

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



Project Title:	Clean Electricity Generation by Solar Power Project in Rajasthan
Monitoring Period:	15/12/2020 to 31/07/2021 (Both days included)
GS project ID:	GS7760
Internal ID:	20221
Customer:	Azure Power Forty-Three Pvt. Ltd.
Date:	27/06/2022
Revision:	05 (GS Review R-III)

SUMMARY			
Reference No.	Date (first version)	Version No.	Date (last version)
GS7760	14/01/2022	04	27/06/2022
GS4GG Verification			
GS4GG Certified Product (sought):		GS VER	
GS4GG SDG Impact Statement (sought):		Impact Certification	
General Information			
Client	Azure Power Forty Three Pvt. Ltd.		
Project Title	Clean Electricity Generation by Solar Power Project in Rajasthan		
Project Participants	Azure Power Forty Three Pvt. Ltd.		
Project Location	Jamsar Village, Bikaner District, Rajasthan, India		
Contact Person	Mr. Sunil Hansu		
Monitoring Period:	15/12/2020 to 31/07/2021 (Both days included)		
GS4GG Version: GS4GG Principles and Requirements 1.2 GS4GG Activity Requirements: RE Activity Requirements, version 1.4 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: 20/09/2021		Final Monitoring Report Version: 04 Date: 24/05/2022	
Certified Project Design Document Version: Assessment team checked the registered GS PDD version 05 dated 22/11/2021. Date: Provided above			
Estimated values for the Monitoring period for all SDG:			
SDG	SDG	Values estimated for this monitoring period	
7	Renewable Electricity Generated	762,630.71 MWh ¹ (508,420.5 ² MWh) electricity generation	
8	Trainings provided to O&M staff	01 Trainings provided to O&M Staff	
8	Number of Jobs generated	10 employments	

¹ Corresponding to total capacity 600 MW.

² Corresponding to actual installed capacity 400 MW.

SUMMARY		
13	Emission Reduction	712,755 ³ tCO ₂ e (475,170 ⁴ tCO ₂ e)
Actual values for the Monitoring period for all SDG:		
SDG	SDG	Actual values for this monitoring period
7	Renewable Electricity Generated	399,184 MWh electricity generation
8	Trainings provided to O&M staff	05 Trainings provided to O&M Staff
8	Number of Jobs generated	12 employments created
13	Emission Reduction	373,076 tCO ₂ e emission reduction
Selected Sustainable Development Goals (SDGs): 7; 8; 13		
Verification Summary		
LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Azure Power Forty Three Pvt. Ltd. to perform the 01st periodical verification of "Clean Electricity Generation by Solar Power Project in Rajasthan" (Ref. No. GS7760) applying the methodology ACM0002 Version 20.0. The management of Azure Power Forty Three Pvt. Ltd. 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: - The registered PDD including the monitoring plan; - Monitoring report(s); - The applied monitoring methodology; - Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board; - GS4GG guideline and related Annex. - All information and references relevant to the project activity's resulting in emission reductions. Azure Power Forty Three Pvt. Ltd. is the promoter of the project activity and involves installation of installation of 600 MW solar power project in Rajasthan. Electricity generated from the project activity is sent to Indian grid of India. As per GS4GG PDD, the project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 1,136,050 tCO₂e per annum for total capacity 600 MW, thereon displacing 1,215,546.76 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/ fossil fuel based power plant. The project activity's first phase commissioned on 15/12/2020 & till date 400 MW capacity is commissioned & balance 200 MW expected to commission in year 2022. The monitoring of emission reduction and sustainable development indicators has been carried out in accordance to respective registered PDD.		

³ Corresponding to total capacity 600 MW.

⁴ Corresponding to actual installed capacity 400 MW.

SUMMARY

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 373,076 tCO₂e emission reductions during period 15/12/2020 to 31/07/2021 (Both days included)

ASSESSMENT TEAM

Team Members	Type of Resource ⁵	Organization (for OEs)
Lead Auditor: Dr. Atul Takarkhede	☐ 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

Note: In line with the GS Rule Update RU 2020 PR – PR V1.2 dated on 02/04/2020, the VVB hereby discloses that the VVB has performed Validation of this project with different team members than in this verification.

