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GOLD STANDARD FOR THE GLOBAL GOALS (GS4GG)
REPORT
-
VERIFICATION

Project Title:	400 MW Solar Power Project at Bhadla, Rajasthan
Monitoring Period:	01/09/2019 to 30/09/2020 (Both days included)
GS project ID:	GS7071
Internal ID:	20020
Customer:	S B Energy Pvt. Limited
Date:	17/12/2020
Revision:	02

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SUMMARY			
Reference No.	**Date** *(first version)*	**Version No.**	**Date** *(last version)*
GS7071	02/11/2020	02	17/12/2020
GS4GG Verification			
GS4GG Certified Product *(sought)*:	GS VER		
GS4GG SDG Impact Statement *(sought)*:	Impact Certification		
General Information			
Client	S B Energy Pvt. Limited		
Project Title	400 MW Solar Power Project at Bhadla, Rajasthan		
Project Participants	S B Energy Pvt. Limited		
Project Location	Village - Bhadla, Tehsil - Phalodi, District- Jodhpur, State-Rajasthan, India		
Contact Person	Mr N.P. Singh		
Monitoring Period:	01/09/2019 to 30/09/2020 (Both days included)		
GS4GG Version: GS4GG Principles and Requirements 1.2 GS4GG Activity Requirements: RE Activity Requirements Applied Methodology Version: ACM0002 "Grid-connected electricity generation from renewable sources" Version 20.0 Current Methodology Version: ACM0002 "Grid-connected electricity generation from renewable sources" Version 20.0		GS4GG Sectoral Scope: 2 UNFCCC CDM Sectoral Scope: 1 Technical Area: 1.2	
Monitoring Report Version: 01 Date: 07/10/2020		Final Monitoring Report Version: 03 Date: 16/12/2020	
Certified Project Design Document Version: Assessment team checked the registered GS PDD version 06 dated 19/12/2019. Date: Provided above Final Passport: NA			
Estimated Annual Emission Reductions for the Monitoring period for all SDG: SDG 7: 832,550 MWh /Year SDG 8: Minimum 1 training to be carried out annually / and 10 people employed. SDG 13: 779,933 tCO2/year			
Actual Emission reduction achieved for all SDG: SDG 7: 1,056,224.83 MWh for this Monitoring Period SDG 8: Trainings = 27 Trainings provided to staff /20 number employment provided SDG 13: 989,457 tCO_2 for this Monitoring Period			
Selected Sustainable Development Goals (SDGs): 7; 8; 13			
Verification Summary			

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SUMMARY

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by S B Energy Pvt. Limited to perform the 2nd periodical verification of "400 MW Solar Power Project at Bhadla, Rajasthan" (Ref. No. GS7071) applying the methodology ACM0002 Version 20.0.

The management of S B Energy Pvt. Limited is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.

A desk review and an interviews have been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following have been reviewed:

a. The registered PDD including the monitoring plan;
b. Monitoring report(s);
c. The applied monitoring methodology;
d. Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board;
e. GS4GG guideline and related Annex.
f. All information and references relevant to the project activity's resulting in emission reductions.

S B Energy Private Limited has implemented a Greenfield "400 MW Solar Power Project at Bhadla, Rajasthan" large-scale grid connected solar PV power project ("Project activity") in Jodhpur district, Rajasthan, India. Project activity comprises of state-of-the-art, environment friendly, solar PV based power project. Project activity comes under the purview of large-scale, solar PV based power project implemented in India.

Electricity generated from the project activity is sent to Indian grid of India. As per GS4GG PDD, the gross electricity generation from the project activity is estimated as 832,550 MWh/year and abates 3,899,665 tonnes of Carbon Dioxide emissions during its entire crediting period (01/01/2019 to 31/12/2023).

Project activity is commissioning on in phased manner as below:

Project Investor	Project Capacity	Date of Commissioning
SB Energy One Private Limited	100 MW	21/09/2018
	100 MW	24/09/2018
	100 MW	24/09/2018
SB Energy Three Private Limited	20 MW	04/10/2018
	20 MW	04/10/2018
	30 MW	18/09/2018
	30 MW	18/09/2018

The monitoring of emission reduction and sustainable development indicators has been carried out in accordance to respective registered PDD.

Applus+ Certification confirms that the project is implemented in accordance with the validated and registered PDD. The monitoring plan complies with the applied methodology ACM0002 Version 20.0 and the GS4GG guideline the monitoring has been carried out in accordance with the monitoring plan. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information reviewed and evaluated Applus+ Certification confirms that the implementation of the project has resulted in 989,457 tCO_2e emission reductions during period 01/09/2019 to 30/09/2020 (Both days included)

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ASSESSMENT TEAM		
Team Members	**Type of Resource**[1]	**Organization** *(for OEs)*
Lead Auditor: Dr. Atul Takarkhede	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
Auditor: Mr. Sukanta Das	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
Technical Expert: Dr. Atul Takarkhede	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
Technical Reviewer: Mr. Simon Shen	☐ IR ☒ EI ☐ OE	Applus+ Certification

[1] IR (Internal Resource); EI (External Individual); OE (Outsourced Entity)

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ABBREVIATIONS	
ACM	Approved Consolidated Methodology
AM	Approved Methodology
AMS	Approved Methodology Small Scale
Applus+ LGAI / Applus+	LGAI Technological Center, S.A. (Applus+ Certification)
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CDM VVS version 02	CDM validation and verification standard for project activities, Version 02.0
CER	Certified Emission Reduction
CL / CR	Clarification Request
CM	Combined Margin
CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
DNA	Designated National Authority
DOE	Designated Operational Entity
EF	Emission Factor
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GS4GG (or GS)	Gold Standard for Global Goals
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-Governmental Organization
SDG	Sustainable Development Goal
TAC	Gold Standard Technical Advisory Committee
SBEPL	S B Energy Pvt. Limited
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
SECIL	Solar Energy Corporation of India Limited
UNFCCC	United Nations Framework Convention for Climate Change
VVB	Validation and Verification Body
VVS	Validation and Verification Standard

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Table of Content

Contents

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1. INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by S B Energy Pvt. Limited to perform the 2nd periodical verification of "400 MW Solar Power Project at Bhadla, Rajasthan" applying the methodology ACM0002 Version 20.0 and GS4GG guideline. Gold Standard projects must undergo periodic audits and verification of emission reductions as the basis for issuance of Gold Standard VERs.

