GS4GG
Verification (Performance Certification) Report

Certification Pvt. Ltd.

VKU Certification Pvt. Ltd.
Regd. Off: Flat No. 306,Sky Star, N-1, New Rani Bagh, Khandwa Road, Indore, Madhya Pradesh, India - 452020
URL: http://vkucertification.com|e-mail:info@vkucertification.com

Project Title
150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra
Registry Project ID: **GS_7627**
Monitoring Period: **01-April-2023 to 31-December-2023 (both dates included)**
Project Representative
Infinite Environmental Solutions Limited
VKU Project Reference No.
VKU.VER.21.23_GS_7627

Executive Summary:

A) Basic information		
Project Title	**150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra**	
GS4GG Project ID:	7627	
Date of Project Design Certification	20/07/2022	
Last Date of Annual Report	07/12/2023	
VKU Project Reference No.	VKU.VER.21.23 GS 7627	
Sectoral scope	Scope: 01 Energy Industries (renewable- and non-renewable sources)	
Methodology/ies applied	ACM0002: Version 20.0	
Technical Area (TA)	T.A 1.2	
Project Representative	Infinite Environmental Solutions Limited	
Project Developer/Investor	Juniper Green Sigma Private Limited	
GS4GG Activity Requirements	Renewable Energy Activity	
GS4GG Certified Product	☒GHG Emissions Reduction & Sequestration ☐Renewable Energy Label ☐N/A	
Selected Sustainable Development Goals	**SDG 7** - Affordable and Clean Energy **SDG 8** - Decent Work and Economic Growth **SDG 13** - Climate Action (Mandatory)	
GS4GG SDG Impact Statement	**SDG 7 –** 243,448.29 MWh of renewable energy generated/per monitoring period **SDG 8 –** Training – 30 No. of training/ monitoring period Employees- 22 No. of Employees/ monitoring period Income (INR) – 12,018,608 cumulative of the current monitoring period **SDG 13 –** 227,399 tCO_2e (GS VERs)	
Scale of Project Activity	Large Scale	
B) Verification		
Start date of crediting period	01/06/2022	
End date of crediting period	31/05/2027	
Monitoring Period	01/04/2023 – 31/12/2023 (both dates included)	
C) Monitoring report	**Version**	**Date**
Initial	1.0	04/01/2024
Final	4.0	26/03/2024
D) Performance Certification report	**Version**	**Date**
Initial	1.0	06/03/2024
Final	2.0	28/03/2024
E) Verification Team		
Team Leader[1]	Barun Kumar	

[1] Team Leader is an approved GS Auditor for VKU.

Technical Expert (TA 1.2)	Barun Kumar (T.A.1.2)
Validator/Verifier	N/A
Validator/Verifier- Trainee	Monika Jha
Project Trainee	Priyanshee Modi
Local Expert (India)	Barun Kumar
F) Approvals	
Technical Reviewer[2]	Vivek Kumar Ahirwar
Technical Expert (TA 1.2)	Vivek Kumar Ahirwar (T.A.1.2)
G) Final opinion	

VKU Certification performed the **second verification** of the GS4GG project "**150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra**" with GS4GG 7627 as Reference Number under the first crediting period.

As described in this report from sections 1 to 3, VKU has performed the entire verification according to the verification criteria and their GHG emission reductions or removals set out in GS4GG Validation and Verification Standard Version 1.0 /5/. The project developer of the "150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra" are responsible for:

- The preparation of greenhouse gas emissions data and the reported greenhouse gas emission reductions for the project on the basis set out in the monitoring plan contained in the registered GS4GG PDD version 6 of 19/09/2022 /13/.
- The development and maintenance of records and reporting procedures are following that plan, including the calculation and determination of greenhouse gas emission reductions of the project.

The verification includes confirmation about the implementation in the PDD/13/monitoring plan and the monitoring methodology as per **ACM0002 "Grid-connected electricity generation from renewable sources – Version 20.0** /12/. VKU Certification which is an approved ISO 14064-3:2019/9/ accredited Validation/Verification Body confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements. All the supporting documents including but not limited to ER Sheet /15/, PPA /27/, O & M Agreement /26/, commissioning certificates /16/, calibration certificates /28/, JMRs /24/, invoices /25/, training records /21/, etc. were checked. VKU's verification approach is based on understanding the risks associated with reporting, analysing the data associated with GHG emission calculations to mitigate any sort of material misstatements. VKU planned and performed the verification by adopting an evidence-based approach to rely on different sorts of data, other information, and explanations. VKU assures to provide a **Reasonable level of assurance** that reported GHG emission reductions are fairly stated and correctly calculated. It is VKU's opinion that the GHG emission reduction stated in the Monitoring report version 4 dated 26/03/2024 /14/and ER sheet version 3.1 dated 26/03/2024/15/ for the

[2] Technical Reviewer is an approved GS Auditor for VKU.

project- "150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra" is fairly stated. The emission reductions from the GS4GG project activity ID 7627 during the period **01/04/2023 – 31/12/2023** (both dates included) amounts to **227,399 tCO2e (SDG 13)**. The equivalent energy generated amounts to **243,448.29 MWh (SDG 7)** and **22** peoples employed**, 30** trainings provided cumulative for the current monitoring period given to employees INR **12,018,608 (SDG 8).**

The assessment team meticulously followed a number of steps prescribed in the ISO standard 14064-3 /9/ to reach the conclusion, starting with Strategic Analysis, followed by Risk Assessment, and the development of an Evidence Gathering plan. Subsequently, the team diligently executed the planned activities to collect the necessary evidence. To ensure a comprehensive planned evaluation, an Audit plan was prepared before the remote site visit, and the remote visit was conducted accordingly. Remote visit activities were carried out following the pre-established Evidence Gathering plan. Following the remote site inspection /29/, post-site evaluation was conducted adhering to verification values which involved scrutinizing supporting documents, and verifying the claims of Monitoring Reports (MR) /14/, along with calculations of Emission Reports (ER) /15/.

The final report prepared after following the previously mentioned procedure follows an Independent Technical review by an experienced Technical Reviewer. Adhering to the mandatory requirements of the standard, the assessment team established a positive opinion based on the findings raised and addressed them individually.

VVB Opinion	**Conclusion**
Positive	☒(Mark Tick if applicable)
Negative	☐(Mark Tick if applicable)

Therefore, VKU certification recommends a request of Issuance to GS4GG.

H) Authorization	
Director	Vikas Kumar Aharwal
Date	30/03/2024
I) Distribution	
No public distribution without written confirmation from the client.	
J) Verification Status	
Findings closed	Yes
Draft report	No
Final report	Yes

Abbreviations

BM	Build Margin
CAR	Corrective Action Request
CERs	Certified Emission Reductions
CL	Clarification Request
CM	Combined Margin
EB	Executive Board
ERs	Emission Reductions
FAR	Forward Action Request
FVR	Final Verification Report
GHG	Greenhouse Gas(es)
GHG	Green House Gas
GS4GG VVS	Gold Standard Validation and Verification Standard
GSS	Grid Sub Station
IPCC	Intergovernmental Panel on Climate Change
MR	Monitoring Report
MSEDCL	Maharashtra State Electricity Distribution Co. Ltd.
O&M	Operation and Maintenance
OM	Operating Margin
PDD	Project Design Document
PE	Project Emissions
PPA	Power Purchase Agreement
PSA	Power Sale Agreement
PV	Photovoltaic
RCP	Renewable of Crediting Period
Ref.	Document Reference
RMP	Revised Monitoring Plan
RSV	Remote Site Visit
SCADA	Supervisory Control and Data Acquisition
SECI	Solar Energy Corporation of India
TA	Technical Area
TR	Technical Reviewer
VERs	Verified Emission Reductions
VKU	VKU Certification Ltd.
VT	Verification Team
VVB	Validation and Verification Body
VVS	Validation and Verification Standard

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The verification team has confirmed that the monitoring plan and implemented monitoring system comply with the applied monitoring methodology ACM0002, version 20.0 /12/. All other requirements of the applied methodology have been met. 23

During the verification process, all relevant monitoring parameters listed in the GS4GG PDD /13/ have been checked for appropriateness of the applied measurement/determination method, correctness of the values used for ER calculation, accuracy, and applied QA/QC measures. 23

Based on our assessment, we believe that the monitoring mechanism is in line with the methodology and is effective and reliable. The monitoring plan mentioned in the GS4GG PDD is in accordance with the applied methodology, i.e. ACM0002, version 20.0 and the approved standardized baseline applied by the registered GS4GG project. 23

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1. INTRODUCTION

1.1 Executive Summary

The main purpose of the project activity is to generate electrical energy through sustainable means by utilizing solar power resources, the generated green electricity is contributing to climate change mitigation efforts. This project activity is a large-scale grid-connected Solar PV project. The project activity is a 150 MW (80 MW + 70 MW) AC Solar PV technology-based grid-connected large-scale solar power generation project and Juniper Green Field Private Limited is the project investor for the project activity. The start date of this project activity is 03/08/2020 which is confirmed from the commissioning certificates/16/.

The project activity is located at 2 sites: Site 1 (80MW_{AC}) is located at Arni region in Arni tehsil, of Yavatmal district in Maharashtra. The power generated from the Solar Power Plant is step up to 132kV voltage level and it is connected to 132/33kV Arni GSS and Site 2 (70 MW_{AC}) is located at Malkapur region IN Malkapur tehsil of Buldhana district in Maharashtra. The power generated from the Solar Power Plant is step up to 132kV voltage level and is connected to 132/33kV Malkapur GSS.