⁵ IR (Internal Resource); EI (External Individual); OE (Outsourced Entity)



LGAI Technological Center, S.A.
Campus UAB – Ronda de la Font del Carme, s/n
08193 Bellaterra – Barcelona
(Spain)
Tel.: +34 93 567 20 08
Fax.: +34 93 567 20 01
www.appluscertification.com

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 03	CDM validation and verification standard for project activities, Version 03.0
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
NRPC	NORTHERN REGIONAL POWER COMMITTEE
SDG	Sustainable Development Goal
TAC	Gold Standard Technical Advisory Committee
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
RVPNL	Rajasthan Rajya Vidyut Prasaran Nigam Limited
SECI	Solar Energy Corporation of India Limited
UNFCCC	United Nations Framework Convention for Climate Change
VVB	Validation and Verification Body

Table of Content

Contents

1. INTRODUCTION.....	9
1.1 Objective	9
1.2 Scope	9
1.3 Description of the project activity	10
2. METHODOLOGY	10
2.1 Appointment of the assessment team.....	11
2.2 Document review.....	11
2.3 On site assessment and follow up interviews.....	12
2.4 Quality of evidences	15
2.5 Reporting of findings	15
2.6 Internal Quality Control	15
3. VERIFICATION FINDINGS	16
3.1 FARs from Validation / Previous Verification.....	16
3.2 Project Implementation in accordance with the registered Project Design Document	16
3.3 Compliance of the Monitoring Plan with the Monitoring Methodology	19
3.4 Completeness of Monitoring	19
3.5 SDG Outcomes Monitoring.....	21
3.6 Assessment of Data and Calculation of Greenhouse Gas Emission Reductions..	25
3.7 Management and Operational System	26
4. REFERENCE.....	27
5. FINAL VERIFICATION STATEMENT.....	28
Appendix 1: Corrective Action Request/Clarification Request/Forward Action Request resolution table	30
Appendix 2: Calibration details of monitoring meters	35
Appendix 3: Audit Team CVs.....	35

1. INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Azure Power Forty Three Pvt. Ltd. to perform the 01st periodical verification of "Clean Electricity Generation by Solar Power Project in 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 03.0 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 VVB. The verification is based on the submitted monitoring report, registered PDD 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 03.0 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

Azure Power Forty Three Pvt. Ltd. is the promoter of the project activity and involves installation of installation of 600 MW solar power project in Jamsar Village, Bikaner District, Rajasthan, India. Electricity generated from the project activity is sent to Indian grid of India. As per GS4GG PDD, the project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 1,136,050 tCO₂e per annum, thereon displacing 1,215,546.76 MWh/year amount of electricity for total capacity 600 MW from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/ fossil fuel based power plant. The project activity's first phase commissioned on 15/12/2020 & till date 400 MW capacity is commissioned & balance 200 MW expected to commission in year 2022.

The details of the project are mentioned in the table:

Name of the SPVs	Capacity	Location	Geo-coordinates	Commissioning date
Azure Power Forty Three Pvt. Ltd.	150 MW	Jamsar Village, Bikaner District, Rajasthan, India	28° 18' 51.5" N & 73° 27' 04.7" E	15/12/2020
	100 MW			30/01/2021
	50 MW			08/02/2021
	50 MW			25/06/2021
	50 MW			08/08/2021
	200 MW			Yet to commission

Out of 600 MW till date 400 MW capacity has installed and rest 200 MW is expected to commission in year 2022 due to delay in some approval process.

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 due to COVID-19 restrictions 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 team⁶.

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

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

2.2 Document review

The Monitoring Report version 01 was submitted to VVB 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:

⁶ The Validation and Verification has been handled by the same VVB however the team composition has been changed i.e., at the time of Validation the Team leader was Mr. Pankaj Kumar & Mr. Sukanta Das as Auditor. Thus, in line with the GS Rule Update RU 2020 PR – PR V1.2 dated on 02/04/2020, the VVB hereby discloses that the VVB has performed Validation of this project with different team members than in this verification.