The objective of the verification work is to assess the compliance with the requirements of paragraph 62 of the CDM Modalities and Procedures as well as the GS4GG guidelines and relevant Principles and Requirements. According to this assessment Applus+ Certification shall:

- Ensure that the project activity has been implemented and operated as per the registered PDD and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place;
- Ensure that the published MR and other supporting documents provided are complete, verifiable and in accordance with applicable CDM validation and verification standard for project activities, Version 02.0 for the project activities and Gold Standard (i.e. applicable GS4GG requirements);
- Ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology;
- Evaluate the data recorded and stored as per the ACM0002 Version 20.0.

1.2 Scope

The verification scope encompasses an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the DOE. The verification is based on the submitted monitoring report, registered PDD and registered Passport as well as its validation report, the applied monitoring methodology, relevant decisions, clarifications and guidance from the CMP and the EB, GS4GG guideline and any other information and references relevant to the project activity's resulting emission reductions. These documents are reviewed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures, GS4GG guideline and relevant Principles and Requirements, as well as their related rules and guidance.

Based on the requirements in the CDM validation and verification standard for project activities, Version 02.0 for the project activities as well as the GS4GG guidelines, Applus+ Certification has applied a rule-based approach for the verification of the project. The principles of accuracy, completeness, relevance, reliability and credibility were combined with a conservative approach to establish a traceable and transparent verification opinion.

The verification considers both quantitative and qualitative information on emission reductions. The verification also considers the monitoring of SDG goals as per the requirement of GS4GG guideline.

The verification is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

1.3 Description of the project activity

S B Energy Pvt. Limited has implemented a Greenfield "400 MW Solar Power Project at Bhadla, Rajasthan" (Project activity) in Jodhpur district, Rajasthan, India. Project activity comprises of state-of-the-art, environment friendly, solar PV technology. Project activity comes under the purview of large-scale, solar power technology-based project implemented in India. Electricity generated from the project activity is sent to Indian grid. As per validated PDD, the gross electricity generation from the project activity is estimated as 832,550 MWh/year resulting in estimated emission reductions of 779,933 tCO_2e and abates 3,899,665 tonnes of Carbon Dioxide emissions during the first crediting period of the project activity (01/01/2019 to 31/12/2023). The project has obtained requisite clearances and has already commissioned and was confirmed during remote audit & document review.
Project activity is a grid-connected large-scale 400 MW solar photo voltaic power generation facility.

The monitoring of emission reduction and sustainable development indicators has been carried out in accordance to respective registered PDD.

2. METHODOLOGY

Applus+ Certification approach to the verification is a two-stage process. In the 1st stage, Applus+ Certification completed a strategic review and risk assessment of the projects activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.

Applus+ Certification used a periodical Verification Checklist which, based on the risk-based assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

In the 2nd stage, using the Verification Checklist, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved a remote audit and a desk review of the Monitoring Report. This Verification Report describes the findings of this assessment.

2.1 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
Dr. Atul Takarkhede	LA/TE	YES	YES	NA	YES
Mr. Sukanta Das	A	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.

2.2 Document review

The Monitoring Report version 01 was submitted to DOE before the verification activities started. The MR was assessed based on all the relevant documents. The aim of the assessment in the desk review was to:

- Verify the completeness of the data and the information presented in the MR;
- Check the compliance of the MR with respect to the monitoring plan depicted in the registered PDD, verify that the applied methodology was carried out. Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures of the power plant was checked by the assessment team.
- Evaluate the data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.
- Please check reference 4 of this report for detail of the documents checked.

2.3 On site assessment and follow up interviews

No Physical verification was conducted by the VVB for this GS verification due to high threat of COVID-19 in entire state of India. Government of India has ordered nationwide lockdown from 25/03/2020[2].

Hence, in line with the COVID 19: INTERIM MEASURES published by GS on 06/04/2020, VVB has taken alternative measures to reach reasonable level of assurance. Further, no alternative monitoring approach have been used by project proponent during this monitoring period. The monitoring period is less than 2 years in line with GS COVID 19: INTERIM MEASURES guidelines. Thus, assessment team have conducted remote audit and used verification techniques & advanced communication technology solutions to verify information and compliance with applicable requirements to the extent possible, to ensure the completeness and credibility of the audit.

Thus, following means of verification have been implemented by assessment team:

- Cross-checks between information provided in the PDD/Monitoring report and information.
- The DOE's sectoral & local expertise.
- Telephone & Zoom video call Interviews with PP representative, O&M team and local stakeholders & consultant.
- Cross checks between the information provided by interviewed personnel & information provided in registered documents as well as previous verification documents;

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Mishra	Anushree	Manager	20/10/2020 (Zoom)	Project implementation, O&M, JMR, Calibration, Sustainable monitoring, LSC etc.	Dr. Atul Takarkhede
2.	Singh	N.	PP Representative	20/10/2020 (Telephonic)	Management practices, trainings, salaries etc.	
3.	Meena	Suresh	Local stakeholder (Villeger)	20/10/2020 (Zoom)	Stakeholder meeting- Employment opportunities, Pollution aspects, Standard of Livings etc.	
4.	Yadav	Anil	Local stakeholder (Villeger)	20/10/2020 (Zoom)	Stakeholder meeting- Employment opportunities,	

[2] https://www.mha.gov.in/notifications/circulars-covid-19

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
					Pollution aspects, Standard of Livings etc.	
5.	Dutta	Bhaskar	Consultant	20/10/2020 (Telephone)	Monitoring report and Emission reduction calculations etc.	

The objective of the remote on-site assessment is to:

- Confirm the implementation and operation of the project;
- Review the data flow for generating, aggregating and reporting the monitoring parameters;
- Confirm the correct implementation of procedures for operations and data collection;
- Cross-check the information provided in the MR documentation with other sources;
- Check the monitoring equipment against the requirements of the PDD and the approved methodology, including calibrations, maintenance, etc.;
- Review the calculations and assumptions used to obtain the GHG data and ER;
- Identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.
- Confirm the SDG goals/ Sustainable monitoring parameter as per the registered PDD
- To understand grievance (if any) from the villagers during the monitoring period.
- Local stakeholder interviews.

To verify the implementation of project activity, onsite operation & maintenance, monitoring & management practices; assessment team has conducted Zoom video call/telephonic interviews with onsite in-charge, O&M team and also had a detail discussion with the PP representative and reviewed third party statutory documents i.e. Commissioning certificates, Power Purchase Agreement, Complete set of JMRs covering monitoring period, Invoice (for cross check of Net electricity supplied to the grid as per registered PDD and approved methodology), employment & training records, Salary records, CSR records, breakdown log, O&M schedule, grievance register and other relevant records.