Verification is conducted for second monitoring period from 01/04/2023 – 31/12/2023 (both dates included) under the first crediting period 01/06/2022 to 31/05/2027 (both dates included) with regards to the relevant requirements for GS4GG activities. The project activity is reducing anthropogenic emissions of greenhouse gases (GHG's) 227,399 tCO2, thereon displacing 243,448.29 MWh 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.

All the SDGs included in the project activity (SDG 7- 243,448.29 MWh, SDG 13- 227,399 tCo_2e, SDG 8- Trainings- 30 No. of trainings/ per monitoring period, Employees- 22 No. of Employees/ per monitoring period, Income- Salary INR12,018,608 were verified via supporting documents and is found to be in compliance as per the GS4GG requirements.

The details of the project are mentioned in the table:

Project Investors' Name	Commissioning Date	Capacity in MW	District	State
Juniper Green Field Private Limited.	01/06/2022	80 MW_{AC}/ 107.6 MW_{DC}	Yavatmal (Site-1)	Maharashtra
	08/08/2022	70 MW_{AC}/ 99.5 MW_{DC}	Buldhana (Site-2)	Maharashtra

The project activity is connected to Unified Indian Grid. Under this project activity 150 MW of Solar PV technology is being implemented at the above location.

Below table mentions the Latitude and Longitude of the project location:

S.No.	Capacity	Village	District	Coordinates
1	80 MW	Shirpur, Arni	Yavatmal (Site-1)	20.127428°N 77.920963°E
2	70 MW	Tighra, Malkapur	Buldhana (Site-2)	20.951549°N 76.123278°E

The project activity was in normal operation during the monitoring period and the same has been confirmed during remote site interviews with PD and crosschecked from review of credit note & breakdown records submitted by PD. No unusual activities observed during the monitoring period and plant undergone through 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 credit notes.

The verification team has reviewed the commissioning certificates /16/ & PPA /27/ dated 18/09/2020 to conclude that the capacity of the project is same as mentioned in the registered GS PDD and same is explained by PD during remote site 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 credit notes issued by State Utility and Invoices raised by the PD towards state utility. The assessment team confirms that the solar PV module details are different as compared to registered PDD because, at the time of the design review, commissioning was going on, and at that time the complete solar PV module details were not available. There is no design or technology change. The actual DC capacity of the project is varying from the registered PDD as the number of modules and the technology of modules is different at Arni site. However, this is not impacting the actual capacity and output of the project in any way.

The capacity of the project is more than 15 MW and thus it qualifies as large-scale project activity. Plant is located in Maharashtra state of India. Assessment team also checked the locations of the project activity as mentioned in the registered PDD and the validation report /19/. Thus, location provided in MR are found in line with registered documents of the project activity and are as stated in table above. The project is connected to Unified Indian 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 remote site interviews with PD.

The grid structure as mentioned in the PDD is still applicable for the project and ex-ante emission factor as in the PDD is used for emission reduction calculation. Assessment team noted that the project activity has entered a power purchase agreement with the state entity Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL).

Thus, assessment team confirms that the project is implemented as per the registered PDD and there is correction in the Solar PV module details in the current monitoring report as compared to the registered PDD since at time of design review, commissioning of the project was on going, so at that time the complete solar PV module details were not available PD has submitted the evidence for the same along with declaration for details of the Solar PV modules which verifies the same and found in-line with the current monitoring report. This change does not affect the total capacity of the project, Additionality, Baseline and applicability of methodology.

1.2 Objective

Infinite Environmental Solutions Limited (Project Representative) has contracted with VKU Certification Private Limited (VKU Certification) to conduct second verification and certification of emission reductions reported for the GS4GG 7627 project activity "150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra" in India for the current monitoring period 01/04/2023 – 31/12/2023 (both dates included) under first crediting period from 01/06/2022-31/05/2027 (both dates included). The project activity follows a renewable crediting period of 5 years, which can be extended a maximum of two times, as outlined in section A.3 of GS4GG PDD Version 6 dated 19/09/2022/13/.

This report contains the findings of the verification process conducted remotely via video conferencing and a conclusive certification statement for the verified emission reductions.

The objective of this verification is to verify and certify emission reductions reported by the stated project as per GS4GG validation and verification standard v 1.0 para 1.1, 9.1 and sub para 9.1.1/5/.

The objectives establish that:

- The project activity has been implemented and operating as per the registered GS4GG PDD/13/ and that all physical features (technology, project equipment, and monitoring) of the project are found to be in place;
- Monitoring report/14/ and other supporting documents are complete and sufficient to confirm the claims stated by the PD;
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan priorly established.
- To confirm that the monitoring system is implemented and fully functional to generate Verified Emission Reductions (VERs) without any double counting as per the Self Declaration by the PD /35/.

- To establish that the data reported are accurate, complete, consistent, transparent, and free of material error or omission by checking the monitoring records and the emissions reduction calculation.

1.3 Scope and Criteria

The scope of this verification was to conduct an independent objective review and ex-post determination of the monitored reductions in GHG emissions from the "150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra". The verification of this project was based on the validated & registered GS4GG PDD Version 6 dated 19/09/2022/13/, Monitoring report version 4 dated 26/03/2024 /14/and ER sheet version 3.1 dated 26/03/2024/15/ along with supporting documents submitted by the project representative to the VKU verification team. The documents thus submitted to the VKU Assessment/Verification Team were reviewed against the following guidance and protocol:

1. GS4GG validation and verification standard v1.0 para 1.2 /5/
2. GS4GG validation and verification standard v1.0 para 9.7.2 /5/.
3. GS4GG principles rules and requirements v1.2 /1/.
4. CDM validation and verification standard for project activities v 3.0 para 2 /36/
5. VKU Quality Manual and Processes
6. Methodology applied by project- ACM0002- Grid-connected electricity generation from renewable sources V-20.0 /12/
7. Tools utilized by the project-
    - Tool to calculate the emission factor for an electricity system- V 07
    - Tool for the demonstration and assessment of additionality V 07

The procedure involved is as follows:

- To assess the project's compliance with other relevant rules including the host country (India) legislation.
- To confirm that the monitoring system is implemented and fully functional to generate GS verified carbon units (GS-VERs) without any double counting.
- To verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement & is sufficiently supported by evidence.

- The verification process ensures that the reported emission reductions are comprehensive and accurate in order to obtain certification.

The verification method and criteria encompassed several phases, including various audit techniques as listed below: -

- Desk Review of GS4GG project design document version 6 dated: 19/09/2022/13/, and supporting documents listed in Section 04 of this report, which is provided by the Project Representative to assessment team.
- Remote site visit /29/ and remote interviews with stakeholders /31/.
- Reporting, calculation checks, QA/QC and resolution of findings
- Drafting of verification report
- Independent technical review of the project documentation
- Completeness/ Quality Check, and
- Issuance of the final verification report

Outstanding issues were resolved, and during the process of resolving issues 03 CARs and 04 CLs were raised and were closed successfully, leading to the issuance of the final verification report. It is to be noted that there was no FAR (Forward Action Request) raised / unaddressed in the previous and current monitoring period. It is important to note that the verification process does not involve providing consultancy to the project developer. However, requests for clarifications and corrective actions may have contributed to improvements in the monitoring processes.

1.4 Level of Assurance and Application of Materiality

All the revisions of the verification report before being submitted to the client were subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent VKU's procedure, with a **Reasonable level of assurance**, as per the GS4GG validation and verification standard v1.0 /5/ and GS4GG Principles and Requirements v1.2 /1/.

VVB applies the general requirements, consideration of materiality in planning verification and for conducting verification is as per the GS4GG validation and verification standard v1.0, para 9.6/5/.

For the identification of materiality threshold VVB referred para 9.6.3 of validation verification standard v1.0 and apply to the total emission reduction achieved by the Project Activity.

As per the GS4GG validation verification standard section 9.6, the level of assurance of the verification report falls under reasonable assurance engagements with respect to material errors, omissions, and misrepresentations.

Table 01: Describing the materiality threshold of the project

Application of Materiality Threshold as per the GS4GG VVS v1.0 para 9.6.3	Materiality threshold value (tCO_2e)	Reported ERs (tCO_2e)		Justification (If any deviation)
		In Initial MR	In Final MR	
1%	2,273.99 tCO2e	227,399 tCO2e	227,399 tCO2e	There is no deviation in reported ERs, hence this section is not applicable.

1.5 Basic information of project activity is mentioned below:

Title of project activity	150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra
GS4GG Reg. No.	7627
Scale of project activity	Large Scale with capacity more than 15 MW
Applied Methodology/ies	ACM0002 "Grid-connected electricity generation from renewable sources – Version 20.0"
Sectoral Scope(s) / Technical Area(s)	Scope: 01 Energy Industries (renewable- and non-renewable sources) T.A.1.2 (Solar)
Project Representative	Infinite Environmental Solutions Limited
Host Country	India
Location of project activity	The project activity is located at Arni region (80MW) of Yavatmal district and Malkapur region (70MW) of Buldhana district of Maharashtra state of India.
Start date of crediting period (with reference to this monitoring period)	First Crediting Period - 01/06/2022 to 31/05/2027 (both dates included)
Type and length of crediting period	Type - Renewable Length - 5 years
Monitoring period	01/04/2023 – 31/12/2023 (both dates included)

Table 02. VVB Information

Name of the VVB	VKU Certification Private Limited
GS accreditation expiry date	20/06/2026
Is the VVB accredited for the applicable sectoral scope?	Yes[3]
Name, position of the approver of the verification report	Vikas Kumar Aharwal

[3] VKU Accreditation in GS4GG Registry- Checked on 06/03/2024

Signature (Final version only)	VIKAS KUMAR AHARWAL Digitally signed by VIKAS KUMAR AHARWAL Date: 2024.03.30 23:07:22 +05'30'

Table 03: Sustainable Development Contributions for verification

Sustainable Development Goals Targeted	SDG Impacts	Estimated Values for current Monitoring period	Actual Values for current Monitoring period	Units
7 Affordable and Clean Energy	MWh of renewable energy generated	267,488.36	243,448.29	MWh
8 Decent Work and Economic Growth	Training/ Employment/ INR	Training- 2 Employees- 20	Training- 30 Employees- 22 Income- 12,018,608	No of Training, Annum No. of Employee INR
13 Climate Action (Mandatory)	Emission Reduction	248,898	227,399	tCO_2 (GS-VERs)

2. METHODOLOGY

VKU Certification assessed and determined whether the implementation and operation of the project activity, and the steps taken to report emission reductions comply with the GS4GG criteria and relevant guidance provided by the GS4GG impact registry.

