

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



Project Title: *400 MW Solar Power Project at Bhadla, Rajasthan*
Monitoring Period: 01/01/2019 to 31/08/2019 (Both days included)
GS project ID: GS 7071
Internal ID: 12118
Customer: S B Energy Pvt. Limited
Date: 27/03/2020
Revision: 01

SUMMARY			
Reference No.	Date (first version)	Version No.	Date (last version)
GS 7071	04/01/2020	01	27/03/2020
GS4GG Verification			
GS4GG Certified Product (sought):		GHG Emission Reductions	
GS4GG SDG Impact Statement (sought):		Impact Certification	
General Information			
Client	S B Energy Pvt. Ltd.		
Project Title	400 MW Solar Power Project at Bhadla, Rajasthan		
Project Participants	S B Energy Pvt. Ltd.		
Project Location	Rajasthan		
Contact Person	Mr. N. P. Singh		
Monitoring Period:	01/01/2019 to 31/08/2019 (Both days included)		
GS4GG Version: GS4GG Principles and Requirements 1.1 GS4GG Activity Requirements: RE Activity Requirements Applied Methodology Version: ACM0002 Version 20.0. Consolidated baseline methodology for grid-connected electricity generation from renewable sources. Current Methodology Version: As this is verification applied methodology is equal to current methodology		GS4GG Sectoral Scope: 2 UNFCCC CDM Sectoral Scope: 1 Technical Area: 1.2	
Published Monitoring Report Version: 01 Date: 14/10/2019		Final Monitoring Report Version: 03 Date: 27/03/2020	
Certified Project Design Document Version: 07 Date: 27/03/2020 GS Passport Version (if applicable): NA			
Estimated Emission Reductions: 519,243 tCO ₂ e			
Actual Emission reduction achieved: 608,592 tCO ₂ e			
Selected Sustainable Development Goals (SDGs): 7, 8, 13			
Verification Summary			
<p>LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by SB Energy Pvt. Ltd. to perform the 1st periodical verification of "400 MW Solar Power Project at Bhadla, Rajasthan" (Ref. No. 7071) applying the methodology ACM0002 version 20.0 The management of S B Energy Private Limited is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.</p> <p>A desk review and a site visit have been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following have been reviewed:</p> <ol style="list-style-type: none"> a. The GS4GG PDD V 06 including the monitoring plan and the corresponding validation report; b. Monitoring report(s); 			

- c. The applied monitoring methodology;
- d. Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board;
- e. The Gold Standard for Global Goals “Principles and Requirements” Version 1.2 and 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 V06, 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 (01/01/2019-31/12/2023)

Applus+ Certification confirms that the project is implemented in accordance with the validated PDD V06. The monitoring plan complies with the applied methodology ACM0002, Version 20.0 /13/ and the Gold Standard for Global Goals “Principles and Requirements” V 1.2/15/, 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 608,592 tCO₂e emission reductions during period 01/01/2019 to 31/08/2019 (Both days included).

ASSESSMENT TEAM		
Team Members	Type of Resource ¹	Organization (for OEs)
Lead Auditor: Mr. Pankaj Kumar	<input type="checkbox"/> IR <input type="checkbox"/> EI <input checked="" type="checkbox"/> OE	M/s True Quality Certifications private Limited
Auditor: Sukanta Das	<input type="checkbox"/> IR <input type="checkbox"/> EI <input checked="" type="checkbox"/> OE	M/s True Quality Certifications private Limited
Technical Expert: Mr. Pankaj Kumar	<input type="checkbox"/> IR <input type="checkbox"/> EI <input checked="" type="checkbox"/> OE	M/s True Quality Certifications private Limited
Technical Reviewer : Mr. Simon Shen	<input type="checkbox"/> IR <input checked="" type="checkbox"/> EI <input type="checkbox"/> OE	

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

ABBREVIATIONS	
ACM	Approved Consolidated Methodology
AM	Approved Methodology
AMS	Approved Methodology Small Scale
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
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
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
UNFCCC	United Nations Framework Convention for Climate Change
VVB	Validation and Verification Body
VVS	Validation and Verification Standard

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

Appendix 2: Calibration details of monitoring meters.

Appendix 3: Audit Team CVs.

1. INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by S B Energy Private Limited to perform the 1st 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 transitional documents for registration 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 VVS for project activities version 02 for the project activity and Gold Standard i.e. and 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, the validated PDD V06 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 VVS for project activities version 02 for the project activity as well as the GS4GG guideline, 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 sustainable parameters.