After telephonic/Zoom interviews with concerned persons, document reviews & site videos/photographs submitted by PP; assessment team concluded that the project activity is still implemented and operated in-line with the registered PDD. There is no change in the project design or operation and monitoring practices at site which can alter the applicability or additionality of the project activity. In addition to the interviews with PP, assessment team have checked the commissioning certificate, PPA and JMRs and found that the project activity is implemented as per the PDD and Monitoring report submitted by the PP for current monitoring period. Assessment team therefore of the opinion that project is implemented as described in the registered PDD and there is no change in monitoring practices as well as all monitoring parameters as envisaged in the PDD. All the monitored values are supported by the evidences i.e. JMRs and found that information provided in the MR is in line with the submitted evidences.

There had not been any legal dispute arisen due to project activity during the current monitoring period. The same has been verified from public domain and annual reports of the project developer.

Interview summary of the local stakeholders is also given below:

Name of the stakeholder	Suresh Meena
Occupation	Villager
DOE QUESTION: Did PP/vendors have employed locals in the operation and maintenance of the project activity? Answer: Yes. PP as well as vendors have given preference to the local peoples residing in the vicinity of the area for various employment. Assessment team noted that locals were employed for the project activity and same is verified from the list of local employees submitted by PP. DOE also during the interviews with site in charge noted that that local people were employed for security and operation related work like vegetation improvement and other unskilled work and operation and electrical work.	

Name of the stakeholder	Anil Yadav
Occupation	Local stakeholder (villager)
DOE QUESTION: In which area you belong to? Answer: Residing in the village near to the plant. DOE questions: Is there any type waste coming out of the solar plant? Answer: No. There is no waste generation due to plant.	

2.4 Quality of evidences

Sufficient evidence covering the full verification period in the required frequency is available to verify the figures stated in the final MR Version 03. Specific cross-checks have been done in cases that further sources were available. The monitoring report's figures were checked by the assessment team against the raw data. The data collection system meets the requirements of the monitoring plan as per the methodology.

2.5 Reporting of findings

As an outcome of the verification process, the assessment team can raise different types of findings.

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

- Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;
- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;

- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

The assessment team shall raise a Clarification Request (CR) if information is insufficient or not clear enough to determine whether the applicable CDM/GS requirements have been met.

All CARs /CRs/ FARs raised during verification shall be resolved prior to submitting a request for issuance.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period.

Please refer Appendix 1 of this report. Total numbers of CARs: 04, CLs: 00, FARs: 00.

2.6 Internal Quality Control

As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Each report has to be finally approved either by the DOE's Technical Manager or the Deputy. This approval process also includes another quality assurance check in terms of Administrative Review. In case one of these two persons is part of the assessment team, the final approval can only be given by the person who is not a part of the assessment team. If the documents have been satisfactorily approved, the Request for Issuance is submitted to the GS Registry along with the relevant documents.

3. VERIFICATION FINDINGS

3.1 FARs from Validation / Previous Verification

This is 2nd periodic verification for the project activity and the FAR from previous validation and previous verification of the project activity has been taken into consideration in appendix 1.

3.2 Project Implementation in accordance with the registered Project Design Document

The project activity was fully implemented according to the description presented in the registered PDD. The assessment team confirms, through the remote audit that all physical features of the proposed project activity including data collecting systems and storage have been implemented in accordance with the registered PDD for GS4GG and Passport.

The technical features of the equipment's have been verified by the assessment team by reviewing following documentation:

- telephonic interviews of onsite personnels
- Technical detail analysis of the power plant from the documents submitted by the manufacturer.
- Commissioning certificates of the plant
- PPA for the project activity

Total installed capacity of the plant is 400 MW, which comprises of two projects owned by SB Energy One Pvt Ltd and SB Energy Three Pvt Ltd in Rajasthan. Technical details are as follows:

Technical specifications of 300 MW Solar PV Project by SB Energy One Pvt. Ltd are as follows:

Sr. No.	Particulars	Details
1.	Capacity of the Project	100 x 3 MW
2.	Technology used	Polycrystalline
3.	Rating of Solar Modules	325 to 330 Wp
4.	Angle from horizontal at which the array is installed	20^0
5.	Number of modules of each type	325 Wp- 2,64,840 Nos 330 Wp- 1,78,650 Nos
6.	Source of modules installed of each type	Jinergy solar in
7.	Number of invertors installed	32 numbers
8.	Rating of invertors	3.125 MVA
9.	Date of installation of full capacity	19-09-2018
10.	PV Arrays	100 %
11.	Invertors	100 %
12.	Transformers	100%

Technical specifications of 100 MW Solar PV Project by SB Energy Three Pvt. Ltd are as follows:

Sr. No.	Particulars	Details
1.	Capacity of the Project	50 x 2 MW
2.	Technology used	Polycrystalline
3.	Rating of Solar Modules	325 to 330 Wp
4.	Angle from horizontal at which the array is installed	20^0
5.	Number of modules of each type	325 Wp- 34,920 Nos 330 Wp- 60,250 Nos
6.	Source of modules installed of each type	Jinergy solar in
7.	Number of invertors installed	16 numbers
8.	Rating of invertors	3.125 MVA
9.	Date of installation of full capacity	04-10-2018
10.	PV Arrays	100 %
11.	Invertors	100 %

Sr. No.	Particulars	Details
12.	Transformers	100%

Project activity is commissioning on in phased manner as below:

Project Investor	Project Capacity	Date of Commissioning
SB Energy One Private Limited	100 MW	21/09/2018
	100 MW	24/09/2018
	100 MW	24/09/2018
SB Energy Three Private Limited	20 MW	04/10/2018
	20 MW	04/10/2018
	30 MW	18/09/2018
	30 MW	18/09/2018

Assessment team checked the commissioning date of the project activity from the Commissioning certificate issued by the government authority i.e. Rajasthan Renewable Energy Corporation Limited (RRECL) and found the same to be appropriate.

The project activity was in normal operational during the monitoring period and the same has been confirmed during interviews with PP and crosschecked from review of JMR & breakdown records submitted by PP. Power plant was working throughout the monitoring period and same have been conformed from JMR values. No unusual activates observed during the monitoring period and plant was undergone scheduled as well as emergency maintenance as per the recommendation of the manufacturers. No forced breakdown observed and the same is confirmed by the assessment team with the plant log details and JMRs.

The verification team has reviewed the commissioning certificates & PPA to conclude that the capacity of the project is same as mentioned in the registered GS PDD and explained by PP during interviews. The capacity of the project activity does not change after the registration of the project activity and same have been confirmed from the commission certificate, PPA and JMRs issued by State Utility and Invoices raised by the PP towards SECIL.

Also from review of other documents such as Commissioning certificate, PPA & JMR, it was observed that the rated capacity of the project is 400 MW. The capacity of the project is more than 15 MW and thus the same qualifies as large scale project activity.