The assessment involved a desk review of relevant documentation as well as a remote site **verification /29/.** The personnel employed and their roles in this assessment are mentioned below;

Verification Team member(s)

S.No.	Full Name	Role(s)	Type of Resource	Type of Activity(ies) carried out
1.	Barun Kumar (Male)	Team Leader cum Technical Expert (TA 1.2)	Internal Resource	DR/RSV/I/VF/FVR[4]
2.	Monika Jha (Female)	Validator/Verifier -Trainee	Internal Resource	DR/VF/RSV
3.	Priyanshee Modi (Female)	Project Trainee	Internal Resource	DR/RSV

[4] DR- Desk Review
RSV-Remote site Visit
I-Interview
VF- Verification Findings
DVR- Draft Verification Report
FVR- Final Verification Report

Technical Reviewer and approver(s) of the verification report

S.No.	Full Name	Role(s)	Type of Resource	Type of Activity(ies) carried out
1	Vivek Kumar Ahirwar (Male)	Technical Reviewer cum Technical Expert (TA 1.2)	External Resource	Technical Review

The competence statement of verification team members is included under Section 7 of this report.

Verification milestones:

Monitoring report submission:	**04/01/2024**
Remote-site assessment and Interview:	**15/01/2024**
Draft Verification Report	**06/03/2024**
Final Verification Report	**30/03/2024**

VKU Certification followed a rule-based verification approach, wherein, the contract review is undertaken as per valid/effective version of GS4GG validation/ verification Standard version 01 /5/ clause 1.3. Once the contract is agreed for verification, the monitoring report of the project activity submitted to VVB for further process. Key steps are described in Section 2.1 to 2.4 of this report.

2.1 Desk Review or Document Review

VKU Certification conducted a desk review or document as under;

During the document review, VKU has applied standard auditing techniques to assess the quality of information provided. The verification was performed primarily based on the review of monitoring report (MR) /14/ and emission reduction (ER) /15/ calculations spreadsheet were received from PD and assessed along with the monitoring reports as part of the verification. In addition, the registered GS4GG PDD version 6 of 19/09/2022 /13/ was also reviewed, for the baseline estimations and applicability of the monitoring plan.

As per section 9.3 and clause 9.3.2 of the GS4GG Validation and Verification standard version 1.0 /5/ the VVB shall assess the information provided by the Project Developer(s).

Document review involving:

- A review of the data and information presented to verify the completeness;
- A review of the monitoring plan, the monitoring methodology including applicable tool(s) and, where applicable, the applied standardized baseline, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures;

- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions;

In addition to the monitoring documentation, VKU Certification has reviewed;

- The GS4GG PDD version 6 of 19/09/2022/13/and the monitoring plan, including any approved revised monitoring plan and/or changes from the registered PDD, and the corresponding validation opinion;
- The Validation Report Version 3 dated 17/10/2022 /19/;
- Previous verification reports/20/;
- The applied monitoring methodology (ACM0002 V.20) /12/ and, where applicable, the applied standardized baseline;
- The monitoring report (all versions, if available) to verify that it is as per the standardized format;
- Any other information and references relevant to the project activity's emission reductions (e.g., IPCC reports, data on electricity generation in the national grid or laboratory analysis and national regulations).

The complete list of documents reviewed is included under Section 4.

2.2 Site Visits (Remote mode)

The project activity is located at Shirpur, Arni region (80MW) of Yavatmal district and Tighra, Malkapur region (70MW) of Buldhana district of Maharashtra state of India. Further the location along with longitude and latitude is mentioned in section 3.1.2. of this report. A remote site visit/29/ was undertaken by VKU Certification on **15/01/2024** and mentioned to carry out following;

- An assessment of the implementation and operation of the registered project activity as per the registered PDD /13/;
- A review of information flows for generating, aggregating, and reporting the monitoring parameters;
- Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PDD /13/;
- A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, JMRs /24/, Invoices 25/, PPA /27/ or other similar data sources listed in section 4;
- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PDD, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline;
- A review of calculations and assumptions made in determining the GHG data and emission reductions;

- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters as per the VVS v1.0 clause 9.3.2.

Verification Team also confirm that there is no deviation(s) to address a non- compliance with the minimum remote site requirement as per the GS4GG applicability of minimum site visit requirement by VVB" dated 16/08/2021 v 2.0 /7/

Interview: Remotely

A remote site inspection /29/ has been performed by the assessment team. Representatives of the PD were interviewed /31/ personally by assessment team remotely on 15/01/2024. Personnel responsible for monitoring of project activity, data collection, management, and QA/QC procedure were part of the remote assessment and were also interviewed remotely. These tables outline the personnel involved in the interviews, along with their respective roles. The interviews specifically targeted individuals responsible for monitoring -of project activity, data collection, quality assurance and quality control (QA/QC) procedures.

The topics covered during remote interview covered- general features and implementation of project to technical details of the project like calibration, monitoring and measuring system, data collection, recording, emergency procedures, Procedures for handling non-conformances with the validated monitoring plan, personal training, and archiving procedures. The assessment was based on the feedback received during remote interviews.

Interview: Technical Personnels

Name	Role	Location of Site
R. Manikandan (Male)	JGFPL- Manager	Arni
Yogesh Kate (Male)	JGFPL- Senior Engineer	Arni
Amiy A. Dixit (Male)	JGFPL- Senior Engineer	Arni
Akash R. Dhumal (Male)	JGFPL- Engineer	Arni
Krishna Chandra Rathod (Male)	JGFPL- O &M Engineer	Malkapur
Manik Kumar Pardhi (Male)	JGFPL- Senior Engineer	Malkapur
Mohan Patidar (Male)	JGFPL- Junior Engineer	Malkapur
Rajeev Gupta (Male)	Infinite solutions-Senior Analyst	Indore

Interview: Local Stakeholders / Non -Technical Personnels

Name	Role	Location of Site
Praful Rathod (Male)	Villager	Shirpur

Rajesh Chauhan (Male)	Villager	Shirpur
Sagar Borse (Male)	Villager	Malkapur
Swapnil Gorade (Male)	Villager	Malkapur

VKU's Assessment Team in a form VKU.F46W. Attendance Sheet for onsite audit /33/ with the names of personnel present during opening and closing meeting is kept as evidence of the remote audit. Stakeholder consultation interview was also conducted by asking the site personnel to arrange some local stakeholders for maintaining the impartiality, there were no negative comments received during the interviews/31/ conducted remotely.

Verification Team confirms that there is no perceived or potential conflict of interest and provided complete list of the people interviewed during remote site visit, including information on the organization they represent are disclosed in public document by their consent. Verification Team confirms that prior approval was taken from each individual interviewed as per the GS4GG requirements regarding recording and using their names and interviews for the reporting purposes.

2.3 Reporting of Findings

The objective of this step is to identify, discuss and conclude on the issues related to the monitoring, implementation and operations of the registered project activity that could impair the capacity of the registered project activity to achieve emission reductions or influence the monitoring and reporting of emission reductions. This is done based on the desk review and remote site assessment. The verification team prepares and/or updates a verification protocol (internal document) that records the conformities and non-conformities, which may be of following types;

CAR (Corrective Action Request) is raised if one of the following occurs:

- Non-compliance with the monitoring plan, the methodology or the standardized baseline are found in monitoring and reporting and has not been sufficiently documented by the project developer, 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 developer;
- 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 developer.

Clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable GS4GG requirements have been met.

A forward action request (FAR) is also raised in cases where any required deviation/information is not fulfilled in current verification and thus needs to be taken up in consequent verification for better

transparency thus holding the applicability of the methodology eligible to the project activity and there is no impact of the same on additionality, baseline scenario & emission reduction calculation of project.

All CARs and CLs raised by the VKU Certification during verification shall be resolved prior to submitting a request for issuance.

In summary, 04 CLs, 03 CARs and 00 FAR were raised during this verification which were closed successfully.

All the findings that were raised and communicated to project representative during the verification are included under Section 6. The section also includes the response, if provided, by the project developer and an assessment by the verification team if it was closed out or otherwise.

2.4 Technical Review

A draft verification report that is prepared by verification team is reviewed by an independent technical review team (one or more members) to confirm if the internal procedures established and implemented by VKU Certification were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the GS4GG rules and requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the verification team.

During the technical review process additional findings may be identified or the closed-out findings may be opened, which needs to be satisfactorily resolved before the request for issuance is submitted to GS4GG. The independent technical reviewer may either approve the report as such or reject/return the same in such case providing the comments/findings/issues that needs to be resolved by the verification team. The decision taken by the Technical Reviewer is final and is authorized by the Managing Director on behalf of VKU Certification Private Limited.

3. VERIFICATION FINDINGS

This section summarises the findings from the verification of the emission reductions reported for the 150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra for the monitoring period 01/04/2023 – 31/12/2023 (both dates included).