- 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

In the context of verification, the GS4GG principles and requirements version 1.2, para 5.1.26 requires VVB to conduct a site visit including the assessment of the monitoring report and all supporting evidence and documents included by the Project Developer to demonstrate conformity. However, in view of the Covid-19 global pandemic and the Interim measures released by GS, the VVB can apply the interim measures until 30/06/2022 where on-site inspection cannot reasonably be performed due to Covid-19 and travel restrictions⁷.

At the time of verification, the host country, India, was witnessing COVID-19 infections in the country & hence the verification team has avoided the risk of exposure by not conducting the on-site visit due to outbreak of global pandemic Covid-19, increased risk of exposure and contact due to travel, as the affected cases in the country are spurring. Hence, VVB assessment team conducted remote audit due to COVID-19 restrictions and to avoid risk of exposure. Same is in line with the GS4GG Covid-19 interim measures applicable at that time.

The project developer has a Verified Emissions Reductions Agreement (VERPA) which requires delivery of credits by March 2022, and the project finances are reliant on the payment from sale of carbon credits.

Therefore, for reasons provided above, and in line with GS4GG Covid-19 interim measures, the assessment team conducted the verification using alternative means as defined in the GS4GG Covid-19 Interim measures.

All the material impact can be confirmed by verifying the supporting documents such as Joint Meter Reading (JMR), Invoices, employment records, Training records, grievance register, etc. which are submitted by PP and the implementation and monitoring procedures can be confirmed through interview with PP representative, O&M team and local stakeholders & consultant. Hence, the assessment team can achieve the reasonable level of assurance through remote 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 VVB's sectoral & local expertise.
- Telephone & Skype video call Interviews with PP representative, O&M team and local stakeholders & consultant.

⁷ <https://www.mohfw.gov.in/pdf/Guidelinesfordomestictravelflighttrainshipbusinterstatetravel.pdf>

- Cross checks between the information provided by interviewed personnels & information provided in registered documents as well as previous verification documents;

The objective of the remote 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 & Transition Annex 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 revised PDD & Transition Annex
- 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 Skype 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, Invoices, employment & training records, Salary records, breakdown log, O&M schedule, complaint/feedback register, and other relevant records.

After telephonic/Skype interviews with concerned onsite 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 revised 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 revised 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 inline with the submitted evidences.

As a part of the verification, the remote audit has been performed by the assessment team & following persons were interviewed through skype/telephonically.

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Kumar	Veenit	PP representative	19/10/2021	Project implementation, Baseline emissions, ER calculations, Sustainable monitoring, Grievance mechanism etc.	Dr. Atul Takarkhede
2.	Singh	Gaje	Plant Incharge		Project implementation, Baseline emissions, ER calculations, JMR, Calbrations, Sustainable monitoring, Grievance mechanism etc.	
3.	Jangid	Manish	Manager			
4.	Mourya	Hari Chand	O&M, Electric Egeiner	19/10/2021	Employment opportunities, Trainings, Salaries etc.	
5.	Pradhan	S.	O&M staff	19/10/2021	Employment opportunities, Salaries etc.	
6.	Kharera	Hargovind	Local stakeholder	19/10/2021	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	
7.	Ninama	Raksha	Local stakeholder	19/10/2021		
8.	Jain	Arun	Local stakeholder	19/10/2021		
9.	Chahar	Rajendra	Local stakeholder	19/10/2021		
10.	Agrawal	Suresh	Local stakeholder	19/10/2021		

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 submitted by PP. 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: 09⁸, 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 VVB'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.

⁸ Including 01 FAR raised by Sustain-cert during previous validation design review.

3. **VERIFICATION FINDINGS**

3.1 **FARs from Validation / Previous Verification**

This is 01st periodic verification for the project activity and No FAR is raised during validation. 01 FAR was raised during design review by Sustain-cert. Same have taken care during this verification. Refer Appendix 1 of this report for details.

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.