Plant is located in village Bhadla, District Jodhpur, Rajasthan, India. Assessment team also checked the locations of the project activity in the registered PDD, validation report and previous verification monitoring report & verification report. Thus, location provided in MR are found in line with registered documents of the project activity and are as $27^{o}10'38.06''N$ & $71^{0}55'49.16''E$.

The project is connected to National grid (as per the grid structure of India) and the same is found correct by the assessment team during the review of commissioning certificate, PPA and interviews with PP. The grid structure as mentioned in the PDD is still applicable for the project and ex-ante emission factor as proposed in the PDD is used for emission reduction calculation. Assessment team noted that the project activity has entered a power purchase agreement with the SECIL. The electricity is fed in the Integrated Indian grid.

The commissioning details as provided in the MR Version 01 & 02 were checked with the commissioning certificates issued by State Utility. The commission certificate is issued by

"Government agencies" which is a third party government firm and thus the commissioning dates are acceptable to the assessment team.

Moreover, there were no changes in host country regulations which may impact either baseline or additionality of the project. Thus, assessment team confirms that the project is implemented as per the registered PDD and no change in additionality/baseline is envisaged for the present monitoring period.

The amount of GS-VERs achieved during the present monitoring period are 17% higher than the estimated value in the PDD. This is due to the higher PLF months during the monitoring period. There is no any adverse impact on additionality due to this higher PLF of project activity for current monitoring period as the achieved PLF is within the breaching value of 35.40%.

Compliance of the Monitoring Plan with the Monitoring Methodology:

The verification team is able to confirm that the monitoring plan is in accordance with the approved methodology ACM0002 Version 20.0, applied by the proposed GS project activity.

No deviation, correction or permanent change to the monitoring plan has been requested or observed.

Assessment team also checked the metering details of the connected solar plant and found the same to be appropriate. Feeder details were confirmed from the interviews with PP, Previous verification report and JMRs submitted for current monitoring period. The monitoring meters are installed at Bhadla substation.

Materiality adopted in Verification:

Consideration of materiality in planning the verification

No.	Risk that would lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk levels	Justification	
1	Human errors: Readings from Meters (if not automatic)	LOW	Human error is likely to occur if the monitoring personnel are not trained well or inexperienced in data recording procedures and monitoring processes.	All the personal are well trained to monitor and collect data and thus risk associated with Human error is minimized. Assessment team checked the training records to confirm that all the personal are well trained to handle the activities related to monitoring. Assessment team checked the training records for the complete monitoring period and confirm that the personal are well trained to monitor and collect data for the project activity.

No.	Risk that would lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk levels	Justification	
2	Human error: Quantification of emission reduction	LOW	Use of spread sheets without adequate data control, changes/updates, version tracking, traceability and security	All the energy statement i.e. JMR sheets and the invoices for the complete monitoring period are checked and thus the assessment team confirms that the ER value is conservative and correct.

Consideration of materiality in conducting the verification

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.

3.3 Compliance of the Monitoring Plan with the Monitoring Methodology

The verification team is able to confirm that the monitoring plan is in accordance with the approved methodology ACM0002 Version 20.0, applied by the proposed GS project activity.

No deviation, correction or permanent change to the monitoring plan has been requested or observed.

3.4 Completeness of Monitoring

The monitoring has been carried out in accordance with the monitoring plan contained in the GS PDD. All parameters were monitored and determined as per the monitoring plan of the GS PDD as follows:

a. Data and parameters fixed ex ante or at renewable of crediting period

$EF_{grid,OM,y}$ $EF_{grid,BM,y}$ & $EF_{grid,CM,y}$ were mentioned as ex-ante fixed parameter.

The value for $EF_{grid,OM,y}$, $EF_{grid,BM,y}$ & $EF_{grid,CM,y}$ was considered from the CO_2 baseline database published by Central Electricity Authority (CEA) version 14.0. The default value as mentioned in the registered PDD and MR are same. The value of combined margin in India is being given by CEA (= Central Electricity Authority, Govt. of India) and thus assessment team concludes that the value is correct and appropriate. The default value in turn is used for baseline calculation as per the formula given in the registered PDD for the current monitoring period. Assessment team checked the values, source of data, choice of data, purpose of the data mentioned in the MR from the registered PDD and confirms that the similar approach was considered for the current monitoring period also.
The relevant Emission factor values used for emission reduction calculation is as below. Also as GS4GG "Principles and Requirements" V 1.2 the ex-ante fixed parameters are now connected to relevant SDG indicator which is acceptable to the assessment team.

$EF_{grid,OM,y}$- Relevant SDG Indicator= SDG13: Cimate Action= 0.9610 tCO_2e/MWh
$EF_{grid,BM,y}$- Relevant SDG Indicator= SDG13: Climate Action= 0.8644 tCO_2e/MWh
$EF_{grid,CM,y}$- Relevant SDG Indicator= SDG13: Climate Action= 0.9368 tCO_2e/MWh

b. Data and parameters monitored

As per the registered monitoring plan and requirement of the registered methodology following parameters needs to be monitored:

Relevant SDG indicators = 7.2.1 Affordable and Clean Energy

$EG_{PJ,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh (MWh)

The parameter **$EG_{PJ,y}$** is calculated using the difference of export and import value measured from the electricity meter. Net electricity supplied to the grid for individual project activity is then calculated as export-import. The Meter Reading Statement (i.e. JMR sheets) issued by State board which provide the values of export and import for the month. The same is thus used for emission reduction calculation. All the plants (including the project activity solar plant and other investors solar plant) are connected to a Pooling substation 132/220 KV GSS II and further electricity is transferred to 220/400 KV RRVPNL substation. The common metering point at RRVPNL substation consists of both main & check meters (ABT Meters) having accuracy class of 0.2s. The export/import losses between these two substations are apportioned based on pooling substation readings. Based on the statement the Invoice is raised by PP to State electricity board. The practice followed onsite is as per the registered PDD. The meter reading is taken during a fixed billing cycle of every month and representative of state electricity board and Operation and maintenance personal onsite present during the process. The export and import reading is continuous and recording frequency is monthly. The QA/QC procedure is as per the requirement of the registered PDD and onsite practice. Assessment team confirms the same during the Zoom/telephonic interviews with PP. Assessment team checked all the values of calculated Net electricity supplied to the grid from the Meter reading statement (provides the value of export and import) issued by State electricity board. Moreover, as per the requirement of the approved methodology and registered PDD, assessment team cross checked the net electricity value as presented in the JMR with the invoice raised and found the values match with each other. The same is thus acceptable to the assessment team and thus emission reduction calculation is correct.

c. Implementation of sampling plan

PP did not apply sampling plan to determine data and parameters monitored during this monitoring period. The verification team has checked all the documents such as JMR issued by State electricity board /Invoices etc. and hence sampling plan was not required. The verification team hereby confirms that has checked all the documents.

d. Compliance with the calibration frequency requirements for measuring instruments

The calibration details such as make, accuracy class serial number is as per the meter available onsite and checked during verification site visit. The Calibration details are presented in Appendix 2 of this report. Calibration of meters carried out by a NABL accredited company for testing and calibration, Govt of India (*http://www.nabl-india.org/*) to carry out calibration.

