by the wind power plant during the current monitoring period.

4.2 Safeguards

4.2.1 No Net Harm

No potential environment or socio-economic matter was found during the discussion with PP during remote audit. The project is renewable energy project and thus no negative impact observed onsite as confirmed by PP during remote audit.

The project activity promotes environmental and socio-economic well-being as it results in zero GHG emissions due to installation and operation of clean, renewable energy technology for electricity generation. The report on “Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects” prepared by MNRE dated September 2013. This report clearly mentioned that hydro power project activity operations do not result in direct air pollution, noise pollution.

However, assessment team still conducted the No net harm assessment for some of the parameters and the result is described below:

SL.NO	Indicator	Assessment team opinion
1	Air quality	The project generates clean energy which replaces the fossil fuel intensive electricity generation. Also report on “Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects” prepared by MNRE dated September 2013. This report clearly mentioned that hydro plant operations do not result in direct air pollution. Adequate measures were taken to mitigate the envisaged impacts like spraying water on the road side to reduce dust level, etc. This was confirmed by the local stakeholders. Therefore, it is validated that mitigation measures were robustly implemented on ground for air quality issues project will have a positive impact on air quality.
3	Soil condition	There are negligible impacts envisaged during operation of the project activity being run of river project. For mitigating the impacts during construction, various mitigation measures were taken which is validated from the plant records of PP and the interview with local villagers. It was also confirmed that, the vegetation done at site helps for soil erosion. The same is confirmed during the discussion with stakeholders during remote audit. Therefore, it can be concluded that the project has no effect on soil conditions during its operation because it has no waste coming out.
4	Biodiversity	During the validation remote audit it was observed that the condition of ground vegetation will be gradually improved; No rare species has been found in the around area. The project site is not on the migration route of migratory bird. As Such large hydro plant do not have any obstruction in the path of migratory birds. Nor project is affecting aquatic life. With the implementation of Project, the greening water will be increased significantly; the biodiversity in the vicinity will be improved with the vegetation improvement.

SL.NO	Indicator	Assessment team opinion
		No negative impact envisaged.
5	Employment Generation	The project activity employed local population as skilled workers as well as security guards which were envisaged during the validation remote audit. The personnel employed by the project activity are also provided trainings and exposed to various awareness programs therefore a positive indicator has been accepted.
6	Livelihood of the poor	The project is associated with infrastructure development like roads in the nearby areas and promoting economic activities like grants to local school and communities temples etc. Also, project employed local villagers as guards for the security of power project. Positive impact envisaged.

4.2.2 Local Stakeholder Consultation

All the stakeholders are happy with the implementation and operation of the project activity and no negative comments envisaged for the project activity. There was no change in project description from the VCS PD. Complaint/suggestion/feedback register is maintained at site as a part of ongoing communication with stakeholders in line with clause 3.16.17 of VCS Standard, ver. 4.0 and appropriate actions taken time to time by PP. Assessment team confirmed the same during the remote audit and document review i.e. grievance register etc.

4.3 AFOLU-Specific Safeguards

Not applicable

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the MR. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in accordance with the formulae and methods described in the monitoring plan of the VCS PD and MR.
Findings	CAR 04 was raised on this section and closed successfully. Please refer Appendix 2 for further details
Conclusion	<u>Baseline emission</u> : The baseline Emissions for a given year is calculated by multiplying the energy baseline (EB) with the regional grid emission factor of the grid. Formula Used:-