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 V07, the gross electricity generation from the project activity is estimated as 832,550 MWh/year resulting in estimated emission reductions of 779,933 tCO₂e and abates 3,899,665 tonnes of Carbon Dioxide emissions during the first crediting period of the project activity (01/01/2019-31/12/2023). The project has obtained requisite clearances and has already commissioned and was confirmed during site visit.

Project activity is a grid-connected large-scale 400 MW solar photo voltaic power generation facility.

Technical Description:

The total installed capacity of the project is 400 MW, which comprises of two projects owned by SB Energy One Pvt Ltd and SB Energy Three Pvt Ltd in Rajasthan.

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 * 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	200
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 * 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	200
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 %
12.	Transformers	100%

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 project's 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 site visit 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
Mr. Pankaj Kumar	LA/TE	YES	YES	YES	YES
Mr. Sukanta Das	A	YES	YES	YES	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 and Passport, 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 section 4 of this report for detail of the documents checked.

2.3 On site assessment and follow up interviews

As a part of the verification, the on-site inspection in the state of Rajasthan been performed by the assessment team.

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Singh	N.P.	PP representative	05/09/2019	Project implementation, Baseline emissions, ER calculations, Sustainable monitoring etc.	Mr. Pankaj Kumar
3	Singh	Mahendra	Local stakeholder	05/09/2019	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	Mr. Pankaj Kumar
4	Yadav	Arjun	Local stakeholder	05/09/2019	Stakeholder meeting- Noise pollution if any, Standard of Livings etc.	Mr. Pankaj Kumar
5	Meena	Surendra	Local stakeholder	05/09/2019	Stakeholder meeting- Soil Erosion if any, Standard of Livings etc.	Mr. Pankaj Kumar

The objective of the 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, Passport 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 Sustainability monitoring plan as per the registered Passport
- To understand grievance (if any) from the villagers during the monitoring period.

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 and CRs 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:00 CR: 05 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

No FARs envisaged from previous verification and or Validation. This is 1st periodic verification for the project activity.

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 visual inspection that all physical features of the proposed project activity including data collecting systems and storage have been implemented in accordance with the validated PDD.

The project activity was in normal operational during the monitoring period and the same has been confirmed on-site. No unusual activities observed during the monitoring period and plant was undergone scheduled maintenance as per the recommendation of the manufactures. No forced breakdown observed and the same is confirmed by the assessment team with the plant log details.

Project Participants	S B Energy Private Limited
Title of project activity	400 MW Solar Power Project at Bhadla, Rajasthan
GS Registration No.	GS 7071
GS Version applied	The project has been submitted to GS4GG as per the guidelines of Gold Standard for Global Goals "Principles & Requirements" Version 1.2 Hence the current verification of the project activity has followed the GS4GG version of the Gold Standard.
Baseline and monitoring methodology	ACM0002 Version 20.0 - Consolidated baseline methodology for grid-connected electricity generation from renewable sources.
Project type	The purpose of the project activity is to generate electricity using solar PV technology. It is a 400 MW large-scale grid connected solar PV power project.
Project scale	Large
Location of the project activity	The project located at Village - Bhadla, Tehsil – Phalodi and District – Jodhpur of Rajasthan state of India
Project's crediting period	01/01/2019 to 31/12/2023 (1 st Crediting Period)
Total duration of the project	15 years (Renewable crediting period)
Period verified in	01/01/2019 to 31/08/2019 (inclusive of both days)

this verification	
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Based on interview with PP representative the verification team was able to confirm that the project implementation is in accordance with the project description contained in the GS PDD (version 7.0, dated 27/03/2020)/10/

The project activity is a 400 MW large-scale grid connected solar PV power project in Jodhpurdistrict, Rajasthan, India state of India with latitude (27°10'38.06"N) and Longitude (71°55'49.16E) as their geo coordinates. The same was confirmed referring to the website Google maps/06/ and found to be correct.

The project activity (part of the project site) involves generation of electrical energy derived from Solar energy. The baseline scenario identified is import of electricity from grid.

Project activity comprises of state-of-the-art, environment friendly, solar power generation using photo voltaic technology. Project activity comes under the purview of large-scale, solar PV power technology-based project implemented in India.

The project has obtained the requisite clearances and has already commissioned on as verified from the review of relevant document /17/ and operating successfully /18/.

Project equipment and the technology are employed as mentioned in the registered PDD /10/.

The technical details of the project activity as confirmed during site visit explained in sec. 1.3 above.