Assessment team checked the same and found that the calibration is appropriate and correct as traceability is ensured. The meters were calibrated as per the norms of NABL and the meters are within the permissible error limit.

3.5 SDG Outcomes Monitoring

In the Registered PDD indicators are chosen for the monitoring of sustainable monitoring:

Meth/tool	Relevant SDG indicator	GS PDD	MR	Compliance
Net electricity supplied to the grid	SDG 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh	Yes
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	SDG 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Number of people employed directly due to the project activity and Training of Staff	Quantitative employment and trainings provided to employees & O&M staff for this monitoring period	Yes
Take urgent action to combat climate change and its impacts	SDG 13: Take urgent action to combat climate change and its impacts	Emission reductions achieved per year	Emission reductions achieved per year	Yes

The verification of the parameters required by the monitoring plan is provided as follows:

Relevant SDG Indicator	**SDG 7.2.1: Affordable and Clean Energy**
Data/parameter:	**$EG_{PJ,y}$**
Unit	MWh
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh
Source of data checked by the assessment team	Monthly JMR provided by State Utility
Value(s) of monitored parameter	1,056,224.83

Means of verification:	The parameter **$EG_{PJ,y}$** is calculated using the difference of export and import value measured from the electricity meter. Net electricity supplied to the grid for individual project activity is then calculated as export-import. The Meter Reading Statement (i.e. JMR sheets) issued by State board which provide the values of export and import for the month. The same is thus used for emission reduction calculation. All the plants (including the project activity solar plant and other investors solar plant) are connected to a Pooling substation 132/220 KV GSS II and further electricity is transferred to 220/400 KV RRVPNL substation. The common metering point at RRVPNL substation consists of both main & check meters (ABT Meters) having accuracy class of 0.2s. The export/import losses between these two substations are apportioned based on pooling substation readings. Based on the statement the Invoice is raised by PP to State electricity board. The practice followed onsite is as per the registered PDD. The meter reading is taken during a fixed billing cycle of every month and representative of state electricity board and Operation and maintenance personal onsite present during the process. The export and import reading is continuous and recording frequency is monthly. The QA/QC procedure is as per the requirement of the registered PDD and onsite practice. Assessment team confirms the same during the Zoom/telephonic interviews with PP. Assessment team checked all the values of calculated Net electricity supplied to the grid from the Meter reading statement (provides the value of export and import) issued by State electricity board. Moreover, as per the requirement of the approved methodology and registered PDD, assessment team cross checked the net electricity value as presented in the JMR with the invoice raised and found the values match with each other. The same is thus acceptable to the assessment team and thus emission reduction calculation is correct. The details of the Meters are provided in appendix 2 of the report.
Cross check mechanism	The JMR is cross-checked with the invoice copies. Emission reduction calculated in thus correct and accurate. The cross-check mechanism is presented in the emission reduction calculation sheet and the same is found correct.

Relevant SDG Indicator	**SDG 13.2.1: Climate Action**
Data/parameter:	**ER_y**
Unit	tCO_2
Description	Emission reductions achieved per year
Source of data checked by the assessment team	Emission reduction sheet
Value(s) of monitored parameter	989,457
Means of verification:	Assessment team checked that the parameter is calculated. The electricity exported & imported measured by Energy meter installed at substation. The JMR is cross-checked with the invoice copies. Emission reduction calculated in thus correct and accurate.
Cross check mechanism	All the formulas are applied in line with the registered GS4GG PDD

Relevant SDG Indicator	**SDG 8.5.1: Decent Work and Economic Growth**
Data/parameter:	**Quality of employment**
Unit	Number of Trainings provided to employees
Description	Training of Staff
Source of data checked by the assessment team	Training Records, HSE & HR records
Value(s) of monitored parameter	Assessment team checked Number of Trainings provided to employees & O&M staffs. A total of 27 training programmes to its employees and O&M staffs. The training records for the monitoring period is checked by the assessment team and found correct.
Means of verification:	The value for this parameter is taken from Plant records / Letter from O&M contractors for employment generation. Verification team interviewed some employees & local stakeholders.
Cross check mechanism	Not applicable

Relevant SDG Indicator	**SDG 8.5.1: Decent Work and Economic Growth**
Data/parameter:	**Number of employment generation and Salary**
Unit	Number of staffs involved in the project
Description	Number of people employed directly due to the project activity
Source of data checked by the assessment team	Plant employment records, HR and PP declaration
Value(s) of monitored parameter	Assessment team checked that for Quantity of employment and income generation. Employment is given in office work, O&M, Security etc. A total of 20 employments given during monitoring period. The employment records for the monitoring period is checked by the assessment team and found correct. Further below is the breakup of employment generated during the monitoring period
Means of verification:	The value for this parameter is taken from Plant employment records, HR and PP declaration. Verification team interviewed some employees and Local stakeholders.
Cross check mechanism	Not applicable

Year	Skilled	Unskilled	Total
2019	8	2	10
2020	7	3	10

Relevant SDG outcome has been included in ER sheet and have been found correct.

During the interviews with PP, the verification team confirmed that there is a grievance book at project site. Every stakeholder has access to the grievance register and can lodge grievance any time. Same if any is resolved as per the standard operating procedures of the company. By checking grievance book submitted by PP, it was able to confirm there are no major comments received from the local people for the present monitoring period. Minor grievances are addressed by the PP. Local people are happy with the implementation of the project activity as it entrust employment and improve living standard of local people and villagers.

Assessment team also checked that the projects are not registered under the REC mechanism of India and the same can be cross-checked at *https://recregistryindia.nic.in*. Thus, double counting for the current monitoring period is ruled out.

Assessment team also checked the other registry like UNFCCC and VCS and found that project is not registered with both mechanisms.

Applus+ Certification conducted an interview with the project owner and local stakeholders please find the summary of the interview as below:

Sections	Debriefing
Trainings & salaries of the employees	During verification process Mr. N.P. Singh, of PP representative team was interviewed. It was noted that regular technical & nontechnical trainings were conducted and the salaries are in line with the industry standard.