	$BE_y = EG_{BL,y} * EF_{grid,CM,y}$ BE_y - are the baseline emissions in year y (tCO₂e/yr) $EG_{BL,y}$- Quantity of net electricity generation supplied by the hydropower plant to the grid as a result of the implementation of the CDM project activity in year y (MWh/yr), and $EF_{grid,CM,y}$ - is Combined margin CO₂ emission factor of the national electricity grid in year y (tCO₂/MWh) Ex-ante parameters" The grid emission factor i.e. 0.5355 tCO₂/MWh is sourced from the CDM registered PDD. The same is used for calculation of emission reductions. In addition to this, other ex-ante parameters which are sourced from the CDM registered PDD are provide below: Cap_{BL}(MW)-Installed capacity of hydropower plant before the implementation of the project activity (in MW). Since the project activity is a newly constructed power plant, therefore this value is considered zero. AB_L(m²)- Area of the reservoir measured in the surface of the water, before the implementation of the project activity, when the reservoir is full. For new reservoirs, this value is zero: The project activity is newly constructed power plant and this value does not exist prior to implementation. Thus, value is considered zero. Heat Rate (Kcal/kWh)- Heat rate of each power plant or the energy conversion: This value was directly sourced from the CDM PDD which was used to calculate grid emission factor. EG_{m,y} (MWh)- Net electricity generated and delivered to the grid by power plant/unit m in year y : This values was used for calculation of EF_{OM} and EF_{BM} ex-ante in CDM PDD. The grid emission factor was directly source from the CDM PDD. EF_{CO2,i,y}(tCO₂/GJ)- CO₂ emission factor of fossil fuel type i in year y: Default value sourced from the IPCC 2006 Guidelines which was used to calculate ex-ante EF_{OM} and EF_{BM}. NCV_{i,y} -(TJ/Gg)- Net calorific value (energy content) of diesel in year y: The value 43.3 TJ/Gg is chosen as IPCC default value and used for calculation of PE_{EF,y}. EF_{CO2,diesel,y} -(kgCO₂/TJ) -CO₂ emission factor of diesel in year y. IPCC default value 74800 kgCO₂/TJ, used for calculation of PE_{EF,y} Ex-post parameter: As per the registered VCS PD and monitoring plan, PP has monitored following parameter needs to be monitored: EG_{y,export} (MWh)- Electricity supplied by the proposed hydropower plant to the national grid and EG_{y,import} (MWh)-Electricity supplied by the national grid to the proposed hydropower plant is measured by the two way power meter installed
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	at the grid connected point. The readings of the electricity meter are hourly measured and monthly recorded in the joint balance sheet signed by the representatives of EVN and the project owner. Electricity supplied to the grid by the project activity during the monitoring period is 237,472.10 MWh and the electricity supplied by the national grid to the hydro power plant is 62.20 MWh. EG_{BL,y} (MWh)- Net electricity supplied to the national grid by the hydropower plant; Net electricity supplied to the national grid by the hydropower plant is calculated by subtracting EG_{y,import} from EG_{y,export}. The net electricity supplied to the grid by the project activity during the monitoring period is 237,409.90 MWh. AP_J (m²)- Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full measured by third party is 17,448 M² . This was used for calculation of power density. Cap_{PPJ} (W)- Installed capacity of the hydro power plant after the implementation of the project activity is 8,100,000 W. . FC_{i,j y} - Mass or volume unit per year (e.g. ton/yr or m³/yr). The quantity of fuel combusted in process during the monitoring period in the event of black out of the plant is 1,279.29 lit. The consistency of metered fuel consumption quantities is crosschecked by an annual energy balance that is based on purchased quantities and stock changes. The verification team has checked the entire monthly Joint balance sheet report applicable for the monitoring period as per the project activity applied for verifications and found the monitoring parameters are monitored and recorded as per the monitoring plan in the registered VCS PD. Electricity supplied to the grid by the project activity during the year y (EG_{BL,y}) by the project activity during the current monitoring period 237,409.90 MWh. . The net electricity supplied by project activity to grid is calculated by subtracting total electricity imported by project from grid from total electricity delivered by project to grid. The verification team has crosschecked the emission reduction sheet and monitoring report data with the Joint balance sheet and sales invoice bills and found all the values are matching. <u>Project Emission:</u> According to the AMS.ID and registered VCS PD, the project emission for the Hydropower project includes emission from a new reservoir and backup power. The following formula is applied: $PE_y = PE_{FF,y} + PE_{HP,y}$ Where, PE_{FF,y} - backup power emissions PE_{HP,y} - the emissions from the reservoir
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	The emissions from the reservoir (PEHP,y) The Power Density of the project activity is more than 10 W/m² . Thus, accordance with the applied methodology emission from reservoir is considered zero. Emission from diesel backup generators (PEFF,y) The project employed a diesel motor as backup power for emergency situation, such as both cut-off of electricity supply and the hydropower station. According to the “Tool to calculate project or leakageCO₂ emissions from fossil fuel consumption”, the annual CO₂ emissions from diesel oil combustion are calculated as follows: $PE_{FF,j,y} = \sum_i FC_{i,j,y} * COEF_{i,y}$ and $COEF_{i,y} = NCV_{i,y} * EF_{CO2,i,y}$ Where: PEFF,j,y The CO₂ emissions from fossil fuel combustion in process j during the year y FCi,j,y The quantity of fuel type I combusted in process j during the year y (mass or volume unit/year) COEFi,y The CO₂ emission coefficient of fuel type I in year y (tCO₂/mass or volume unit) NCVi,y The weighted average net calorific value of the fuel type I in year y EF_{CO2,i,y} The weighted average CO₂ emission factor of fuel type I in year y (tCO₂/GJ) i The fuel types combusted in process j during the year y According to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, the NCV of diesel oil is 43.3 TJ/Gg and the emission factor is 74,800 kgCO₂/TJ, and thus the COEF_{i,y} = 0.0032 tCO₂/kg diesel. Therefore, $PE_{FF,j,y} = \sum_i FC_{i,j,y} * COEF_{i,y}$ $PE_{FF,j,y} = 1,279.29 * \frac{1}{1165} * 1000 * 0.0032$ $PE_{FF,j,y} = 9$ tCO₂e (Roundup for each vintage year) The assessment team has checked the metered data and plant log book data and the same have been found correct. The calculation approach was in line with the VCS PD. <u>Leakage:</u> As per registered PDD the leakage is zero. Thus, Emission Reductions are:
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	The emission reductions (ER_y) by the Project activity during a given year y is the difference between baseline emissions (BE_y), project activity emissions (PE_y) and leakage, as follows $ER_y = BE_y - PE_y - L_y$ VVB confirmed that GHG reductions and removals has been quantified correctly and in line with monitoring procedure in VCS PS and applied methodology.
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4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