The project has applied for registration under the Gold Standard (GS) exclusively with ID: 7627. This sole registration status has been confirmed by the assessment team by surfing the Gold Standard registry's website. Same sort of comprehensive search was conducted across the websites of several registries like CDM (Clean Development Mechanism), VCS (Verified Carbon Standard), GCC (Global Carbon Council) and UCR (Universal Carbon Registry) etc, using matching project field, scope, titles and capacity, as well as by searching the details of Project Proponent. This rigorous surfing through various registries did not yield any instances of the project being registered under/ rejected by any of the aforementioned registries or any comparable mechanisms Verification through Declaration:

The Project Developer (PD) has also confirmed this claim of single-registration through a declaration document submitted to the assessment team, affirming that the GHG emission reductions achieved by the project during the current monitoring period are not be sought or claimed under any other registries apart from GS.

Cross-Verification of GHG Benefits:

An independent search was also conducted to ascertain whether the project had been registered or claimed for other GHG-related benefits, such as Renewable Energy Certificates (RECs) and International Renewable Energy Certificates (I-RECs). The assessment conducted thoroughly in the mentioned manner, coupled with the declaration submitted by the PD, affirms that there is no double counting of GHG benefits arising from this project activity.

The project's non-rejection status by other GHG programs has also been confirmed through a meticulous assessment. A declaration /35/ submitted by the PD claiming the same was duly verified and found to be accurate by the verification team. Additionally, an independent verification process was initiated with other relevant registries, which substantiated that there were no instances of project rejection by these entities.

In conclusion, the project's exclusive registration under GS for the current monitoring period, along with its absence from rejection lists of other GHG programs, has been comprehensively verified, ensuring the integrity and credibility of its GHG benefits claims. Details of the registries checked are as follows:

1) **http://cdm.unfccc.int/**
2) **Verra Search Page**
3) **I-REC Standard - The International REC Standard Foundation (irecstandard.org)**
4) **https://cri.nccf.in/**
5) **International Carbon Registry - International Carbon Registry**
6) **GCC PROJECTS PORTAL (globalcarboncouncil.com)**
7) **https://biocarbonregistry.com/en/projects/**
8) **https://wilder.earth/social_carbon**
9) **https://www.ucarbonregistry.io/**
10) **https://www.ecoregistry.io/**
11) **https://www.carbonregistry.com/explore/projects**
12) **https://wilder.earth/social_carbon**
13) **https://www.recregistryindia.nic.in/**
14) **https://www.ecoregistry.io/**

Further, verification team also confirms that this project doesn't falls under any NDC regulations as per the independent assessment of website climate action tracker-India.

3.1 Description of project

3.1.1 General description of project

Verification Means	During desk review and Remote site Inspection, the Assessment Team verified MR version 1 dated: 04/01/2024, MR version 2 dated: 13/02/2024, Monitoring report version 3 dated 28/02/2024 and Final Monitoring report version 4 dated 26/03/2024 /14/and ER sheet version 3.1 dated 26/03/2024/15/, PDD version 6 dated: 19/09/2022/13/, and other supporting documents /16/ /27/ /28/.
Findings	CAR 01- was raised and was further closed successfully.
Conclusions	Verification is done in accordance with the registered PDD. General description of the project was verified via Commissioning certificates, PPA. Since all data was verified thoroughly, the Assessment Team can ascertain that the description of the project mentioned is in line with GS4GG standards Version 1.0 and Principle and Requirements v1.2.

3.1.2 Location of Project

Verification Means	During desk review and Remote site Inspection assessment team verified MR version 1 dated: 04/01/2024 and final Monitoring report version 4 dated 26/03/2024/14/, PDD version 6 dated: 19/09/2022/13/, and other supporting documents /30/ /31/
Findings	No findings raised
Conclusions	Verification is done following the registered monitoring plan and was verified using Google earth during desk review. Since, 100% data was verified, the assessment team can ascertain that the location of project mentioned is correct and in compliance.

3.1.3 Reference of Applied Methodology

Verification Means	During desk review and Remote site Inspection, the Assessment Team verified MR version 1.0 dated: 04/01/2024 and Final Monitoring report version 4 dated 26/03/2024 /14/, PDD version 6 dated: 19/09/2022/13/, and another supporting documents /12/
Findings	CAR 01- was raised and was further closed successfully.
Conclusions	Verification is done following the registered PDD and applied methodology ACM0002 Version 20.0 as this a large-scale solar project. Since data mentioned in MR was verified thoroughly via registered PDD, the assessment team can ascertain that the description of the methodology used in the project mentioned is in line with GS4GG standards. The link provided for the reference of the applied methodology was incorrect which was further updated by the PD.

3.1.4 Crediting period of Project

Verification Means	During desk review and Remote site Inspection assessment team verified MR version 1.0 dated: 04/01/2024 and Final Monitoring report version 4 dated 26/03/2024 /14/, PDD version 6 dated: 19/09/2022/13/, and other supporting documents
Findings	No findings raised

Conclusions	Verification Team assessed that this is the 1st crediting period of the given project activity i.e., from 01/06/2022 to 31/05/2027 (Length of 5 years and renewable). This was verified via registered PDD and GS impact registry. Based on this, it can be concluded that crediting period start date and its length is correct and is in line with GS4GG VVS/5/, GS4GG principles and requirements /1/.

3.2 Remaining Issues (FAR(s) from validation or previous verification)

This is second verification of the project activity. There are no FAR(s) from previous verification as per the last verification report version 02 dated 31/05/2023 /20/ that need to be closed during this verification.

3.3 Post registration changes

Type of change(s)	**Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline**
Description of change(s)	N/A
Assessment of change(s)	N/A
Opinion on change(s)	N/A

Type of change(s)	**Corrections**
Description of change(s)	N/A
Assessment of change(s)	N/A
Opinion on change(s)	N/A

Type of change(s)	**Changes to the start date of the crediting period**
Description of change(s)	N/A
Assessment of change(s)	N/A
Opinion on change(s)	N/A

Type of change(s)	**Permanent changes from the design Certified registered monitoring plan, applied monitoring methodology or standardized baseline**
Description of change(s)	N/A
Assessment of change(s)	N/A
Opinion on change(s)	N/A

Type of change(s)	**Changes to the project design of approved project activity**
Description of change(s)	N/A
Assessment of change(s)	N/A
Opinion on change(s)	N/A

3.4 Description of monitoring system applied by the project

Project entails installation & operation of 150 MW (AC) grid connected solar photovoltaic power plant. The monitoring plan has been crafted in alignment with the guidelines and processes established for the GS4GG project in Maharashtra - India, specifically for grid-connected solar power projects.

It's worth noting that the project activity does not entail any technology transfer. The project activity is anticipated to operate continuously without any major breakdowns, which enables it to export 355,030 MWh of electrical energy annually to grid. This, in turn, leads to an average annual reduction of 330,355 metric tons of carbon dioxide (tCO_2e) per year stemming from the project's operations.

3.4.1 Compliance of monitoring plan with monitoring methodology

The verification team has confirmed that the monitoring plan and implemented monitoring system comply with the applied monitoring methodology ACM0002, version 20.0 /12/. All other requirements of the applied methodology have been met.

During the verification process, all relevant monitoring parameters listed in the GS4GG PDD /13/ have been checked for appropriateness of the applied measurement/determination method, correctness of the values used for ER calculation, accuracy, and applied QA/QC measures.

Based on our assessment, we believe that the monitoring mechanism is in line with the methodology and is effective and reliable. The monitoring plan mentioned in the GS4GG PDD is in accordance with the applied methodology, i.e. ACM0002, version 20.0 and the approved standardized baseline applied by the registered GS4GG project.

3.4.2 Compliance of monitoring activities with the registered Monitoring plan

3.4.2.1 Data and Parameters fixed ex-ante or at renewal of crediting period

<table>
<tr><td>Verification Means</td><td>During desk review and Remote site Inspection, the Assessment Team verified MR version 1.0 dated: 04/01/2024 and final MR version 4 dated 26/03/2024 /14/, PDD version 6 dated: 19/09/2022/13/, and other supporting documents</td></tr>
<tr><td>Findings</td><td>No findings raised</td></tr>
<tr><td>Conclusions</td><td>Details of ex-ante parameters
<table>
<tr><th>Parameter</th><th>Unit</th><th>Description</th><th>Value</th></tr>
<tr><td>$EF_{OM, y}$</td><td>tCO_2e/ MWh</td><td>Operating Margin CO_2 emission factor in year y</td><td>0.9522</td></tr>
<tr><td>$EF_{BM, y}$</td><td>tCO_{2e}/ MWh</td><td>Build Margin CO_2 emission factor in year y</td><td>0.8653</td></tr>
<tr><td>$EF_{CM, y}$</td><td>tCO_{2e}/ MWh</td><td>Combined Margin CO_2 emission factor in year y</td><td>0.9305</td></tr>
</table>
Verification is done in accordance with the registered PDD and applied methodology ACM0002 Version 20.0 /12/. The values are obtained from the "CO2 Baseline Database for Indian Power Sector" /34/ for Indian Power Sector version 17, published by the Central Electricity Authority,</td></tr>
</table>

	Ministry of Power, Government of India as mentioned in MR /14/ and verified as per registered PDD /13/.

3.4.2.2 Data and Parameters monitored

Verification Means	During desk review and Remote site Inspection assessment team verified MR version 1.0 dated: 04/01/2024 and final MR version 4 dated 26/03/2024 /14/, PDD version 6 dated: 19/09/2022/13/, and other supporting documents /24/ /25/
Findings	CL02 and CAR 02- was raised and was further closed successfully.
Conclusions	Details of monitored parameter

Parameters	Source	Value Applied	Purpose of Data
EGPJ, y	Monthly JMR, cross-verification with invoices raised.	243,448.29 MWh	Monitoring and data verification regarding implication of SDG 7.
ER_y	The baseline emissions are the product of electrical energy baseline EGPJ, y expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.	227,399 tCO2e	Monitoring and data verification regarding implication of SDG 13.
Quantitative employment, Quality of Employment Income generation.	Training Records (HSE & HR) Salary Slip of the project employees.	22 people Employed 30 trainings Income (INR) – 12,018,608 cumulative of the current monitoring period	Monitoring and data verification regarding implication of SDG 8.