The operation of the project activity complies with all statutory requirements as the PP is submitting the monthly invoice to government authorities i.e. SECI (Solar Energy Corporation India)

The monitoring data is recorded on continuous basis and available on hourly/daily basis as ERP and MIS reports /18/ and stored at plant site.

Training has been provided to the operators handling the operation of the critical equipment such as solar panels, power evacuation systems and other equipments. The company has recruited personnel with relevant experience in the operation of the plant.

There is no event or situation including emergency situations occurred during this monitoring period which has impacted the applicability of methodology /13/. The outage record or breakdown report/07/ for this monitoring period was verified during the on-site visit from logbooks and found OK.

The timeline of the project's implementation is as follows:

Milestone of the project activity	Timeline	Assessment by the verification team
Registration of the project activity under GS4GG Principles and Requirements version 1.2	10/04/2020	The end date of the review period "6 week registration review period under GS4GG version 1.2" i.e. 10/04/2020 has been considered as the registration date of the project activity and has been verified by the verification team from the review document
Crediting period		

1 st Monitoring period	01/01/2019 to 31/08/2019	Verification team has verified same from the registered documents. Also, this monitoring period is within the first crediting period.
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Assessment of actual emission reductions with the estimate emission reductions in PDD:

Estimated Emission Reduction as per registered PDD	519,243 tCO ₂ e As per PDD V06, ER for 365 days- 779,933 tCO ₂ e and for this MP, total days are 243. Accordingly, emission reduction for this MP, estimated. Plz refer calculation in ER Spread sheet
Actual Emission Reduction for the monitoring period	608,592 tCO ₂ e
Is any increase of VERs occurred?	Yes
Reason for increase of VERs	There has been marginal increase in emission reductions observed during this monitoring period as the project experienced favourable solar radiation during this verification period and is nature dependent and not in control of PP.

In summary, verification team confirms that actual emission reduction is higher than the estimate of the registered for the current monitoring period.

Verification team considers the project and monitoring description of the project contained in the Monitoring report to be complete and accurate. The Monitoring report complies with the relevant methodology, tools, forms and guidance which are in line with that available in the registered documents (including PDD) with GS4GG.

Opinion:

- a) In opinion of the assessment team the implementation and operation of the project activity is in compliance with the description in the PDD V07.
- b) There is no revision in monitoring plan or post registration change for the current monitoring period.
- c) The actual emission reductions for the current monitoring period are 608,592 tCO₂e which are higher than the estimated ERs (519,243 tCO₂e) for the comparable period.

3.3 Compliance of the Monitoring Plan with the Monitoring Methodology

The DOE verification team is able to confirm that the monitoring plan contained in the PDD (version 7.0, dated 27/03/2020) is in accordance with the approved methodology applied by the project activity –ACM0002 Version 20 /13/. Consolidated baseline methodology for grid-connected electricity generation from renewable sources.

The monitoring plan and the monitoring system implemented are in compliance to the applied monitoring methodology ACM0002 Version 20. All other requirements of the applied methodology are met. Furthermore, it can be confirmed that the ex-ante value for grid emission

factor (EF) sourced from CEA data base in the registered PDD has been correctly applied in the calculation of emission reductions. The DOE verification team confirms that the monitoring plan of the CDM project activity complied with the applied methodology.

During the verification all relevant monitoring parameters (as listed in the PDD) have been verified with regard to the appropriateness of the applied measurement / determination method, the correctness of the values applied for ER calculation, the accuracy, and applied QA/QC measures.

Opinion:

The monitoring plan mentioned in the registered PDD is in line with the applied methodology i.e. – ACM0002 Version 20. Consolidated baseline methodology for grid-connected electricity generation from renewable sources. The monitoring mechanism is in line with the methodology and is effective and reliable

3.4 Completeness of Monitoring

The monitoring has been carried out in accordance with the monitoring plan contained in the PDD (version 7.0, dated 27/03/2020) /10/. During the course of verification, all relevant monitoring parameters have been verified with regard to the appropriateness of the applied measurement / determination method and applied QA/QC procedures. It is confirmed that the monitoring parameters have been measured / determined without material misstatements.

The verification team reviewed the actual monitoring during the site visit and from document review and compared it against the requirements of the monitoring plan in the PDD /10/ and found in line.

The verification team assessed the monitoring techniques and each monitoring value in the monitoring report; and provided a short summary on the verification of every parameter listed in the monitoring plan and used for calculation of emission reductions.