Means of verification	The verification team checked the break down log for the monitoring period. During the verification remote audit the energy meters are also checked. The Calibration details of the monitoring meters are also checked with calibration certificates.					
Findings	CAR 05 was raised on this section and closed successfully. Please refer Appendix 2 for further details					
Conclusion	The project activity has installed a digital kilowatt hour (kWh) meter at grid connected point. The metering system includes the main system and a back-up system that measure, record and control the various monitoring parameters. The back-up system would be used in case of failing of the main meter. latest state -of art monitoring and control equipment that measure, record and control the various monitoring parameters. These meters record parameters including electricity exported & imported. Moreover, the meters are located at the grid connected point are of accuracy class of 0.5s for project activity applied for verification. These electricity meters are being used by EVN for Joint balance sheet electricity generation statements. The Net electricity supplied to the grid is then calculated from export and import values. The electricity Export, Import and Net electricity exported to the grid are cross checked from the sales invoices raised to EVN which is in line with Methodology requirement for small scale project activity. Hence assessment team confirmed that the value of net electricity exported to the grid as used in emission reduction calculation is correct. Electricity supplied to the grid is metered by main meters and Check meters as per details given below: <table><tr><td>Technical Details</td><td>Main Power meter CTC</td><td>Backup Power Meter CTP</td></tr></table>			Technical Details	Main Power meter CTC	Backup Power Meter CTP
Technical Details	Main Power meter CTC	Backup Power Meter CTP				

	Serial number	8062733	8062734
	Model	PB3KAAGHT-5	
	Accuracy	0.5s	0.5s
	Date of current Calibration	09-May-2013	09-May-2013
		17-January-2014	17-January-2014
		16-January -2015	16-January -2015
		03-November-2016	03-November-2016
		08-April-2017	08-April-2017
		14-August-2018	14-August-2018
	Calibration Validity	13-August-2020	
	Calibration Frequency	At least once every two years.	

The main meter reading is taken jointly on a fixed day of every month for the preceding month at the delivery point and signed by the representatives of EVN staff and PP representative. In the event of failure of main meter, the check meter will be used in monitoring the electricity data.

Calibration of all the meters is done as per the VCS PD. Assessment team has checked the calibration certificate and found that meters are calibrated as per calibration frequency mentioned in VCS PD.