SDG Indicator 7.2: Affordable and Clean Energy
EGPJ, y: Quantity of net electricity supplied by the project plant/unit to the grid in year y (MWh)

Method: The Net electricity supplied to the grid by the project activity is calculated as a difference of electricity exported to the grid, electricity imported from the grid obtained from Monthly

Meter reading reports provided by SEB as per below equation:

	$EG_{facility,y/}$ $EG_{PJ,y} = EG_{Export} - EG_{Import}$ Electricity exported/imported to the grid is in kWh. However, for the calculation purpose electricity exported is converted in MWh. The Net electricity supplied to the grid by the project activity is calculated as a difference of electricity exported to the grid, electricity imported from the grid obtained from Monthly Meter reading reports provided by MSEDCL as per below equation: $EG_{PJ,y} = EG_{Export,Malkapur} + EG_{Export,Arni}$ Additionally, this parameter aligns with the recorded net generation values documented in the State Electricity Board in this case MSEDCL. The power generated from the Solar Power Plant is step up to 132kV voltage level and it is connected to 132/33kV Arni GSS and power generated from the Solar Power Plant is step up to 132kV voltage level and is connected to 132/33kV MALKAPUR GSS. The Energy meters used to record the values of export/import are of accuracy class 0.2s are used to measure the net electricity generated. The assessment Team physically inspected the energy meters installed at site and verified the Serial numbers and confirmed the authenticity of the meter details. Hence, the value of 243,448.29 MWh, as specified in MR version 04 and the emission sheet, is validated as accurate and complies with the stipulations outlined in Para 364 and 395 (e) of the "CDM validation and verification standard for project activities, Version 03.0." /36/. Additionally, the assessment team scrutinized the Joint Monitoring Reports (JMRs)/ credit notes issued /24/. They also cross-checked the power exported values with the invoices raised by PD to MSEDCL and found them consistent with the credit notes issued. The meters are calibrated once in every five years and the calibration of the meters (calibration details added in appendix 3) are verified from calibration certificates provided and is still applicable for current monitoring period /28/. The calibration is done by State electricity board. During remote inspection of the site, the assessment team also interviewed the site in-charge, O&M personnel /26/, plant manager along with other technical and non-technical staff, an confirmed the calibration details, technical specifications (added in appendix 2) /17/, O&M details, etc. It is to note that arrangement of meters, accuracy class of meters and calibration frequency is under the purview of state electricity boards in the project implemented area and PD has no control over meter calibration. PD is performing the O&M inhouse by a skilled team. Since 100% data was verified, the assessment team can ascertain that the values for the emission reductions calculated are accurate and found correct. **SDG Indicator SDG 8.5.1: Decent Work and Economic Growth** The parameter under consideration is the average hourly earnings of both female and male employees, categorized by occupation, age, and individuals with disabilities.

	• Regarding quantitative employment and income generation, this involves tracking the number of project employees, their gender, employment type (permanent/temporary), age, disability status, and the salaries paid to them. The parameter is determined by the total number of individuals employed directly as a result of the project's activities, and it takes into account the improved salary provided to these employees, as well as the income from the Salary slips samples provided to assessment team by the PD. • In this specific case, the data reveals that there was a total of 22 employees during this monitoring period. • Further VVB has crosschecked the number of persons employed during on site visit by means of attendance register and remote interviews/31/ and Salary Slips /22/. The Project thus provides employment opportunities and pays salaries and welfares and also helps to increase the income and living standards of the employees. **SDG indicator 8.6.1: Quality of employment** A total of 30 total trainings were provided during the current monitoring period (18-Arni site and 12-Malkapur site) and salary (INR) – 12,018,608 cumulative of the current monitoring period. The assessment team found this information acceptable and verified it using the salary slips, Training Attendance sheets & Employee Records submitted. Details of training topics are mentioned in the table below in appendix 4. **SDG Indicator 13.2.1: Climate Action** ERy: Emission reductions achieved The baseline emissions are the product of electrical energy baseline EGPJ,y expressed in MWh of electricity produced by the renewable generating unit multiplied by the emission factor. The calculation is clearly presented in the Emission Reduction Sheet, and it indicates that the emission reduction achieved during the current monitoring period is 227,399 tCO2e. The assessment team has reviewed this information and confirmed its accuracy by verifying via credit notes and further cross verifying via invoices. Consequently, the emission reduction calculation is considered correct and in compliance with the necessary standards. Additionally, employee interviews /31/ were conducted during remote audit as part of the verification procedure.

3.4.2.3 Implementation of Sampling Plan

Verification Means	N/A
Findings	N/A
Conclusions	N/A

3.4.3 Compliance with the calibration frequency requirements for measuring instruments

Verification Means	During desk review and Remote site Inspection assessment team verified MR version 1.0 dated: 04/01/2024 and final MR version 4 dated 26/03/2024 /14/, PDD version 6 dated: 19/09/2022/13/ and other supporting documents /28/
Findings	CL 02- was raised and was further closed successfully
Conclusions	Verification is done in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. Calibration is done Once in every five years as per registered PDD /13/ and PPA /27/. Calibration frequency was cross verified via calibration certificates and was found to be in line with the registered PDD /13/ and PPA /27/. Calibration is conducted by State Electricity Board and Calibration records are maintained at the plant. The meter is in control and supervision of MSEDCL and are calibrated only as and when MSEDCL so desires. The metering system comprises of main and check meter. In the event that the main metering system is not in service due to maintenance, repair or testing, the reading is obtained from the check meter. During assessment it was verified that PD has not provided calibration certificate and calibration dates mentioned were not correct. This was further raised as a CL. PD provided calibration certificate and also updates the dates to resolve it. **Calibration Details of meters:** **1. For 70 MW solar plant connected to Malkapur Site:** S.No. | Meter Number | Type | Make | Accuracy class | Date of calibration | Due date 1 | 22004105 | Main | L&T | 0.2s | 21/06/2022 | 20/06/2027 2 | 22004106 | Check | L&T | 0.2s | 21/06/2022 | 20/06/2027 **2. For 80 MW solar plant connected to Arni Site:** S.No. | Meter Number | Type | Make | Accuracy class | Date of calibration | Due date 1 | 22001180 | Main | L&T | 0.2s | 18/04/2022 | 17/04/2027 2 | 22001181 | Check | L&T | 0.2s | 20/04/2022 | 19/04/2027

3.5 Assessment of data and calculation of emission reductions or net removals

3.5.1 Calculation of baseline values or estimation of baseline situation of each SDG Impact

Verification Means	During desk review and Remote site Inspection assessment team verified MR version 1.0 dated: 04/01/2024 and final MR version 4 dated 26/03/2024 /14/, PDD version 6 dated: 19/09/2022/13/, and other supporting documents
Findings	No findings raised
Conclusions	Verification is done in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology /12/. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.

SDG 13- The baseline emissions are the product of electrical energy baseline EGPJ,y expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.

BEy = EGPJ,y * EFgrid,CM,y = 227,399 tCO2e .

Estimated Emission Reduction as in GS PD for the equivalent period of the current Monitoring period, 01/04/2023 to 31/12/2023 (both dates included):	
Monitoring Period Start Date	01/04/2023
Monitoring Period End Date	31/12/2023
Days in Current Monitoring period	275
Annual VERs as per GS PDD	330,355 tCO2e
Estimated Emission Reduction as in VERs PDD for the equivalent period of the current Monitoring period	= (Annual Estimated GHG emission reductions as per revised GS PD/Total days in a year) *days in current monitoring period = (330,355 * 275/ 365 = 248,898 (round down) (tCO_2e)

SDG 7- The Values estimated in ex ante calculation of approved PDD for this monitoring period is 355,030 MWh.

SDG 8- Total 2 training was to be conducted (one training each for each site) and 20 employees (10 employees per site) were to be hired as per ex-ante values estimated in ex ante calculation of approved PDD for this monitoring period.

The Data given in the MR /14/ section E.1 and ER sheet /15/ was verified via Registered PDD /13/ during desk review stage and was found to be correct and in compliance with ISO 14064-2 clause 6.4 and 6.5 /9/.

3.5.2 Calculation of project value or estimation of project situation of each SDG Impact

Verification Means	During desk review and Remote site Inspection assessment team verified MR version 1.0 dated: 04/01/2024 and final MR version 4 dated 26/03/2024 /14/, PDD version 6 dated: 19/09/2022/13/ and other supporting documents /24/ /25/
Findings	No findings raised
Conclusions	Verification is done in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology /12/. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. Monitored parameters for the project is- SDG 13: Baseline emissions: It includes only CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:

BEy = EFgrid,CM, y x EGPJ, y

Where;
BEy = Baseline emissions in year y, (tCO2e/yr)
EGPJ, y = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/yr)
EFgrid, CM, y = Combined margin CO2e emission factor for grid connected power generation in year y

Calculation of EGPJ, y
The calculation of EGPJ, y is different for
a) Greenfield plants,
b) Retrofits and replacements, and
c) Capacity additions

The project activity is the installation of solar projects, and it is a green field project. So, the formula in option
(a) i.e., greenfield plants are used to calculate the value of EGPJ, y. In accordance with para 44 of the applied methodology:
Where:
EGPJ, y= Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/yr).
EGfacility, y= Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr).