In Summary, it is Applus+ Certification's opinion that the monitoring of the project owner regarding to sustainability is in line with requirement of the GS4GG guideline.

Summary of ex-post values of each SDG outcome for the current monitoring period

Item	Baseline estimate	Project estimate	Net benefit
SDG 7: Affordable and Clean Energy	0 MWh	840,960 MWh	215,264.83 MWh
SDG 8: Decent Work and Economic Growth	-	No. of employment opportunities created: 10 No. of trainings conducted: 1	No. of employment opportunities created: 10 No. of trainings conducted: 26
SDG 13: Climate Action	779,933 tCO_2e	0 tCO_2e	209,524 tCO_2e

Comparison of actual value of outcomes with estimates in approved GS PDD

Item	Values estimated in ex ante calculation of approved PDD	Actual values achieved during this monitoring period
SDG 7: Affordable and Clean Energy	903,260 MWh for the Monitoring Period	1,056,224.83 MWh
SDG 8: Decent Work and Economic Growth	01 Training	No. of employment opportunities created: 20 No. of trainings conducted: 27
SDG 13: Climate Action	846,174 tCO_2e	989,457 tCO_2e

3.6 Assessment of Data and Calculation of Greenhouse Gas Emission Reductions

As a result of verification of the ER calculation process, the assessment team confirmed that all the parameters required for the determination of the emission reductions have been included in the Monitoring Report Version 01 & Monitoring report Version 03 and corresponding ER calculation spread-sheets and are consistent with the applied methodology ACM0002 Version 20.0 and the monitoring plan contained in the registered PDD. The parameters are complete in this monitoring period.

After verifying the reported figures with the raw data sources, it's confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the Monitoring Report Version 01 & Monitoring report Version 03 and corresponding ER calculation spread-sheets. The verification process for the same has been clearly described in above section of the report. See below for the detailed data:

Baseline Emissions for the amount of electricity supplied by project activity, BE_y is calculated as:

The baseline emission is using equation below:

$$\mathbf{BE_y = EG_{PJ,y} \times EF_{grid,CM.y}}$$

BE_y = 1,056,224.83 x 0.9368 = 989,457 tCO_2e (round down figure)

Thus, the baseline value of each SDG outcome are summarised as follows;

Item	Baseline value
SDG 7: Affordable and Clean Energy	No Activities in the baseline
SDG 8: Decent Work and Economic Growth	No Activities in the baseline
SDG 13: Climate Action	Emission of 989,457 tCO_{2e}

Project emissions:

The project is a solar power project, no fossil fuel is be consumed according to the methodology ACM0002 Version 20.0 & according to registered PDD, PE_y = 0 tCO_2e

Leakage:

As per ACM0002 Version 20.0, No leakage emission needs to be considered.

Emission reductions:

Thus the emission reductions are:

$ER_y = BE_y - PE_y$

= 989,457 – 0 = 989,457 tCO_2e

The actual achieved emission reduction for this monitoring period is 17% higher than estimated value in the GS PDD (989,457 tCO_2e against estimated 846,174 tCO_2e for 396 operational days with 779,933 tCO_2e/annum). The reductions in actual emission reduction are justified, since during the current monitoring period, the plant underwent scheduled maintenance and

breakdown. Also being a solar power project, the generation is nature dependent. There is no any adverse impact on additionality due to this higher PLF of project activity for current monitoring period as the achieved PLF is within the breaching value of 35.40%.
Further no design change in the project activity has taken place and even with an increased PLF which is achieved during this monitoring period, the equity IRR of the project is well below the benchmark. During the current monitoring period the project witnessed a PLF of 27% against the estimated PLF of 24% which was considered at the validation of the project activity. However, it is to be noted here that even with actual PLF of 27% (achieved during present verification) the equity IRR of the project activity is 6.39% against the benchmark value of 13.41%.
Further it was being analysed by the VVB that even after increase of 10% values in PLF than compared to actual PLF value, the IRR of the project is 9.62% which Is well below the benchmark value and thus the project activity still remains additional.

3.7 Management and Operational System

The responsibilities of data measurement, collection, verifying, archiving etc. have been clearly defined in the registered PDD. The same practice is followed onsite and it is confirmed by the assessment team during the interviews with PP. The data related to ER calculation as well as data monitoring, collection process etc. have been internally reviewed by the management of the Monitoring team regularly. The responsibility of each function is consistent with the monitoring plan in the registered PDD.

The information flow of each parameter has been verified by the assessment team via interviewing with responsible personnel.

It's verified during the interviews with PP & document review, the monitoring procedure as well as the internal quality management and control procedures are stipulated in the PDD. The monitoring personnel have been interviewed by the assessment team and it's confirmed that the monitoring is implemented as per the procedure. Also the training record has been checked by the assessment team and it is confirmed that the monitoring personnel are get sufficient train to perform the monitoring.

All the data and documents, either hard copies or soft copies, is kept for two years after the end of the last crediting period or the last issuance of GS VERs for this Project, whichever occurs later.

4. REFERENCE

LIST OF DOCUMENTS	
S. No.	**Document/Evidence/Reference/Web link, Version, Date**
1.	Monitoring Report Version 01 dated 07/10/2020, Revised Monitoring report version 02 dated 28/10/2020 Final Monitoring report version 03 dated 16/12/2020
2.	ER sheets version 01 dated 07/10/2020 Final ER Sheets version 02 dated 28/10/2020
3.	Registered PDD Version 06 dated 19/12/2019, Final GS Validation report version 01 dated 04/01/2020 Final MR for 1st Verification version 02 dated 10/12/2019 Final Verification Report for 1st Verification version 00 dated 04/01/2020
4.	ACM0002 Version 20.0 "Tool to calculate the emission factor for an electricity system"
5.	CDM validation and verification standard for project activities, Version 02.0
6.	GS4GG guideline
7.	Training records of the employees (both skilled/non-skilled)
8.	O&M policy
9.	Monthly reports issued by state utility and invoices raised by PP for the complete monitoring period
10.	Calibration certificates of the complete monitoring period
11.	Commissioning certificates for power plant
12.	Log book records for scheduled maintenance of the power plant for the complete monitoring period
13.	Sample work contract for both skilled and non-skilled manpower
14.	CSR report
15.	Grievance register
16.	HSE procedures
17.	Power purchase agreement
18.	O&M agreement
19.	Technical manual from the Manufacturer
20.	Zoom and telephonic interviews carried out with PP as part of remote audit due COVID-19 situation in India
21.	Various Circulars for Covid-19 issued by Ministry of Home Affairs of Government of India time to time https://www.mha.gov.in/notifications/circulars-covid-19

5. FINAL VERIFICATION STATEMENT

Applus+ Certification has been engaged by S B Energy Pvt. Limited to perform the 2nd periodical verification of the "400 MW Solar Power Project at Bhadla, Rajasthan" (GS Ref. No. GS7071).