It is reported that the data will be kept for 2 years following the end of the crediting period or till the last issuance of VERs for the project activity whichever occurs later.

The responsibilities and authorities of project management, data handling and recording, measurement methods and QA/QC procedure have been systematically established and formalized and the same was verified during the remote audit.

Remote audit and interview with site personnel also confirms that the operational and organizational chart as mentioned in VCS PD is as per the site practice and thus assessment team confirms that the details are correct.

The break down log is checked and found that the plant undergone scheduled maintenance and break down. VVB checked the breakdown and routine maintenance log book which also provided in appendix 1 of MR and confirmed that it does not have any impact on project design and monitoring procedures.

	No unforced error observed. VVB confirmed that data/ information used for determining GHG reductions and removals was sufficient in quantity and of appropriate quality. Calibration certificates of meters/ QA/QC procedure checked and found to be appropriate.
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4.6 Non-Permanence Risk Analysis

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Not applicable	Not applicable	Not applicable	Not applicable

5 VERIFICATION CONCLUSION

Applus+ Certification has been engaged by Song Ong Hydropower Joint Stock Company to perform the verification of the “Song Ong Hydropower Project”

The management of the project participant/owner is responsible for the preparation of the GHG emissions data and the reported/estimated GHG emissions reductions on the basis set out within the project’s Monitoring Plan in the VCS PD and MR and the approved methodology AMS-I.D version 16.

Our Verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakesh accord, as well as those defined by the CDM Executive Board and VCS Standard version 4.0. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:

- the project is operated as planned and described in the project document;
- the monitoring plan is as per the applied methodology;
- the monitoring process in Monitoring Report is as per the PD
- the development and maintenance of records and reporting procedures are in accordance with the monitoring plan
- the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately except delayed calibration is addressed in line with para 366 (a) of the “CDM validation and verification standard for project activities, Version 02.0”;
- the monitoring system is in place and generates GHG emission reductions data;

- the GHG emission reductions are calculated without material misstatements.
- A reasonable level of assurance was achieved during the verification.
- No limitation observed for the present verification

Verification period: From 01/03/2012 to 28/02/2018 (first and last date included).

Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
01/03/2012 to 31/12/2012	18,368	1	0	18,367
01/01/2013 to 31/12/2013	21,811	1	0	21,810
01/01/2014 to 31/12/2014	18,393	1	0	18,392
01/01/2015 to 31/12/2015	17,452	2	0	17,450
01/01/2016 to 31/12/2016	20,192	2	0	20,190
01/01/2017 to 31/12/2017	27,699	1	0	27,698
01/01/2018 to 28/02/2018	3,214	1	0	3,213
Total	127,129	9	0	127,120

The estimated emission reduction achieved from the project activity for the current monitoring period is 128,554 tCO₂e³, whereas actual emission reductions achieved are 127,120 tCO₂e, which is 1.11% lower than the estimated emission reductions. This is due to climatic conditions and low PLF attained by the plant during the current monitoring period.

³ This estimation is based on annual (365 days) estimation of ER and current monitoring period days i.e.2191 days.

APPENDIX I: DOCUMENTS REVIEWED DURING VERIFICATION

No.	Author	Title	References to the document	Provider
1.	NA	Commissioning certificate	Commissioning of the Hydro turbine unit	Project participant
2.	NA	Contract of the other entity with the DOE	Contract of the other entity with the DOE	Project participant
3.	NA	Technical specifications	Technical specifications of turbines	Project participant
4.	NA	Power Purchase agreement for the project activity	Manufacturer technical specifications	Project participant
5.	NA	VCS Project Description	Dated:28/12/2012	Project participant
6.	NA	Initial Monitoring report Final Monitoring report	Version 01, dated 15/10/2020 Version 02, dated 31/10/2020	Project participant
7.	NA	Emission Calculation sheet	Version 1, dated 15/10/2020	Project participant
8.	NA	Emission Calculation sheet	Version 02, dated 31/10/2020	Project participant
9.	NA	Tools/ guidelines used in the project activity • UNFCCC Methodology: ACM0002 version 06 • VCS verification report template Version 4.0 • VCS Standard, version 4.0	UNFCCC CDM web site VERRA website	UNFCCC & VERRA
10.	NA	Calibration details of the project activity undergoing verification	Calibration certificates	Project participant
11.	NA	JMR records+ Invoices for the complete monitoring period	Joint balance sheet copies Sales Invoices for the complete Monitoring period	Project participant
12.	NA	PPA Agreement	Power purchase Agreement between Project	Project participant
13.	NA	Break down details of the complete monitoring period	Log Sheet	Project