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 CO₂ 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: Climate Action= 0.9610 tCO₂e/MWh
 $EF_{grid,BM,y}$ - Relevant SDG Indicator= SDG13: Climate Action= 0.8644 tCO₂e/MWh
 $EF_{grid,CM,y}$ - Relevant SDG Indicator= SDG13: Climate Action= 0.9368 tCO₂e/MWh

b. Data and parameters monitored

Relevant SDG Indicator	7.2.1 Renewable energy share in the total final energy consumption
Data/parameter:	EG_{PJ,y}
Unit	MWh
Description	Quantity of Net Electricity generated and fed into Grid
Measured/calculated/default	Continuous recording and monthly
Source of data	Monthly Joint Meter Reading records
Value(s) of monitored parameter	649,658 Quantity of net electricity generated and fed into grid checked with monthly JMRs and found the values to be consistent with JMRs which are the basis for invoicing. JMRs also cross checked with invoices.
Monitoring equipment	Tri-Vector type Availability Based Tariff Energy meter Accuracy class: 0.2s All the meters were calibrated as per the requirement, the details of calibration have been provided in Appendix 2 of the report.
Measuring/reading/recording frequency:	Monthly
Calculation method (if applicable):	Not Applicable
QA/QC procedures:	Quantity of net electricity supplied is cross-verified with the invoice raised. As per PDD V06, calibration is to be done once in five years.
Cross Checks	The value was cross checked between JMR, Invoices and site log book.

Relevant SDG Indicator	8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
Data/parameter:	No. of employment generation
Unit	Number of total employment Number for men/women employed by project activity Type of Job like temporary/ permanent or skilled/unskilled, etc.
Description	Number of people employed directly due to the project activity Number of men/women employed by the project activity Type of Job like temporary/permanent or skilled/unskilled, etc
Measured/calculated/default	Not Applicable
Source of data	Plant records/ HR records/ Letter from O&M contractor for employment generation/ DOE interview with employees, local stakeholders etc

Value(s) of monitored parameter	<p>Total no. Of persons employed during this monitoring period with breakup of skilled and unskilled workers provided by the PP which was cross checked with plant records and through interviews during site visit. Total no. of employment generated during the monitoring period is as below: 2019 : 28</p> <p>Further below is the breakup of employment generated during the monitoring period</p> <table border="1" data-bbox="628 568 1366 636"> <thead> <tr> <th>Year</th> <th>Skilled</th> <th>Unskilled</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2019</td> <td>22</td> <td>6</td> <td>28</td> </tr> </tbody> </table>	Year	Skilled	Unskilled	Total	2019	22	6	28
Year	Skilled	Unskilled	Total						
2019	22	6	28						
Monitoring equipment	<p>The total number of persons working in the plant would be calculated based on source of data provided above. This parameter also monitors number of men/women employed by the project activity.</p> <p>The project activity ensures that "equal pay for work of equal value" for both men and women and there is no any discrimination against women.</p> <p>"The employment covers number of men and number of women employed by the project activity. The job is of type temporary/permanent or skilled/unskilled, etc. Also it is ensured that peoples will get equal payment for equal work. The payment will be based on work and no any gender inequality for payment for work of equal value.</p> <p>The employment generated refers to overall jobs created during project implementation and during project Operation and Maintenance. This is primary and direct effect on employment generated due to project activity. The effect of employment generation is not be 'one off' or an effect generated in design, construction, distribution or start-up or decommissioning of the Project."</p> <p>PP has provided salary slips and employment agreement of persons directly getting employment opportunity from the project activity.</p> <p>Further the average hourly earnings of a person are higher than the local level. For e.g a person is getting a monthly salary of INR 62,000 then his average hourly earnings will be as follows:</p> $= 62,000 / (30 * 7) = \text{INR } 210.$ <p>This is higher than the average wage per hour in India (Average hourly earning of highly skilled workers for Zone C is INR 26.85²).</p> <p>Further the same has been crosschecked by the VVB during on site visit by means of attendance register and physical interviews and Salary Slips. The Project thus provides employment opportunities and pays salaries and welfares and also helps to increase the income and living standards of the employees. The Sample Salary slip is also submitted to GS for their purview and further consideration.</p>								
Measuring/reading/recording	Monthly monitoring and annual compilation								

²<https://clc.gov.in/clc/min-wages>

frequency:	
Calculation method (if applicable):	Not Applicable
QA/QC procedures:	The number of persons employed would be monitored in the plant register, which can be crossed checked with daily attendance register.
Cross Checks:	Employment records.