The management of S B Energy Pvt. Limited is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project's Monitoring Plan in the registered PDD and the applied methodology ACM0002 Version 20.0.

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 Gold Standard. 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. A reasonable level of assurance has been achieved during this verification. The verification can confirm that:

- the project is operated as planned and described in the project design document and PDD approved by the EB and GS;
- the monitoring plan is as per the applied methodology;
- the monitoring in Monitoring Report is as per the PDD and the monitoring plan approved by the EB and GS;
- the development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately;
- the monitoring system is in place and generates GHG emission reductions data;
- the GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for "400 MW Solar Power Project at Bhadla, Rajasthan" for the monitoring period 01/09/2019 to 30/09/2020 (Both days included) as reported in Monitoring Report, prepared on the basis of the project's Monitoring Plan are fairly stated.

Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period:	01/09/2019 to 30/09/2020 (Both days included)

Verified emissions in the above reporting period:

Leakage emissions	0 tCO_2e equivalents
Project emissions	0 tCO_2e equivalents
Baseline emissions	989,457 tCO_2e equivalents
Emission reductions	989,457 tCO_2e equivalents

Vintage wise breakup of verified emission reduction is given below:

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Vintage	Period	Emission Reduction Achieved (tCO_2e)
Year 2019	01/09/2019 to 31/12/2019	278877
Year 2020	01/01/2020 to 30/09/2020	710580
Total	**01/09/2019 to 30/09/2020**	**989,457**

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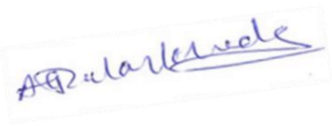
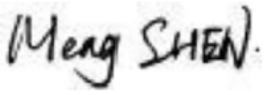
Date: 02/11/2020

Lead Auditor: Dr. Atul Takarkhede
Tech. Expert: Dr. Atul Takarkhede
Auditor: Mr. Sukanta Das
Tech. Reviewer: Mr. Simon Shen

Approver *(Applus+ Certification Business Unit Managing Director)*
Mr. Juan Sendín Caballero

ASSESSMENT TEAM	
Team Leader Dr. Atul Takarkhede	**Technical Reviewer:** Mr. Simon Shen
Signature: 	Signature: 
Approver: Mr. Juan Sendín Caballero	
Signature: 	

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Appendix 1: Corrective Action Request/Clarification Request/Forward Action Request resolution table

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	01
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	NA
Description of the audit finding		Date:	27/10/2020
Commission Certificate, technical specifications, breakdown details, O&M contract, PPA, Calibration certificates for monitoring meters & Community Empowerment policy of S B Energy, CSR records, EHS Policy is missing in in the document submission by PP.			
Project Participant's response		Date:	28/10/2020
The supporting documents like commissioning certificates, PPA, Calibration certificates have been submitted to the Verification team as desired.			
Documentation provided as evidence by Project Participant			
COD copies, PPA, O&M Copy, Calibration certificates etc.			
Auditor's assessment comment		Date:	31/10/2020
The required documents, Commission Certificate, technical specifications, breakdown details, O&M contract, PPA, Calibration certificates for monitoring meters & Community Empowerment policy of S B Energy, CSR records, EHS Policy have been submitted by PP. Information in the revised MR found inline with the supporting documents submitted. CAR closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	02
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	
Description of the audit finding		Date:	27/10/2020
PP requested to submit evidences for the SDG 8: 1. Training records or the monitoring period. 2. Provide breakup of employees as number of locals, skilled and unskilled etc. 3. Sample salary slips for review of assessment team Further, the workplace Health & Safety trainings are emerging from the safeguarding principles and not as contribution towards SDG 8. Corrections requested.			
Project Participant's response		Date:	28/10/2020
Supporting documents against SDG 8 has been submitted to the verification team as desired. Also since workplace health and safety trainings are a contribution towards SDG 8, hence these are removed from further consideration.			
Documentation provided as evidence by Project Participant			
MR Version 02 Training and employment records			
Auditor's assessment comment		Date:	31/10/2020
PP have submitted supporting documents for SDG 8 i.e. training records, records of employment with breakup, and sample salary slips. Also of workplace health and safety trainings removed as not contributing towards SDG 8. CAR thus closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	
Description of the audit finding		Date:	27/10/2020
As per the interviews with PP, a grievance register is placed at site and is being monitored continuously for any comments from Stakeholder. However, the Register is not submitted to the assessment team. CAR is thus raised.			
Project Participant's response		Date:	28/10/2020
Grievance register has been submitted to the Verification team as desired			
Documentation provided as evidence by Project Participant			
Grievance Register copies			
Auditor's assessment comment		Date:	31/10/2020
PP have submitted copy of the grievance register and found that information in MR inline with records & interviews with PP as well as local stakeholders.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	
Description of the audit finding		Date:	27/10/2020
PP requested to submit the JMR and invoice for the complete monitoring period. Correction sought. Further, PP requested to submit the ER sheet with applying rounddown to the baseline emissions for conservative estimation of the ER. Corrections in the ER sheet and MR sought.			
Project Participant's response		Date:	28/10/2020
The JMR and Invoices for the complete monitoring period has been submitted to the Verification team as desired. Also the ER Sheet with rounddown values has been submitted as desired.			
Documentation provided as evidence by Project Participant			
JMR and Invoices for the complete monitoring period			
Auditor's assessment comment		Date:	31/10/2020
PP have submitted JMR and Invoices for the complete monitoring period. Export & import values found matching with the JMRs. Also baseline emissions are rounddown for the conservative estimation of the ERs. CAR thus closed.			

Type:	☐ CAR ☐ CL/CR ☒ FAR	Number:	01
Raised by:	Gold Standard	Ref. to checklist in above tables:	
Description of the audit finding		Date:	25/05/2020
For, retroactive project, the physical meeting in line with GS4GG stakeholder consultation principles and consultation principles and requirements shall be integrated with the stakeholder feedback round. This is delayed but shall be organized prior to next verification and PP shall report the physical meeting using LSC report template. Special attention must be paid to the fact that the projects must take into account stakeholder feedback and shall modify project design, where reasonable.			
Project Participant's response		Date:	15/12/2020

The project owner was serious to organize the stakeholder consultation as per the FAR received from validation, however due to ongoing panademic of COVID 19 and restrictions on mass gatherings and travel this could not be conducted. The same shall be conducted as soon as the pandemic situation is normalized. **http://www.rajswasthya.nic.in/PDF/09%20Dt.12.03.2020%20Website%20Part%201.pdf** **https://www.dnaindia.com/india/news-night-curfew-no-social-gatherings-rajasthan-imposes-new-restrictions-to-curb-covid-cases-know-details-2859190**
Documentation provided as evidence by Project Participant
Government circulars

Auditor's assessment comment	Date:	15/12/2020
The Verification team agrees to the justification provided by the project owner as the PP didn't get sufficient time to arrange physical meeting as per GS performance review report concluded in April 2020. Further, PP confirms that the stakeholder meeting to be done before the next verification.		