No.	Author	Title	References to the document	Provider
				participant
14.	NA	VCS Declaration	Declaration dated 25/10/2020 from PP for Participation under Other GHG Programs	Project participant

APPENDIX 2: CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS (CAR/CL/FAR)

Project Implementation Status

CAR ID	01	Section no.	Section 1.11 VCS MR	Date: 28/10/2020
Description of CAR				
- On front page of MR and in ER sheet, PP shall revise the duration of monitoring period and make corrections in all relevant sections of MR - In sec. 1.1, PP shall revise the value of net electricity generation and emission reductions due as duration of monitoring period changed.				
Project participant response				Date: 31/10/2020
- Duration of the monitoring period is being updated over the revised MR and ER. - Net generation and the ER values have been updated.				
Documentation provided by project participant				
Revised MR and ER				
DOE assessment				Date: 04/11/2020
- PP has now corrected the duration of monitoring period in revised MR dated 31/10/2020 and ER sheet, ver. 02 dated 30/10/2020. - In sec. 1.1 of revised MR dated 31/10/2020, PP has corrected the value of net electricity generation and emission reduction in consistent with revised ER sheet, ver. 02 dated 30/10/2020. CAR Closed.				

CAR ID	02	Section no.	1.6	Date: 28/10/2020
Description of CAR				
PP is requested to provide an undertaking regarding no double counting of emission reduction claimed as project is registered under UNFCCC also				
Project participant response				Date: 31/10/2020

No double counting declaration is being provided herewith.	
Documentation provided by project participant	
Declaration	
DOE assessment	Date: 04/11/2020
PP has provided an undertaking dated 25/10/2020 regarding no double counting of emission reduction claimed. CAR closed.	

CAR ID	03	Section no.	Section 2.2 VCS MR	Date: 28/10/2020
Description of CAR				
PP is requested to provide grievance register for review along with English translation of EIA related document.				
Project participant response				Date: 31/10/2020
<i>English translation of Grievance register and the EIA document is being provided.</i>				
Documentation provided by project participant				
<i>Grievance register and EIA</i>				
DOE assessment				Date: 04/11/2020
PP has provided English translation of EIA document and screen shot of grievance register. Verification team checked the documents and found the documents to be appropriate. CAR Closed.				

Accuracy of GHG Emission Reduction and Removal Calculations

CAR ID	04	Section no.	MR	Date: 28/08/2020
Description of CAR				
PP requested to submit JMR/ Invoices/ Plant records for total electricity supplied to grid by project activity for entire monitoring period. However, PP has submitted few documents but VVB couldn't confirm as documents are in local vernacular language.				
PP shall provide English translation of key documents (JMR, INVOICES, CALIBRATION Certificates etc.)				
Project participant response				Date: 31/10/2020
English translated JMR cum Invoices and calibration records is being provided herewith.				

Documentation provided by project participant	
JMR Invoices and calibration records	
DOE assessment	Date: 04/11/2020
PP has shared sample translation of JMR, invoices and meter calibration certificate and also provided an undertaking confirming authenticity of data considered for emission reduction calculation.	
CAR Closed.	

Quality of Evidence to Determine GHG Emission Reductions and Removals

CAR ID	05	Section no.	MR	Date: 28/10/2020
Description of CAR				
1. PP requested to furnish details of calibration carried out in compliance with calibration frequency along with calibration certificates of the monitoring meters involved in the project activity. 2. PP is requested to provide outage details and calibration details of meters in MR				
Project participant response				Date: 31/10/2020
1. Calibration certificates is being provided and the details of calibration is mentioned over section 4.2 of revised MR. 2. Calibration certificate and the outage details are being provided in the revised MR.				
Documentation provided by project participant				
MR V2 and calibration certificate				
DOE assessment				Date: 04/11/2020
1. PP has now provided calibration details of meters in se. 4.2 of revised MR dated 31/10/2020 and also provided calibration certificates. Verification team confirms the calibration details are in line with approved PD. 2. PP has provided outage details in revised MR, dated 31/10/2020. CAR closed.				