Relevant SDG Indicator	8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training				
Data/parameter:	Quality of employment				
Unit	Number				
Description	Training of staff and Safety training				
Measured/calculated/default	Not Applicable				
Source of data	The training records for all the employees/ HR records/ Letter from O&M contractor for employment generation/ DOE interview with employees, local stakeholders etc				
Value(s) of monitored parameter	2019 – 19				
	Sr No	Topic	Date	Number of Participant	Duration
	1	Electrical shock Mock drill	14/02/2019	21	1 hour
	2	Awareness training on Tobacco & Alcohol	21/02/2019	26	45 mints
	3	First aid training on Snake bite	23/04/2019	14	1 hour
	4	Manual Handling	22/04/2019	23	45 mints
	5	Earth Day Importance	24/04/2019	23	45 mints
	6	PPES Importance	24/04/2019	13	30 mints
	7	Awareness training on Tobacco day	31/05/2019	34	2 hours
	8	HT Cable Laying SOP	19/07/2019	10	1 Hours
	9	Defensive Driving	25/07/2019	13	1 hours
	10	Basic Hygiene	30/07/2019	3	1 hours
	11	Arc Flash Training	03/06/2019	5	1 hours
	12	First Aid	23/06/2019	23	8 hours
13	Working with Electrical	24/06/2019	20	8 hours	

	Appliances			
14	Emergency Response Preparedness	25/06/2019	20	8 hours
15	Awareness Training on ISO 45001	26/06/2019	23	8 Hours
16	Unsafe act, Unsafe Condition & PTW Training	06/07/2019	11	2 Hours
17	Safety Awareness Session	27/07/2019	14	1.5 hours
18	Fire Fighting Training	08/08/2019	9	2 hours
19	HT Panel Training	11/08/2019	5	45 mints
	PP has confirmed, total 19 trainings conducted during this monitoring period. VVB confirmed the details provided in MR with training register and the attendance sheet and also cross checked by conducting interviews during site visit.			
Monitoring equipment	Together with the technology supplier, the Project organise training for the staff on the technology and the monitoring of the plant operation, and the emergency and safety procedures.			
Measuring/reading/recording frequency:	Annually			
Calculation method (if applicable):	Not Applicable			
QA/QC procedures:	The training records of all the employees			
Cross Checks:	Training records.			

Relevant SDG Indicator	SDG 13
Data/parameter:	ER,
Unit	tCO ₂ / year
Description	Emission reduction achieved per year
Measured/calculated/default	Calculated
Source of data	Calculated as per registered PDD and as per methodology
Value(s) of monitored parameter	2019 – 608,592 Emission reduction calculated in line with applied methodology and PDD V06. ER calculation checked in ER spread sheet and found to be correct and conservative.
Monitoring equipment	Not Applicable
Measuring/reading/recording frequency:	As per monitoring period
Calculation method	The baseline emissions are the product of electrical energy

(if applicable):	baseline EG_{re} , expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.
QA/QC procedures:	Not Applicable
Cross Checks:	Baseline and emission calculation sheets were compared with actual monitoring data.

The verification team confirms;

- a) The monitoring plan implemented is in line with monitoring plan included in approved GS4GG PDD.
- b) The monitoring complies with the requirement of the applied methodology.
- c) The information inflow (from data generation, aggregation, to recording, calculation and reporting) is included above under each parameter and confirms to the requirement of the approved PDD.
- d) The values included in the monitoring report and corresponding emission reduction sheets are verified, cross checked and included under each monitoring parameter, wherever appropriate
- e) The findings relevant to each parameter, wherever appropriate are discussed in detail in Appendix 1 of this report.

In summary, the verification team confirms that all the ex-post parameters are monitored in accordance with the approved monitoring plan and applied methodology.

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

For Contributions to Sustainable Development

The verification team checked the sustainable development indicator parameters during the site visit and interview.

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.