BEy = EGPJ, y * EFgrid, CM, y.
BEy= 243,448.29 * 0.9305
BEy= 227,399 tCO2e (Rounded down)

Project Emissions:
As per para 31 of section 5.4 of the approved consolidated Methodology ACM0002 (Version 20.0): /12/
"For most renewable energy power generation project activities, PEy = 0. However, some project activities may involve project emissions that can be significant. These emissions shall be accounted as project emissions by using the following equation:
PEy = PEFF, y + PEGP, y + PEHP, y
Where:
PEy - Project emissions in year y (t CO2e/yr)
PEFF, y - Project emissions from fossil fuel consumption in year y (t CO2/yr)
PEGP, y - Project emissions from the operation of dry, flash steam or binary geothermal power plants in year y (t CO2e/yr)
PEHP, y - Project emissions from water reservoirs of hydro power plants in year y (t CO2e/yr)
" As the project activity is the installation of a new grid-connected Solar power plant/unit and does not involve any project emissions from fossil fuel, operation of dry, flash steam or binary geothermal power plants, and from water reservoirs of hydro power plants. Therefore PEFF, y, PEGP, y, PEHP, y is equal to zero and thus,
PEy = 0.

Leakage Emissions:

	As per para 53 of section 5.6 of the approved consolidated Methodology ACM0002 (Version 20.0) /12/: No leakage emissions are considered in the project activity. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g., extraction, processing, and transport). Since the emissions sources are small, it is neglected, thus, LEy = 0. SDG 07: $EG_{PJ,y}$: During current monitoring period, the project has generated 243,448.29 MWh affordable and clean energy. SDG 08: Quality of Employment - 30 Trainings Quantitative employment and income generation - 22 employees & Income (INR) – 12,018,608 cumulative of the current monitoring period. The electricity generated was verified via JMRs /24/ and crosschecked with the invoices /25/ provided by the PD and the employment generated was checked via O&M contract /26/ & employment records and salary slips /22/, training records /21/ of employees. Since 100% data was verified, the assessment team can ascertain that the values for the emission reductions calculated are accurate and in line with ISO 14064- 2 clause 6.7 /9/.

3.5.3 Calculation of Leakage

Verification Means	During Desk Review and Remote site Inspection assessment team verified MR version 1.0 dated: 04/01/2024 and final MR version 4 dated 26/03/2024 and PDD Version 06 dated 19/09/2022, and other supporting documents.
Findings	No findings raised
Conclusions	Verification is done in accordance with the registered PDD /13/ and applied methodology ACM0002 Version 20.0 /12/. **Leakage (LE_y) = 0** As per Paragraph 53 of the consolidated methodology ACM0002 Version 20 /12/, there is no leakage emission considered through the renewable project electricity generation.

3.5.4 Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

SDG and SDG Impact	Baseline Estimate	Project Estimate	Net Benfit	Conclusion
7- Affordable and Clean	0	243,448.29 MWh	243,448.29 MWh	Assessment team verified Net Electricity generated in the current monitoring period via JMRs /24/ that were further crosschecked via invoices /25/ and DGRs presented remotely and found it to be correct.

8- Decent Work and Economic Growth	0	Total 10 people employed and 2 training conducted Income (INR) – 12,018,608 cumulative of the current monitoring period	Total people Employed**: 22** Training Conducted: **30** Income (INR) – **12,018,608** cumulative of the current monitoring period.	Assessment team verified total employment generated and trainings conducted in the current monitoring period via employment records, salary slips /22/ of employees and training records /21/ and were found to be correct.
13- Climate Action	227,399 tCO_2e	0	227,399 tCO2e	Assessment team conducted desk review and an on-site inspection and verified the data reported in the ER sheet /15/ and MR /14/ for current monitoring period via JMRs /24/ and invoices /25/ raised monthly and found it to be correct.

3.5.5 Comparison of actual emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

SDG and SDG Impact	Values estimated in ex ante calculation of approved PDD	Actual values achieved during this monitoring period	Conclusion
7- Affordable and Clean	355,030 MWh	243,448.29 MWh	Assessment team conducted desk review and remote-site inspection and verified the Net Electricity generation reported in the ER sheet /15/ and MR /14/ for current monitoring period via JMRs /24/ and invoices /25/ raised monthly. Total employment generated and trainings conducted in the current monitoring period were verified via employment records, salary slips /22/ of employees and training records /21/ and were found to be correct.
8- Decent Work and Economic Growth	2 Trainings-minimum 20 employees	30 Trainings 22 employees Income (INR) – 12,018,608 cumulative of the current monitoring period	
13- Climate Action	330,355 tCO_2	227,399 tCO2e	

3.5.6 Remarks on difference from estimated value in registered PDD

Verification Means	During Desk Review and Remote site Inspection assessment team verified MR version 1.0 dated: 04/01/2024 and final MR version 4 dated 26/03/2024 PDD Version 06 dated 19/09/2022, and other supporting documents
Findings	No findings raised

Conclusions

The ex-ante estimates value of the emission reductions for the monitoring period as per the registered PDD /13/, is 330,355 tCO2e and the actual emission reductions achieved for the monitoring period is 227,399 tCO2e. The table below defines the estimated and achieved values of the parameters:

SDG Indicator	SDG	Values Estimated Annually	Values Estimated for current MP	Values achieved for Current MP	Unit
Affordable and Clean Energy	SDG 7	355,030	267,488	243,448.29	MWh
Decent Work and Economic Growth	SDG 8	20	20	22	Number of employees
		2	2	30	Number of Trainings
Climate Action	SDG 13	330,355	248,898	227,399	tCO_2e per annum

For SDG 13, Since actual emission reduction is lower than the estimated value by 8.64%. The actual achieved emission reduction achieved during the current monitoring period is 8.64% lower than the estimated value in the PDD. i.e., there is a decrease in ex-post emission reductions. The lower generation observed because the current monitoring period have lower yield months.

Thus, VKU is of opinion that the facts stated by PD is correct and calculations for ER is done correctly and in line with applied methodology.

All the data have been made available to the assessment team by PD during site visit/29/ and as supporting evidences which have been monitored as per required monitoring frequency. The means of verification for the values of parameters, used for baseline emission calculation, is described above.

The assessment team has checked and confirmed the emission reduction calculations in the spreadsheet and found to be accurate. The monitoring report /14/ is supported by emission reduction spreadsheet /15/. The consistency and formula were verified and found to be accurate.

VKU is of the opinion that this method of calculation of emission reductions is accurate and results in conservative estimation of emission reduction and is in line with the applicable GS requirements set out in section 12.13 clause 12.13.2 of GS Standard version 01 and that the verification of the GHG statement was conducted in accordance with ISO 14064-3; 2019 /9/.

3.6 Safeguards Reporting

As per the safeguarding Principles Assessment in Section D.1. of the GS4GG PDD, there is one safeguarding principle (4.3.5: Hazardous and Non-hazardous Waste) which is included in the monitoring plan. This project activity is a solar project activity. Hence there had been no generation of 'Hazardous and Non-hazardous Waste' throughout the monitoring period. Assessment Team confirms that project representative has provided all the evidences to verify the safeguarding principles that are added in the monitoring plan. Assessment Team concluded that project representative provided all required information as per the Template Guide- MR v1.1 and they are correct and in compliance with GS4GG Safeguarding Principles Requirement v2.1 dated: 29/06/2023 /3/.

Principles	Mitigation Measures added to the Monitoring Plan
Principle 9.5 Hazardous and Non-hazardous Waste	The waste is disposed to the waste handlers and the firm comply with all the local laws for monitoring and disposal. However, the Solar PV based power generation project does not involved any Hazardous or Non-Hazardous waste generation in this monitoring period.

3.7 Stakeholder inputs and legal disputes

3.7.1 List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.

During desk review, Assessment team checked the procedures mentioned in MR and during remote site inspection cross verified the same via interviews of site personnel and stakeholders /31/ that-

As a part of continual improvement process- PD has kept Visitor register cum grievance register /23/ at the project site which is accessible to stakeholders to provide their feedback on the project. It is placed appropriately at a publicly accessible location (at the security gate) where local stakeholders can provide their feedback. This location is also conducive to continuous and regular checks for stakeholder comments. The grievance register is being continuously monitored and addressed through the grievances cell on regular basis.

In the current monitoring period, no grievances have been received and this was verified during remote site inspection /29/ via the Visitor register cum grievance register /23/ placed on site.

3.7.2 Report on any stakeholder mitigations that were agreed to be monitored.

During remote site inspection Assessment Team verified visitor register cum grievance register /23/ placed on site and conducted personnel interviews /31/ and concluded that there was no negative feedback logged during the current monitoring period.

3.7.3 Details of legal contest that has arisen with the project during the monitoring period

Assessment Team confirms that the given GS4GG project "150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra" is in compliance with the Host Country "India" legal environmental, ecological and social regulations as per requirements mentioned in section 7.11 at time of validation for design certification for standalone project activity of validation and verification standard v1.0 /5/ and there is no

legal challenge that has arisen claiming a project is not in compliance with regulation, during certification process.

3.8 Quality of evidence to determine emission reductions

As per the verification of ER calculation process, assessment team confirmed that all the parameters required for determination of emission reductions has been included in the Monitoring report version 4 dated 26/03/2024 /14/and ER sheet version 3.1 dated 26/03/2024/15/ and are consistent with the applied methodology ACM0002 Version 20.0 /12/ and the monitoring plan contained in the registered PDD /13/. The parameters used are completely monitored as per the registered PDD /13/ in this monitoring period.

During desk review and remote site inspection, assessment team verified the reported ERs with the help of supporting documents e.g., JMRs, Invoices, DGR and conducted personnel interviews to check sufficiency of data and its aggregation.