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

- Interviews of onsite personnels during remote audit
- Technical detail analysis of the power plant from the documents submitted by the manufacturer.
- Commissioning certificates of the plant
- PPA for the project activity
- Azure Power Forty Three Pvt. Ltd. has installed solar power project at Jamsar Village, Bikaner District, Rajasthan, India with capacity of 600 MW. Out of 600 MW till date 400 MW capacity has installed and rest 200 MW is expected to commission in year 2022 due to delay in some approval process.
- Technical details are as follows:

The details of equipment installed at Azure Power Forty three Pvt. Ltd. are as follows⁹:

Equipment	Technical Specifications
PV Module	Make: Jinko
	Rating: 335 Wp or above
	PV Technology: Crystalline
	Number Of modules: Aprx. 2126656 Nos
	PV System Mounting Structure: Seasonal Tilt Jan/ Feb/ March: 30° April/May/ June/ July/Aug: 5° Sept/Oct/Nov/Dec: 30°
Inverter	Make: Sungrow
	Type: Central /String
	Rating: 3125 kW
	Number of Inverters: 96 Nos.

⁹ The make and number of equipment may change due to maintenance and various changes over the time during project operation, but total capacity of project remains same.

The details of the project are mentioned in the table:

Name of the SPVs	Capacity	Location	Geo-coordinates	Commissioning date
Azure Power Forty Three Pvt. Ltd.	150 MW	Jamsar Village, Bikaner District, Rajasthan, India	28° 18' 51.5" N & 73° 27' 04.7" E	15/12/2020
	100 MW			30/01/2021
	50 MW			08/02/2021
	50 MW			25/06/2021
	50 MW			08/08/2021
	200 MW			Yet to commission

Out of 600 MW till date 400 MW capacity has installed and rest 200 MW is expected to commission in year 2022 due to delay in some approval process.

Technical specifications of the SPV is provided in the section B.1 of the MR. Same are conformed during the interviews with PP and commissioning certificates, validation report and found correct. The project activity was commissioned in phased manner as stated in table above and same was verified from the commissioning certificate issued by SECI.

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 Northern Regional Power Committee (NRPC) and Invoices raised by the PP towards SECI.

Also, from review of other documents such as Commissioning certificate, PPA & JMR, it was observed that the rated capacity of the project is 600 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 Rajasthan state of India. Assessment team also checked the locations of the project activity in the registered PDD, validation report. Further, VVB verified the coordinates with Google earth software independently and observed coordinates are correctly provided. During remote audit, VVB also verified site location with the photographs and videos of project activity submitted by PP. Thus, location provided in revised MR are found in line with actual coordinates of the project activity and are as stated in table above.

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 SECI. The electricity is fed in the Integrated Indian grid.

Further, during interview with onsite personnel and local stakeholders, VVB team observed there is no hazardous oil or substance released or used by project activity. Moreover, as the project activity refers to Solar PV modules-based power plant. There are no pollutions causing technology installed at the project site. Also, no flora and fauna including birds harmed during operation of project activity

Thus, assessment team confirms that the project is implemented as per the registered PDD and no change in project design is envisaged for the present monitoring period.

The amount of GS-VERs achieved during the present monitoring period are 21.49%¹⁰ lower than the estimated value in the PDD. This is due to the lower PLF months during the monitoring period.

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, and commissioning certificate submitted by PP.

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>. Also International REC (I-REC) registry (<https://evident.services/device-register>) is cross-checked and found that this project is not under I-REC as well. 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 UNFCCC or VCS.

Grievance Mechanism:

During the interviews with PP, the verification team confirmed that there is a grievance book/form with GS contact information at the project site office and are accessible to local stakeholders. By checking grievance book submitted by PP, it was able to confirm there are no comments received from the local people for the present monitoring period towards project activity. Local people are happy with the implementation of the project activity as it entrusts employment and improve living standard of local people and villagers. Also during interview with the PP, VVB team observed there is no legal Contest arise on project activity during monitoring period.

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	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

¹⁰ Compared for actual installed capacity of 400 MW till date.

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	
			monitoring processes.	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.
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 values considered ex-ante for this monitoring period were cross-checked with registered PDD, and their respective sources. The summary of all the ex-ante parameters has been given below:

Parameter/ Description	Value applied	MoV
SDG 13: Climate Action EF_{grid,OM,y} Operating Margin CO ₂ emission factor in year y	0.9568 tCO ₂ /MWh	The value of the parameter was checked from registered PDD. The value of the parameter was sourced from CEA database version 16.
SDG 13: Climate Action EF_{grid,BM} Build Margin CO ₂ emission factor in year y	0.8682 tCO ₂ /MWh	The value of the parameter was checked from registered PDD. The value of the parameter was sourced from CEA database version 16.
SDG 13: Climate Action EF_{grid,CM,y} Combined Margin CO ₂ emission factor in year y	0.9346 tCO ₂ /MWh	The value of the parameter was checked from registered PDD. The value of the parameter was sourced from CEA database version 16.