As per the sustainability monitoring plan in the approved PDD, verification team evaluated all sustainable development indicators as followed in the table:

Item	Baseline estimate	Project estimate	Net benefit
SDG 7: Affordable and Clean Energy	-	649,658 MWh	649,658 MWh
SDG 8: Decent Work and Economic Growth		No. of employment opportunities created: 28 No. of trainings given: 19	No. of employment opportunities created: 28 No. of trainings given: 19
SDG 13: Climate Action	608,592 tCO ₂ e	-	608,592 tCO ₂ e

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	554,273 MWh	649,658 MWh								
SDG 8: Decent Work and Economic Growth	1 training per year and employment for 10 people	No. of employment opportunities created: 28 No. of trainings in MP - 19 Further below is the breakup of employment generated during the monitoring period <table border="1"> <thead> <tr> <th>Year</th> <th>Skilled</th> <th>Unskilled</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2019</td> <td>22</td> <td>6</td> <td>28</td> </tr> </tbody> </table>	Year	Skilled	Unskilled	Total	2019	22	6	28
Year	Skilled	Unskilled	Total							
2019	22	6	28							
SDG 13: Climate Action	519,243 tCO ₂ e	608,592 tCO ₂ e								

The adequacy and compliance of the monitoring plan in the Monitoring report was found as per the requirements laid by the approved GS4GG PDD. The information flow (from data generation, aggregation, to recording, calculation and reporting) is already included under respective parameter above. The verification team has verified all the data and collected evidence as per the required monitoring frequency and found to be correct and appropriate meeting the requirements of the applied methodology and registered PDD.

As a part of continuous feedback from stakeholders, the grievances register is being placed at site and is being continuously monitored and addressed through the grievances cell on regular basis and maintained in a register at SB Energy site office. The comments received have been described in the Monitoring report along with the actions undertaken. The grievance register was also checked during the site visit and actions undertaken were discussed with the affected stakeholders and found that appropriate consideration of the comments have been taken by the project proponent.

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.

Also during the site visit, 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 site visit 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.

Local stakeholder meeting details:

Name of the stakeholder	Arjun Yadav
Occupation	Farmer
<p>DOE QUESTION: Did PP promised employment opportunity?</p> <p>Answer: Yes, PP told us that employment will be generated and the locals will be given priority.</p> <p>DOE also like to conclude that during the site visit it was observed that local people were employed for security and operation related work like water spraying, vegetation improvement and other unskilled work. DOE also found that skilled local persons were also employed by the organization for the operation and maintenance of the power plant.</p>	

Name of the stakeholder	Surendra Meena
Occupation	Villager
<p>DOE questions: Did the power plant discharge any harmful pollutants?</p> <p>Answer: NO the plant does not discharge any harmful pollutants.</p> <p>DOE questions: Did the power plant destroy any crop fields?</p> <p>Answer: The plant is implemented in barren land and there were no any fertile land or crop which is damaged.</p>	

Name of the stakeholder	Mahendra Singh Tomar
Occupation	Teacher
<p>DOE question: Did the power plant produces noise which effect the livelihood of the Villager</p> <p>Answer: No. The locals are happy with the implementation of the project activity.</p>	

Name of the stakeholder	Md. Ghaus
Occupation	Shopkeeper
<p>DOE questions: Did the power plant causes any Soil erosion</p> <p>Answer: The project participant Excavated material stock piled and used for backfilling of foundations, platforms etc. They also have done Vegetation to avoid any kind of soil erosion.</p>	

Name of the stakeholder	Phholchand
Occupation	Villager
<p>DOE questions: Did the project help in improving the livelihood of the nearby local people</p> <p>Answer: Before the implementation of the project activity local people are employed as Labour in the Agricultural field and the Job is also not permanent. They are paid as per the requirement of the field and day work. After the implementation of the project activity the local people are employed with a permanent job and paid as per the minimum salary wages of the area. This not only improved the livelihood of the local villagers/peoples but also helped in improving the happiness quotient of the area.</p>	

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.

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 02 & Monitoring report Version 03 and corresponding ER calculation spreadsheets and are consistent with the applied methodology ACM0002 version 20 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 03 and corresponding ER calculation spreadsheets. 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:

Project emissions:

Project Emissions, PE_y = 0

Emission reductions:

Calculation of baseline emission is as follows;

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

Where,

$$EG_{PJ,y} = 649,658 \text{ MWh}$$

$$EF_{grid,CM,y} = 0.9368 \text{ tCO}_2\text{e/MWh}$$

Hence,

$$\begin{aligned} BE_y &= 649,658 \text{ MWh} \times 0.9368 \text{ tCO}_2\text{e/MWh} \\ &= 608,592 \text{ tCO}_2\text{e} \end{aligned}$$