No significant, lack of evidence and missing data were detected during verification. Hence, the verification team confirms that the monitoring plan ensures required management of the monitoring system to ensure the quality of the monitored data. All internal data are subjected to QA/QC measures. The verification process for the same has been clearly described in above section of the report.

Emission reductions is calculated by the "Quantity of net electricity supplied from the project (solar) plant/unit to the grid in year y", $EG_{facility, y}$ (MWh) (SDG Indicator 7). This parameter is monitored through the reading of Energy meters installed. The meters have accuracy of class 0.2s.

The electricity generated was checked via JMRs /24/ and were crosschecked with records of electricity sale (e.g., sales receipt/Invoices) /25/. Calibration of all the meters undertaken once in every five years as per PPA. On site personnel interview /31/ with the site personnel of the project activity confirms that the necessary QA/QC procedures are in place. Data management system is effective and reliable for the net electricity supplied by the project plant/unit to the grid in year y. Hence, assessment can conclude that the data and its management is in compliance with GS4GG validation/ verification standard /5/.

3.9 Management system and quality assurance

The final verification report passed a technical review and completeness check/ Quality check before being submitted to the client for forward submission to GS.

A technical reviewer qualified in accordance with VKU certification competency form which VKU.F8A. Competency Evaluation of Personnel (Internal Document) for validation and verification of GHG projects performed the technical review.

The comments raised during the technical review stage is thoroughly addressed by the PD, PD's corrections are further assessed by assessment team.

After the comments raised during this stage is successfully addressed, the Final verification report undergo VKU's Completeness/Quality Check before issuance.

3.10 Verification Assessment

All the data have been made available to the assessment team by PD during remote site visit /29/ and as supporting evidences during verification assessment which have been monitored as per required monitoring frequency. The means of verification for the values of parameters, used for baseline emission calculation, is described above in the report.

The verification team attests to correctness of the formulas and methodologies used to compute baseline emissions as per GS4GG Validation and Verification Standard V1.0 /5/. Applied default values, emission factors, and assumptions in the calculations are all reasonable. Verification team attests to the correctness of formulas and methodologies used in calculation of baseline emissions, assumptions, emission factors and default values applied in the calculations are justified.

SDG Indicators during this monitoring period 01/04/2023 – 31/12/2023 is:

SDG 13- Actual emission reduction achieved is 227,399 tCO2e calculated by multiplying the unit of MWh produced by an emission factor. The value of emission factor is verified from the PDD /13/ and is calculated as per "Tool to calculate the emission factor for an electricity system Tool 7: version 7,". The data is obtained from "CO2 Baseline Database for Indian Power Sector" for Indian Power Sector" version 17.0, /35/ published by the Central Electricity Authority, Ministry of Power, Government of India /34/.

SDG 7- Amount of net electricity generated is 243,448.29 MWh. Value calculated was verified via JMRs /24/ and was further cross verified by Invoices /25/.

SDG 8- Employment generated- 22 verified via employment records and salary slips and 30 trainings conducted were verified via training records provided by PDD /13/.

The verification consisted of the following phases:

- **Document Review:** Relevant documents, such as the verification report, monitoring plan, methodology, GS PDD, QA/QC procedures and supporting documents were thoroughly reviewed.
- **On-Site Assessment:** This included crosschecking of data, personnel interviews and evaluation of the actual project scenario.
- **Resolution of Discrepancies:** Any non-conformities identified during the assessment were addressed and resolved.

In this monitoring period, **CAR: Corrective Action Request :03**, **CL: Clarification Request :04** were raised and resolved. No FAR was raised.

Description of the findings raised is provided in Section 6 of this verification report.

3.11 Verification Opinion

VKU Certification, contracted by Infinite Environmental Solutions Limited., has performed the independent verification of the emission reductions for the GS Project ID 7627"150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra" for the monitoring period 01/04/2023 to 31/12/2023 as reported in the Final

MR version 4 dated 26/03/2024. Site in-charge responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity.

VKU commenced the verification against the baseline and monitoring methodology ACM0002, version 20.0 /12/ the monitoring plan contained in the PDD Version 06 dated 19/09/2022 and Monitoring Report Version 04 dated 26/03/2024 /14/.

VKU Certification confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements. This verification report has been prepared using the latest available template specified by GS4GG registry and complies with the instructions to follow as per GS4GG principle and requirements v1.2 /1/ and GS4GG validation and verification standard v1.0 /5/.

The verification activities were conducted in accordance with VKU Certification's Quality Manual System and SOP 4 of this report and as per the GS4GG validation and verification standard v1.0 /5/. As a result, it is concluded that the emission reductions from the GS Project Activity ID 7627 "150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra" are correctly reported in the Monitoring Report Version 04 dated 26/03/2024 /14/ and corresponding ER sheet /15/ for the monitoring period 01/04/2023 to 31/12/2023 (both dates included) amounted to 227,399 tCO2e.

VVB opinion on issuance as per the ISO 14064-3 /9/, clause 9 which is in compliance with GS4GG principles and requirement v1.2 /1/ and GS4GG validation and verification standard v1.0 /5/. The VVB hereby issues a resolutely positive opinion meticulously drafted in strict accordance with ISO 14064-3:2019, /9 / Section 09, and the precise provisions of Clause 9.7.1.6 & 9.7.2 of ISO 14065:2020. This opinion stands in full alignment with the exacting requirements delineated in ISO/IEC 17029:2019, Section 9.7./9.4/

Our verification process provides a robust and reasonable level of assurance regarding the veracity of the reported GHG emission reduction data. This data is devoid of any material misstatements and is steadfastly supported by the evidence furnished by the Project Proponent (PD), comprehensively presented in this report.

VVB opinion on issuance as per the ISO 14064-3, clause 9 which is compliance with GS4GG principles and requirement v1.2 /1/ and GS4GG validation and verification standard v1.0 /5/.

VVB Opinion	Conclusion
Positive	☒
Negative	☐

4. REFERENCE/DOCUMENTS USED IN THE VERIFICATION

S.No	AUTHOR	TITLE	REFERENCE TO THE DOCUMENT	PROVIDER
1.	Gold Standard	Principles and Requirements	Version 1.2 and Dated: 23/10/2019	Gold Standard Website
2.	Gold Standard	Stakeholder consultation and engagement requirements	Version 2.1 and Dated: 14/06/2022	Gold Standard Website
3.	Gold Standard	Safeguarding principles & requirements	Version 2.1 and Dated: 29/06/2023	Gold Standard Website
4.	Gold Standard	Design change requirements	Version 1.1 and Dated: 14/04/2023	Gold Standard Website
5.	Gold Standard	Validation and verification standard	Version 1.0 and Dated: 06/03/2023	Gold Standard Website
6.	Gold Standard	On-site and remote audit requirements and procedures	Version 2.0 and Dated: 30/05/2023	Gold Standard Website
7.	Gold Standard	Applicability of minimum site visit requirement by VVB	Version 2.0 and Dated: 16/08/2021	Gold Standard Website
8.	Gold Standard	Validation & verification body requirements	Version 2.0 and Dated: 14/01/2021	Gold Standard Website
9.	ISO	ISO- 14064-2 ISO- 14064- 3	Dated: 04-2019 Dated- 31/05/2019	ISO Website
10.	Gold Standard	Renewable energy activity requirements	Version 1.4 and Dated: 16/08/2021	Gold Standard Website
11.	Gold Standard	Gold standard eligible impact quantification methodologies	Version 2.4 and Dated: 22/06/2023	Gold Standard Website
12.	UNFCCC CDM	Methodology- ACM0002 "Grid-connected electricity generation from renewable sources	Version 20.0 and Dated: 28/11/2019	CDM Website
13.	Infinite Environmental Solutions Limited	GS4GG PDD	Version 06 and Dated 19/09/2022	Gold Standard Website
14.	Infinite Environmental Solutions Limited	Monitoring Report	Version 01 and Dated 12/01/2024 Version 02 and Dated 06/02/2024 Version 03 and Dated 28/02/2024 Version 04 and Dated 26/03/2024	Infinite Environmental Solutions Limited
15.	Infinite Environmental Solutions Limited	ER Sheet	Version 01 and Dated 12/01/2024 Version 02 and Dated 06/02/2024	Infinite Environmental Solutions Limited

			Version 03 and Dated 28/02/2024 Version 03.1 and Dated 26/03/2024	
16.	Juniper Green Field Private Limited	Commissioning certificates	Dated: 01/06/2022 and 08/08/2022- 150 MW Commissioned	Infinite Environmental Solutions Limited
17.	Juniper Green Field Private Limited	Technical specifications	16/04/2023 Declaration _modules data	Infinite Environmental Solutions Limited
18.	Juniper Green Field Private Limited	Block Diagram	N/A	Infinite Environmental Solutions Limited
19.	LGAI Technological Center, S.A	Design Certification (Validation) Report	Version 03 and Dated 17/10/2022	Gold Standard Website
20.	LGAI Technological Center, S.A	Registered previous Verification report	Version 02 and Dated 31/05/2023	Gold Standard Website
21.	Juniper Green Field Private Limited	Training Records applicable for current monitoring period from 01-April-2023 to 31-December-2023	N/A	Infinite Environmental Solutions Limited
22.	Juniper Green Field Private Limited	Employment records and salary slips of personnels applicable for the current monitoring period	N/A	Infinite Environmental Solutions Limited
23.	Juniper Green Field Private Limited	Grievance Register Photograph	N/A	Infinite Environmental Solutions Limited
24.	MSEDCL	Joint Monitoring Report	N/A	Infinite Environmental Solutions Limited
25.	Juniper Green Field Private Limited	Invoices	N/A	Infinite Environmental Solutions Limited
26.	Inhouse Entity	O&M Agreement	N/A	Infinite Environmental Solutions Limited
27.	Govt. Entity	Power Purchase Agreement	Dated: 06/11/2019	Infinite Environmental