APPENDIX 3: COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS

Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Lead Auditor/Technical Expert	OR	Kumar	Pankaj	TQC-Outsourced entity	Yes	No	Yes	Yes

Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer (TR)	EI	Shen	Simon	Applus+ Certification
2.	Approver	IR	Sendin	Juan	Applus+ Certification B.U. Managing Director

Short CVs of the Team:

1. Pankaj Kumar worked as team leader – Bihar for South Asia Climate Proofing and Growth Development (CPGD) – Climate Change Innovation Programme (CCIP) supported by DFID that seeks to mainstream climate change resilience into planning and budgeting at the national and sub-national level in India, Pakistan, Nepal, and Afghanistan. Pankaj Kumar has worked previously with IL&FS Infrastructure Development Corporation and BUIDCO (Bihar Urban Infrastructure Development Corporation), Govt. Of Bihar as Environmental Specialist for WB & ADB funded projects. Prior to this, he worked with Carbon Check (UNFCCC accredited DoE), Johannesburg, RSA as Team Leader for validation, verification of

around 100 GHG projects in Asia, Africa, USA, Asia Pacific & Americas. Pankaj is accredited Lead Auditor, Validator, Verifier and Technical Expert for Sectoral Scope/Technical Area – 1.1, 1.2, 3.1 & 13.1 by UNFCCC DoE (Designated Operational Entity), APPLUS, Spain. He is also member of task force on climate change & human health, Health Department, GoB and on roster of UNICEF's WASH experts.

He is an experienced, qualified and result oriented Environment Professional having more than 14 yrs. Of relevant experience in Climate Change (Mitigation & Adaptation), Environmental Due Diligence, Disaster Risk Reduction, Validation and Verification of GHG project under CDM, Verified Carbon Standard, Gold Standard & Social Carbon Standard, Brazil. He provides technical support for environmental investigative, consultative and remedial projects involving air, water and soil, Waste management, EIA, Environmental Compliance, ISO 14001, OHSAS 18001, GHG accounting (ISO 14064) and Carbon foot printing

Pankaj Kumar is Masters in Environment Management from Forest Research Institute (University), I.C.F.R.E, Dehradun, which is Centre of Excellence in South East Asia for Forestry education & research and PGDEL from National Law School of India University, Bangalore (India)

2. Mr. Simon Shen (Master's Degree in Thermal Energy Engineering, Bachelor's Degree in Environmental Engineering) is an Auditor appointed by Applus+ LGAI for the GHG project assessment, auditing and technical review. He has more than 6 years of work experience in CDM/GS4GG/VCS project assessment and review with Applus+, apart from the years of experience working as GHG Auditor and ISO 9001/14001 in TUV SUD for 5 years before he joined Applus+. Mr. Simon Shen has extensive experience also as former Applus+ Shanghai CDM Technical Manager.

APPENDIX 4: ABBREVIATIONS

Abbreviations	Full texts
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction(s)
CEA	Central Electricity Authority
CL	Clarification request
CM	Combined Margin
CMS	Central Monitoring system
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EF	Emission Factor
EIA	Environmental Impact Assessment
ER	Emission Reductions
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GWP	Global Warming potential
EVN	Electricity Corporation of Vietnam
PP	Project Participant

APPENDIX 5: CALIBRATION DETAILS

Details of Meter Calibration:

Technical Details	Main Power meter CTC	Backup Power Meter CTP
Serial number	8062733	8062734
Model	PB3KAAGHT-5	
Accuracy	0.5s	0.5s
Date of current Calibration	09-May-2013	09-May-2013
	17-January-2014	17-January-2014
	16-January -2015	16-January -2015
	03-November-2016	03-November-2016
	08-April-2017	08-April-2017
	14-August-2018	14-August-2018
Calibration Validity	13-August-2020	
Calibration Frequency	At least once every two years.	

APPENDIX 6: REMOTE AUDIT