3.7 Management and Operational System

The responsibilities of data measurement, collection, verifying, archiving etc. have been clearly defined in the approved PDD V06. The same practice is followed onsite and it is confirmed by the assessment team during the verification site visit. 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 on-site verification, 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 (Training register and attendance sheet) 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, will be 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
/01/	GS MR 7071 version 1
/02/	GS MR 7071 Version 2
/03/	Emission reduction Sheet version 1
/04/	Emission reduction Sheet version 2
/05/	Joint Meter Reading (JMR)/ Invoices
/06/	Actual geo-coordinates
/07/	Break Down details of plant
/08/	Calibration certificates
/09/	Training record
/10/	Registered PDD
/11/	EHS Policy
/12/	GS registered Validation Report
/13/	Methodology
/14/	CDM VVS version 02 for the project activities
/15/	The Gold Standard for Global Goals "Principles and Requirement" V 1.2
/16/	Employment records
/17/	Commissioning certificates for the power plant
/18/	Log book records for scheduled maintenance of the power plant for the complete monitoring period
/19/	Grievance register
/20/	CSR records.
/21/	Community Empowerment policy of S B Energy
/22/	Project O&M HSE logbook, or interview with maintenance staff.

5. FINAL VERIFICATION STATEMENT

Applus+ Certification has been engaged by S B Energy Pvt. Limited to perform the 1st periodical verification of the “400 MW Solar Power Project at Bhadla, Rajasthan”

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. The verification can confirm that:

- the project is operated as planned and described in the approved GS4GG project design document;
- 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 GS4GG;
- 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 01/01/2019 to 31/08/2019 (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: 01/01/2019 to 31/08/2019 (Both days included)

Verified emissions in the above reporting period:



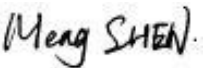

Leakage emissions	0 tCO ₂ e equivalents
Project emissions	0 tCO ₂ e equivalents
Baseline emissions	608,592 tCO ₂ e equivalents
Emission reductions	608,592 tCO ₂ e equivalents

Vintage wise yearly data is as below:

Emission Reduction for this monitoring period	608,592	tCO ₂ e
Emission Reduction for 2019	608,592	tCO ₂ e

Date: 27/03/2020
Lead Auditor: Mr. Pankaj Kumar
Auditor Mr. Sukanta Das
Tech. Expert: Mr. Pankaj Kumar
Tech. Reviewer: Mr. Simon Shen

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

ASSESSMENT TEAM	
Team Leader Mr.Pankaj Kumar	Auditor: Mr. Sukanta Das
Signature: 	Signature: 
Technical Reviewer: Mr. Simon Shen	Approver: Mr. Juan Sendín Caballero
Signature: 	Signature: 

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

Type:	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	01
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	
Description of the audit finding		Date:	20/10/2019
1. In sec. A.2, PP shall maintain consistency for format of geo coordinates.			
Project Participant's response		Date:	05/12/2019
1. The Geo Coordinates have now been updated in proper format.			
Documentation provided as evidence by Project Participant			
1. Monitoring report Version 02.			
Auditor's assessment comment		Date:	03/01/2020
Geo coordinates of the project location now corrected in sec. A.2 of revised MR, Ver. 02 dated 10/12/2019. Comment closed.			
Type:	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	02
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	
Description of the audit finding		Date:	20/10/2019
In sec. D.3, PP has mentioned sampling applicable for monitoring of SDG 8. PP shall clarify sampling procedure if applicable.			
Project Participant's response		Date:	05/12/2019
1. No sampling has been used for SDG 8. There had been a typo error which has been corrected in the Monitoring Report Version 02.			
Documentation provided as evidence by Project Participant			

1. Monitoring Report Version 02			
Auditor's assessment comment		Date:	03/01/2020
PP has clarified that no sampling involved for monitoring of SDG 8 and made necessary changes in sec. D.3 of revised MR, ver. 2.0 dated 10/12/2019. Comment closed.			
Type:	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	03
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	
Description of the audit finding		Date:	20/10/2019
In ER sheet, in tab "ER comparison", start date of monitoring period is incorrect and project title is also not correct. PP shall link all values with formula for traceability in ER sheet			
Project Participant's response		Date:	05/12/2019
<ol style="list-style-type: none"> The start date of the monitoring Period along with the project title has been crosschecked and updated in the ER sheet Version 02. All the values have been linked with respective formulae for better traceability in ER Sheet Version 02 			
Documentation provided as evidence by Project Participant			
1. ER Sheet Version 02			
Auditor's assessment comment		Date:	03/01/2020
Duration of monitoring period and project title corrected in ER sheet, version 02 and all values have been now linked. Comment closed.			