Type:	☐ CAR ☐ CL/CR ☒ FAR	Number:	02
Raised by:	Gold Standard	Ref. to checklist in above tables:	
Description of the audit finding		Date:	25/05/2020
VVB is required to check for double counting by reviewing all relevant registries that could hold RECs/VERs/CERs from the considered project activity. The list of registries examined by the VVB shall be reported in the Verification report.			
Project Participant's response		Date:	15/12/2020
The project is not registered in any other mechanisms and the same has been crosschecked by the VVB as well and examined various registries that could hold environmental attributes however no records were being found and the project was not found in any of other registries, since the project activity has already been deregistered from Verra. https://cdm.unfccc.int/ https://registry.verra.org/app/projectDetail/VCS/1805 https://www.recregistryindia.nic.in/			
Documentation provided as evidence by Project Participant			
-			
Auditor's assessment comment		Date:	15/12/2020
The Verification team agrees to the justification provided by the project owner and confirms no double accounting from the same project activity.			

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Appendix 2: Calibration details of monitoring meters

For SB Energy One Private Limited:

Meter Number	Accuracy Class & Make	Calibration Date	Due Date of Calibration	Calibration Date	Due date of Calibration
	For Plot L1 A				
2843291 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843292 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843293 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
	For Plot L1 B				
2843294 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843295 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843296 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
	For Plot L1 C				
2843297 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843298 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843299 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
	For Plot L1 D				
2843300 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	14/09/2019	13/09/2024
2843301 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	14/09/2019	13/09/2024
2843302 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024

Meter Number	Accuracy Class & Make	Calibration Date	Due Date of Calibration	Calibration Date	Due date of Calibration
	For Plot L4 A				

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Meter Number	Accuracy Class & Make	Calibration Date	Due Date of Calibration	Calibration Date	Due date of Calibration
2843327 (Main Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843328 (Check Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843329 (Standby Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
	For Plot L4 B				
2843330 (Main Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843331 (Check Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843332 (Standby Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
	For Plot L4 C				
2843333 (Main Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843334 (Check Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843335 (Standby Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
	For Plot L4 D				
2843336 (Main Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843337 (Check Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843338 (Standby Meter)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024

Meter Number	Accuracy Class & Make	Calibration Date	Due Date of Calibration	Calibration Date	Due date of Calibration
	For Plot L5 A				
2843339 (Main Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2843340 (Check Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024

Meter Number	Accuracy Class & Make	Calibration Date	Due Date of Calibration	Calibration Date	Due date of Calibration
2861545 (Standby Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
	For Plot L5 B				
2861546 (Main Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861547 (Check Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861548 (Standby Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
	For Plot L5 C				
2861549 (Main Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861550 (Check Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861551 (Standby Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
	For Plot L5 D				
2861552 (Main Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861553 (Check Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2843326 (Standby Meter)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024

For SB Energy Three Private Limited:

Meter Number	Accuracy Class & Make	Calibration Date	Due Date of Calibration	Calibration Date	Due date of Calibration
	For Plot P2F1				
RJB92278 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	25/09/2019	24/09/2024
RJB92275 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	25/09/2019	24/09/2024
RJB92281 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	25/09/2019	24/09/2024
	For Plot P2F2				

Meter Number	Accuracy Class & Make	Calibration Date	Due Date of Calibration	Calibration Date	Due date of Calibration
RJB92279 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92276 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92282 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	25/09/2019	24/09/2024
	For Plot P2F3				
RJB92280 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92277 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92283 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024

Meter Number	Accuracy Class & Make	Calibration Date	Due Date of Calibration	Calibration Date	Due date of Calibration
	For Plot P3F1				
RJB92288 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92289 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92292 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
	For Plot P3F2				
RJB92285 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92284 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92291 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
	For Plot P3F3				
RJB92286 (Main Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92287 (Check Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92290 (Standby Meter)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024

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Appendix 3: Audit Team CVs

Name	SHORT CV. BACKGROUND INFORMATION
Dr. Atul Takarkhede	**Dr. Atul Takarkhede** counts with 10 years of experience in field of Environmental Auditing, consulting and accreditation. He is an Expert in ISO 9001-14001, CO2/GHG Reporting, Carbon Foot Print, Energy, Water and Waste Management Reporting for organizations environmental performance. His professional portfolio is mainly related with carrying out EIA, conducting QA/QC of EIA Reports; Conducting Environmental/water Audits; NABET requirements appliance. Furthermore, he counts with solid experience on CDM-VCS-GS consultancy and auditing. He has Ph.D. (Environmental Science) from Institute of Science, RTM Nagpur University, Nagpur, and he has already published different technical reports related to environmental science. Currently he is associated with True Quality Certifications Private Limited and is empanelled with APPLUS certification to carry out GHG audit.
Mr. Sukanta DAS	**Mr. Sukanta DAS**, has done M. SC in (Electronics and Photonics) and M. Tech in (Energy technology) from Tezpur Central University/ Indian Institute of technology Bombay in India. He is a certified lead auditor for ISO 14001 EMS LA and ISO 9001 QMS LA from International registry for Certified Auditors (IRCA) and Certified Lean Management practitioner from Quality Council of India (QCI). He has more than Nine years of working experience at TUV NoRD/ Re-consult/CRA/APPLUS certifications under various categories of projects stating from Renewable to waste to supercritical projects. He was JI/ CDM Lead Assessor in TUV NoRD and was involved in more than 100 CDM validation and verifications activities in Gold Standard, VCS, CDM projects as a team leader/technical reviewer / validator / verifier covering the sectoral scope 1, 13 technical areas 1.2/1.1/13.1. Currently he is associated with True Quality Certifications Private Limited and is empanelled with APPLUS certification to carry out GHG audit.
Mr. Simon Shen	**Mr. Simon Shen** (Master Degree in Thermal Energy Engineering, Bachelor Degree in Environmental Engineering) is a Lead Auditor appointed by Applus+ LGAI for the GHG project assessment. He is based in Shanghai. He has several years of work experience in environmental protection field. Before he joined Applus+ LGAI, he had been worked for TÜV SÜD as a GHG Validator/Assessment team and ISO 9001/14001 Lead Auditor for 3.5 years