The value mentioned in the Monitoring Report and Emission Reduction Spreadsheet is consistent with the registered PDD. The applied value is correct and justified.

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

1. EG_{PJ,y}: Quantity of net electricity generation supplied by the project plant/unit in year y in MWh

The parameter EG_{PJ,y} is calculated based on the difference between values of “export” and “import” on the energy meter at the sub-station (evacuation point). The Meter Reading Statement (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. The project activity includes metering at the substations managed by State Utilities & PP/O&M Contractor. The electricity exported & imported are measured by Energy meters (main meter, check meter & standby meter) installed at substation. The reading is recorded and the difference from last month reading gives the number of units imported/exported. Meters are of Secure make and of 0.2s accuracy class. 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 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 NRPC. 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.

Relevant SDG indicators= 8

1. **Quality of employment:** Number of Trainings provided per year

The number of trainings provided to the employees and O&M staff by the project proponent. The assessment team verified the same during interviews with PP & checked training records submitted by PP and thus confirm that the total 3 trainings has been conducted during the course of time as mentioned in the MR. Same are found correct inline with the training records submitted by PP.

2. **Quantitative employment and income generation:** Number of people employed directly due to the project activity.

The assessment team verified the same during interviews with PP & checked the employment records and thus confirm that total 12 personnel are employed for the O&M of the project activity. Assessment team found it consistent with the employment records.

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 meters available onsite and checked during verification remote audit interviews. 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 indicator	SDG	GS PDD	MR	Compliance
Quantity of 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 in year y in MWh	Quantity of net electricity generation supplied by the project plant/unit in year y in MWh	Yes

Meth/tool	Relevant indicator	SDG	GS PDD	MR	Compliance
- Quantitative employment, - Quality of employment - Income generation	8.6: 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 Trainings provided per year - Number of people employed directly due to the project activity	- Number of Trainings provided per year - Number of people employed directly due to the project activity	Yes
Take urgent action to combat climate change and its impacts	SDG 13: Take urgent action to combat climate change and its impacts		Reduction in CO ₂ emission reduction due to implementation of project activity	Reduction in CO ₂ emission reduction due to implementation of project activity	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 in year y in MWh
Source of data checked by the assessment team	Monthly JMR provided by NRPC
Value(s) of monitored parameter	399,184
Means of verification:	The parameter EG_{PJ,y} is calculated based on the difference between values of “export” and “import” on the energy meter at the sub-station (evacuation point). The Meter Reading Statement (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. The project activity includes metering at the substations managed by PGCL & PP/O&M Contractor. The electricity exported & imported are measured by Energy meters installed at substation. The reading is recorded and the difference from last month reading gives the number of units imported/exported. The installed meters are of 0.2s accuracy class. 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 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 NRPC. 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 are 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	Reduction in CO ₂ emission reduction due to implementation of project activity
Source of data checked by the assessment team	Emission reduction sheet
Value(s) of monitored parameter	373,076
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 05 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. Further, during interviews with service provider it was noted that there were no occupational injuries/near miss events happened during this monitoring period. EHS training are conducted regularly and standard training calendar is followed by service provider for technical & EHS trainings.
Means of verification:	The value for this parameter is taken from Plant records. 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:	Quantitative employment and income generation
Unit	Number of employment generation
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 12 employment given during monitoring period. The employment records for the monitoring period is checked by the assessment team and found correct.
Means of verification:	The value for number of employment created is taken from Plant employment records, and PP declaration. The value for Cost Spent for salaries is taken from HR records. Verification team interviewed some

	employees and Local stakeholders. VVB also checked the salary slips of the employees and found that the salaries of the employees in the project activity are in line with industry standard based on the qualification & experience without inequality or gender basis. Further same is found inline with the HR policy of the company for "Policy for Human Rights" of employees.
Cross check mechanism	Not applicable

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 negative comments received from the local people for the present monitoring period. Staff complaints/grievances were addressed as per the company policies. 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 the Indian domestic REC web site (<https://recregistryindia.nic.in/>) & International REC device registry (<https://evident.services/device-register>) and confirms that the project is not undertaking any REC benefits at present nor intended to take it in near future.