Type:	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	04
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	
Description of the audit finding		Date:	20/10/2019
PP shall provide grievance register for review.			
Project Participant's response		Date:	05/12/2019

1. The grievance register has been provided by the PP at the site for feedback and concerns. The scanned copy of the same has now been submitted to the assessment team.		
Documentation provided as evidence by Project Participant		
1. Copy of Grievance Register.		
Auditor's assessment comment	Date:	03/01/2020
Grievance register submitted by PP. Comment closed.		

Type:	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	05
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	
Description of the audit finding		Date:	20/10/2019
1. PP shall provide JMRS/ Invoices for entire monitoring period along with calibration certificates of energy meters 2. PP shall also provide pay slips/ employee roll/ attendance register and training records for SDG 8 impacts for this monitoring period			
Project Participant's response		Date:	05/12/2019
1. All the JMRS/Invoices along with the calibration certificates of energy meters have now been submitted to the assessment team. 2. Pay Slips, employee roll and training records for SDG 8 have now been submitted to the assessment team. Attendance register is maintained at the site by PP for the employee presence record and hence scanned copy of the register has been submitted to the assessment team.			
Documentation provided as evidence by Project Participant			
1. Pay Slips 2. Employee roll 3. Copy of Attendance Register 4. Training records			
Auditor's assessment comment		Date:	03/01/2020

1. PP has provided copies of JMR/ Invoices for entire monitoring along with calibration certificate of meters. Verification team checked these documents and confirmed that documents in line with PDD. **Comment closed.**
2. PP has provided attendance sheet of employees and training records for both the sites which found to be appropriate. **Comment closed.**

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 (MM)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843292 (CM)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843293 (SM)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
For Plot L1 B					
2843294 (MM)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843295 (CM)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843296 (SM)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
For Plot L1 C					
2843297 (MM)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843298 (CM)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
2843299 (SM)	0.2 s, Elster	16/09/2018	15/09/2023	13/09/2019	12/09/2024
For Plot L1 D					
2843300 (MM)	0.2 s, Elster	16/09/2018	15/09/2023	14/09/2019	13/09/2024
2843301 (CM)	0.2 s, Elster	16/09/2018	15/09/2023	14/09/2019	13/09/2024
2843302 (SM)	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					
2843327 (MM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024

2843328 (CM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843329 (SM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
For Plot L4 B					
2843330 (MM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843331 (CM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843332 (SM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
For Plot L4 C					
2843333 (MM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843334 (CM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843335 (SM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
For Plot L4 D					
2843336 (MM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843337 (CM)	0.2 s, Elster	17/09/2018	16/09/2023	14/09/2019	13/09/2024
2843338 (SM)	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 (MM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2843340 (CM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861545 (SM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
For Plot L5 B					
2861546 (MM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861547 (CM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861548 (SM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024

For Plot L5 C					
2861549 (MM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861550 (CM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861551 (SM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
For Plot L5 D					
2861552 (MM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2861553 (CM)	0.2 s, Elster	17/09/2018	16/09/2023	15/09/2019	14/09/2024
2843326 (SM)	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 (MM)	0.2 s, Elster	16/09/2018	15/09/2023	25/09/2019	24/09/2024
RJB92275 (CM)	0.2 s, Elster	16/09/2018	15/09/2023	25/09/2019	24/09/2024
RJB92281 (SM)	0.2 s, Elster	16/09/2018	15/09/2023	25/09/2019	24/09/2024
For Plot P2F2					
RJB92279 (MM)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92276 (CM)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92282 (SM)	0.2 s, Elster	16/09/2018	15/09/2023	25/09/2019	24/09/2024
For Plot P2F3					
RJB92280 (MM)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92277 (CM)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024
RJB92283 (SM)	0.2 s, Elster	16/09/2018	15/09/2023	24/09/2019	23/09/2024

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

Appendix 3: Audit Team CVs

Name	SHORT CV. BACKGROUND INFORMATION
Mr. Pankaj Kumar	<p>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.</p> <p>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 &</p>

	<p>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</p> <p>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).</p>
<p>Mr. Simon Shen</p>	<p>Mr. Meng (Simon) Shen has Master degree in Thermal Energy Engineering, Bacheor Degree in Environment 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 environment protection field. Before he joined Applus+ LGAI, he had been worked for TUV SUD as a GHG Validator/ Assessment team and ISO 9001/ 14001 Lead Auditors for 5 years</p>
<p>Mr. Sukanta Das</p>	<p>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 (11) 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 withAPPLUS certification to carry out GHG audit.</p>