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 PP, project staff & local stakeholders and details are already provided in Section 2.3 above.

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	399,184 MWh	399,184 MWh
SDG 8: Decent Work and Economic Growth	0 Training provided to O&M Staff 0 employment generation	05 Trainings provided to O&M Staff 12 employments generation	05 Trainings provided to O&M Staff 12 employments generation
SDG 13: Climate Action	373,076 tCO ₂ e	0 tCO ₂ e	373,076 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 for this monitoring period	Actual values achieved during this monitoring period
------	--	--

SDG 7: Affordable and Clean Energy	762,630.71 MWh ¹¹ (508,420.5 ¹² MWh) electricity generation	399,184 MWh
SDG 8: Decent Work and Economic Growth	01 Trainings provided to O&M Staff & 10 employments	05 Trainings provided to O&M Staff 12 employments generation
SDG 13: Climate Action	712,755 ¹³ tCO ₂ e (475,170 ¹⁴ tCO ₂ e)	373,076 tCO ₂ e

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 02 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 02 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:

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

$$BE_y = 399,184 \times 0.9346 = 373,076 \text{ tCO}_2\text{e (round down figure)}$$

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	No Activities in the baseline

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 tCO₂e

¹¹ Corresponding to total capacity 600 MW.

¹² Corresponding to actual installed capacity 400 MW.

¹³ Corresponding to total capacity 600 MW.

¹⁴ Corresponding to actual installed capacity 400 MW.

Leakage:

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

Emission reductions:

Thus the emission reductions are:

$$\begin{aligned}ER_y &= BE_y - PE_y \\ &= 373,076 - 0 = 373,076 \text{ tCO}_2\text{e}\end{aligned}$$

3.7 Management and Operational System

The responsibilities of data measurement, collection, verifying, archiving etc. have been clearly defined in the 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 20/09/2021, Monitoring report version 02 dated 13/01/2022 Monitoring report version 03 dated 07/04/2022 Final Monitoring report version 04 dated 24/05/2022
2.	ER sheets Version 01 dated 20/09/2021 ER Sheets version 02 dated 13/01/2022 ER Sheets version 03 dated 07/04/2022 ER Sheets version 04 dated 24/05/2022 ER Sheets version 05 dated 24/06/2022
3.	Registered PDD Version 05 dated 22/11/2021, Final GS Validation report version 01 dated 09/02/2021 GS Design review documents
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 03.0
6.	GS4GG guideline
7.	Training records of the employees (both skilled/non-skilled)
8.	O&M policy
9.	Monthly reports issued by NRPC 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.	Employment records

5. FINAL VERIFICATION STATEMENT

Applus+ Certification has been engaged by Azure Power Forty Three Pvt. Ltd. to perform the 01st periodical verification of the "Clean Electricity Generation by Solar Power Project in Rajasthan" (GS Ref. No. GS7760).

The management of Azure Power Forty Three Pvt. Ltd. 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 verified type of the product to be issued inline with approved GS PDD are included; Quantity of net electricity generation, Number of employment & trainings conducted & emission reductions achieved;
- 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 "Clean Electricity Generation by Solar Power Project in Rajasthan" for the monitoring period 15/12/2020 to 31/07/2021 (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: 15/12/2020 to 31/07/2021 (Both days included)

Verified product to be issued in the above reporting period:

Vintage Start Dates	Vintage End Dates	SDG 7	SDG 8	SDG 13
15/12/2020	31/12/2020	12,122 MWh	00 number of trainings & 12 number of people employed by this project activity	11,329 tCO ₂ e VERs
01/01/2021	31/07/2021	387,062 MWh	05 number of trainings & 12 number of people employed by this project activity	361,747 CO ₂ e VERs

Date: 27/06/2022

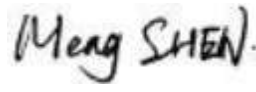
Lead Auditor: Dr. Atul Takarkhede

Tech. Expert: Dr. Atul Takarkhede

Tech. Reviewer: Mr. Simon Shen

Approver (*Applus+ Certification VVB Technical Manager*)

Mr. Agustín Calle de Miguel

ASSESSMENT TEAM	
Lead Auditor: Dr. Atul Takarkhede	Technical Reviewer: Mr. Simon Shen
Signature: 	Signature: 
Approver: Mr. Agustín Calle de Miguel	
Signature: 	

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:	11/11/2021
PP requested to submit final GS registration documents for the project activity along with closed GS design & performance review for last verification to verify likely CARs and FARs raised during GS design/performance review. Please submit.			
Project Participant's response		Date:	13/01/2022
The latest GS registration documents for the project activity with closed GS design & performance review are being provided.			
Documentation provided as evidence by Project Participant			
Review Forms (Design + Performance), Validation & verification reports.			
Auditor's assessment comment		Date:	14/01/2022
PP have submitted GS registration, review & previous verification performance review documents. Four CARs raised during 02 nd verification have been now considered & addressed during this verification. CAR thus closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	02
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	NA
Description of the audit finding		Date:	11/11/2021
PP requested to re-submit revised MR inline with applicable latest guidelines as well as for editorial mistakes as per comments provided in MR.			
Project Participant's response		Date:	13/01/2022
Revised MR addressing the comments are being submitted.			
Documentation provided as evidence by Project Participant			
MR V2			
Auditor's assessment comment		Date:	14/01/2022
PP have submitted revised MR along with latest guidelines & editorial mistake rectified and found correct. CAR thus closed			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	NA
Description of the audit finding		Date:	11/11/2021
Section A.2 of the MR: Latitude & longitude of the project activity provided in the MR found not matching with actual coordinates. Corrective action sought.			
Project Participant's response		Date:	13/01/2022

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	NA
Geo Co-ordinates mentioned in section A.2 of the MR is being rectified and is now matching with actual co-ordinates			
Documentation provided as evidence by Project Participant			
GS MR			
Auditor's assessment comment		Date:	14/01/2022
PP have revised the longitude of the project activity and now found correct inline with actual coordinates of the project activity. CAR thus closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	NA
Description of the audit finding		Date:	11/11/2021
PP requested to submit supportive documents; commissioning certificates, technical specifications of the plant, PPA & O&M contract etc. Kindly submit.			
Project Participant's response		Date:	13/01/2022
Commissioning certificates, technical specifications of the plant & PPA contract are being submitted. O&M done inhouse.			
Documentation provided as evidence by Project Participant			
Commissioning certificates, technical specifications of the plant, PPA			
Auditor's assessment comment		Date:	14/01/2022
PP have submitted supporting documents; commissioning certificates, technical specifications & PPA . Information in the MR found inline with the documents submitted. CAR thus closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	05
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	NA
Description of the audit finding		Date:	11/11/2021
PP requested to submit supporting documents for all the monitoring parameters.			
1. JMRs and Invoice relevant to the current monitoring period. 2. Training records or the monitoring period. 3. Provide breakup of employees as number of locals, skilled and unskilled etc. 4. Sample salary slips for review of assessment team. Further, Parameter values missing throughout MR.			
Moreover, 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:	13/01/2022

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	05
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	NA
1. JMRs and Invoices relevant to the current monitoring period is being submitted. 2. Training records for this monitoring period are being submitted 3. Break-up of employees has been provided 4. Sample salary slips are being submitted and correction in GS MR has also been done. Grievance register placed at site is also being attached in this submission.			
Documentation provided as evidence by Project Participant			
JMRs, Invoices, Sample salary slips, Grievance register			
Auditor's assessment comment		Date:	14/01/2022
PP have submitted supporting documents for JMRs, training records, breakup of employees and values in revised MR found correct. PP also submitted sample salary sheets of the employees & found that salaries are inline with the industry standard. PP have also submitted grievance register & observed that no grievances recorded during this monitoring period. Grievances are also discussed with local stakeholders & no grievances recorded. CAR thus closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	06
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	
Description of the audit finding		Date:	11/11/2021
The calibration details; Calibration date/Calibration frequency/Due date of Calibration is missing in the MR. Moreover, Calibration certificates are also not submitted. Corrective action is sought.			
Project Participant's response		Date:	13/01/2020
Calibration details such as calibration frequency/ calibration date/ meter serial number/due date of calibration are being mentioned in section D.2 of GS MR. Calibrations certificates are also being attached in this submission.			
Documentation provided as evidence by Project Participant			
GS MR V02 and calibration reports.			
Auditor's assessment comment		Date:	14/01/2021
PP have submitted the calibration records & details of the meters have been included in the MR. Details found inline with records submitted. CAR thus closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	07
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	
Description of the audit finding		Date:	11/11/2021

1. The values of estimated ex ante in section E.5 of MR is not consistent with the ER sheet. 2. During desk review assessment team found that the JMR value is not consistent with the provided ER sheet for the Month of March, June and July 2021, Thus, corrective action sought. 3. The year of Monitoring period mentioned is not correct in ER sheet. Thus, corrective action sought.		
Project Participant's response	Date:	13/01/2022
1. Estimated ex ante values in section E.5 of the MR is rectified and is now consistent with the ER sheet. 2. ER sheet is being rectified as per JMR values and is now consistent. 3. Correction has been done regarding year of monitoring in ER sheet.		
Documentation provided as evidence by Project Participant		
ER Sheet V2		
Auditor's assessment comment	Date:	14/01/2021
PP have submitted revised MR and ER sheet with corrections and same found correct. CAR thus closed		

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	08
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	
Description of the audit finding		Date:	11/11/2021
As per the monitoring report 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:	13/01/2020
Grievance register placed at site is being attached in this submission.			
Documentation provided as evidence by Project Participant			
Grievance register.			
Auditor's assessment comment		Date:	14/01/2022
PP have submitted copy of the grievance register and found that no grievances recorded for the monitoring period. Further, same was also discussed with local stakeholders and found correct. CAR thus closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	09
Raised by:	Sustain-cert	Ref. to checklist in above tables:	
Description of the audit finding		Date:	13/01/2022
Following FAR have been raised by Sustain-cert during design review of the project activity: FAR # 1: At the time of verification VVB shall check the commissioning certificates to verify the start date of crediting period.			
Project Participant's response		Date:	13/01/2022

The total proposed capacity of this project activity is 600 MW out of which 400 MW has been commissioned till date and the rest 200 MW is expected to get commissioned March-2022. The delay in commissioning is due to the approval process from the regulatory board. Since, the earliest date of commissioning is 15/12/2020, so crediting period start date is taken as 15/12/2020.

Documentation provided as evidence by Project Participant

Commissioning certificates for installed capacity 400 MW

Auditor's assessment comment

Date:

14/01/2022

Assessment team checked the commissioning certificates and discussed with PP, till date 400 MW capacity is commissioned and balance expected to be commissioned in year 2022. Details of the commissioning dates found inline with the commissioning certificates issued by SECI. FAR thus closed for this monitoring period.

Appendix 2: Calibration details of monitoring meters

Details of Meter Calibration:

Meter	Sr. No.	Make	Calibration date	Due date of calibration	Calibration Compliance
Main meter	NS1175A	Secure	08/11/2020	07/11/2025	Yes. Meet once in 5 years calibration frequency
Check meter	NS1176A	Secure	08/11/2020	07/11/2025	
Stand by meter	NS1185A	Secure	08/11/2020	07/11/2025	

Above meter and calibration detail are verified by VVB assessment team through copies of calibration certificates. Further observed no delay in scheduled calibration of installed meters thus found inline with GS4GG standards and registered PD.

Appendix 3: Audit Team CVs

Name	SHORT CV. BACKGROUND INFORMATION
Dr. Atul Takarkhede	Dr. Atul Takarkhede is Ph.D. (Environmental Sciences) from Institute of Science, RTM Nagpur University, Nagpur, and he has already published different technical papers related to environmental sciences. He counts with more than 11 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, functional area expert in Water Pollution & Solid & Hazardous Waste management among others. Furthermore, he counts with solid experience on CDM-VCS-GS consultancy and auditing. Currently he is associated with True Quality Certifications Private Limited and empanelled with Applus+ Certification to carry out GHG audits in the aforementioned schemes.
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.