				Solutions Limited
28.	Govt. Entity	Calibration Certificates of energy meters installed	Dated: 15/12/2023	Infinite Environmental Solutions Limited
29.	VKU Certification	Remote site Inspection- Site Photographs	Dated: 15/01/2024	N/A
30.	N/A	Google Earth Software	N/A	N/A
31.	VKU Certification	Remote site Personnel and Stakeholders Interview	Dated: 15/01/2024	N/A
32.	VKU Certification	VKU.F62W.Field Assessment Checklist	Dated: 15/01/2024	N/A
33.	VKU Certification	VKU.F46W. Attendance Sheet	Dated: 15/01/2024	N/A
34.	Central Electricity Authority	"CO2 Baseline Database for Indian Power Sector" for Indian Power Sector	Version 17	Central Electricity Authority website
35.	Juniper Green Field Private Limited	Self- declaration for no double counting	N/A	Infinite Environmental Solutions Limited
36.	UNFCCC CDM	CDM validation and verification standard for project activities	Version 3.0 Dated- 09/09/2021	CDM Website

5. CERTIFICATION STATEMENT

VKU Certification Private Limited (VKU Certification), contracted by Infinite Environmental Solutions Limited, has performed the independent verification of the emission reductions for the GS4GG project activity 7627 "150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra" in India for the monitoring period 01/04/2023 – 31/12/2023 (both dates included) as reported in the Monitoring Report (public) Version 04 dated 26/03/2024/14/. The Infinite Environmental Solutions Limited is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity.

It is our responsibility to express an independent verification statement on the reported GHG emission reductions from the project activity

VKU Certification commenced the verification on the basis of the baseline and monitoring methodology ACM0002 V 20.0 /12/ the monitoring plan contained in the PDD Version 06 dated 19/09/2022/13/, Monitoring Report (public) Version 4 dated 26/03/2024 /14/ as per the methodology described under Section 2 of this report.

VKU Certification's verification approach is based on the understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. VKU Certification planned and performed the verification by obtaining evidence and other information and explanations that VKU Certification considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emissions reductions reported for the project activity for the period 01/04/2023 – 31/12/2023 (both dates included) are fairly stated in the Monitoring Report (public) Version 4 dated 26/03/2024/14/. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology ACM0002 V 20.0 /12/ and the monitoring plan contained in the PDD Version 06 dated 19/09/2022/13/.

VKU Certification Private Limited is able to certify that the emission reductions from the GS4GG project activity 7627 "150 MW Solar PV Plant by Juniper Green Field Pvt. Ltd. in Maharashtra" in India during the period 01/04/2023 – 31/12/2023 (both dates included) amount to 227,399 tCO2e.

Verified and certified emission reductions as per commitment period:

Commitment period	Amount
From: 01/04/2023 – 31/12/2023 (both dates included)	227,399 tCO2e

VIKAS KUMAR AHARWAL
Digitally signed by VIKAS KUMAR AHARWAL
Date: 2024.03.30 23:09:23 +05'30'

Dr Vikas Kumar Aharwal **30/03/2024**

Founder and Director Indore, India

VKU Certification Private Limited

6. VERIFICATION FINDINGS (CAR/CL/FAR)

Type	**Date**	19/01/2024
CL#01	**Reference**	Section A of verification protocol /DR/OSV/AT Section B of verification protocol /DR/OSV/AT
Description of the Non-Conformance		
1. **Key Project Information:** PD needs to provide documents to substantiate the claim 2. **Section B.1. of MR:** Mention full form 3. **Section C of MR:** • PD to clarify whether it is CDM or GS4GG? • PD to clarify whether it is PD or PP? • PD needs to provide document to substantiate the claim • Mention full form • PD to clarify whether it is CDM or GS4GG?		
1st Response from PP	**Date**	24/01/2024
1. **Key Project Information:** The substantiated claim form is submitted along with this revised MR. 2. **Section B.1. of MR:** The full form has mentioned 3. **Section C of MR:** • Changed as GS4GG in revised MR. • Changed as PD in revised MR. • The substantiate claim form is submitted along with this revised MR. • The full form is provided. • Changed as GS4GG in throughout MR.		

1st Assessment by Audit Team	**Status**	Open	**Date**	07/02/2024
1. **Key Project Information:** The substantiate claim form is submitted along with this revised MR but PD has not properly classified the employment generated into skilled, unskilled workforce, Also PD has not mentioned that the salary given to employees are as per the state labour laws or not. (Open) 2. **Section B.1. of MR:** The full form has been mentioned in the updated version of MR. (Close) 3. **Section C of MR:** • Changed in the revised version of MR. (Close) • Changed as PD in revised MR. (Close) • The substantiate claim form is submitted along with this revised MR, JMR invoices are submitted along with this revised MR for this current MP. (Close) • The full form is provided as MSEDCL - Maharashtra State Electricity Distribution Co. Ltd. (Close) • Changed as GS4GG throughout MR by the PD. (Close)				
2nd Response from PP			**Date**	28/02/2024

1. The bifurcation of skilled, unskilled has been demonstrated in section D.2. The per day wages for all the employees is approximately 1,986 INR which is more than the minimum wage criteria and thus the salary given to the employees are as per the state labour laws and it is fulfilling the minimum wage requirement and the supporting for the same has been provided.

2nd Assessment by Audit Team	**Status**	Closed	**Date**	29/02/2024

1. **Key Project Information:** PP has clarified that bifurcation of skilled, unskilled has been demonstrated in section D.2. The per day wages for all the employees is approximately 1,986 INR which is more than the minimum wage criteria and thus the salary given to the employees are as per the state labour laws and it is fulfilling the minimum wage requirement and the supporting for the same has been provided. Hence, found correct by the assessment team. **(Close)**

Hence, CL#01 is closed successfully.

Type	**Date**	19/01/2024
CL#02	**Reference**	Section C of verification protocol /DR/OSV/AT Section D of verification protocol /DR/OSV/AT Section E of verification protocol /DR/OSV/AT Section F of verification protocol /DR/OSV/AT Section G of verification protocol /DR/OSV/AT

Description of the Non-Conformance

1. **In section D.2. of MR:**
   - PD needs clarify whether dates are Inclusive of both dates?
   - PD needs to provide documents to substantiate the claim
   - PD needs to provide documents for the same
2. **In section G.1 of MR:** PD needs to provide documents for the same
3. **Appendix 1 of MR:** PD to provide document to substantiate the claim for the dates mentioned here

1st Response from PP	**Date**	24/01/2024

1. **In section D.2. of MR:**
   - The dates are Inclusive of both dates in revised MR.
   - The documents to substantiate the claim is provided along with this revised MR.
   - The documents are submitted along with this revised MR.
2. **In section G.1 of MR:** The grievance register is submitted along with this revised MR.
3. **Appendix 1 of MR:** The Calibration test report of the main and check meter for the current MP is submitted along with this revised MR.

1st Assessment by Audit Team	**Status**	Open	**Date**	07/02/2024

1. **In section D.2. of MR:**

- PD has corrected that the dates are inclusive of both dates in the revised MR. (Close)
- The documents to substantiate the claim are not provided satisfactorily along with this revised MR. PD has not mentioned the applicable laws to verify the minimum wage criteria. (Open)
- Employee Attendance register submitted along with this revised MR but PD needs to substantiate this in tabular form for better clarification in the revised MR. (Open)

2. **In section G.1 of MR:**

- The grievance register is submitted along with this revised MR and found correct. (Close)

3. **Appendix 1 of MR:**

- The Calibration test report of the main and check meter for the current MP is submitted along with this revised MR and found correct. (Close)

4. **In section E.2 of MR:**

  - Values found inconsistent. (Open)

5. **In section E.2 of MR:**

  - Values found inconsistent. (Open)

2nd Response from PP	**Date**	28/02/2024

1. **In section D.2 of revised MR:**
   - The supporting documents have been provided to substantiate the claim of the total income generation. Also, the applicable laws regarding the minimum wage criteria have been described in the given table and the weblinks for the same has been attached in the footnote.
   - The employee details have been provided in tabular form for better clarification in the revised MR.

4. **In section E.2 of revised MR:**
   - The values are made consistent with the ER sheet provided.

5. In section E.2 of revised MR:
   - The values are made consistent with the ER sheet provided.

2nd Assessment by Audit Team	**Status**	Closed	**Date**	29/02/2024

1. **In section D.2 of revised MR:**
   - The supporting documents have been provided by the PD to substantiate the claim of the total income generation. Also, the applicable laws regarding the minimum wage criteria have been described in the given table in MR version 3 and the weblinks for the same has been attached in the footnote. **(Close)**
   - The employee details have been provided by the PD in tabular form for better clarification in the revised MR. **(Close)**

2. **In section E.2 of revised MR:**
   - The values are made consistent with the ER sheet provided. **(Close)**

3. In section E.2 of revised MR:
   - The values are made consistent with the ER sheet provided. **(Close)**

Hence, CL#02 is closed successfully.

Type	Date	13-March-2024
CL#03	**Reference**	Section A of verification protocol /DR/OSV/AT Section B of verification protocol /DR/OSV/AT Section C of verification protocol /DR/OSV/AT Section D of verification protocol /DR/OSV/AT Section E of verification protocol /DR/OSV/AT Section F of verification protocol /DR/OSV/AT Section G of verification protocol /DR/OSV/AT
Description of the Non-Conformance		
1. **In key project information:** How this date was confirmed? 2. **In table 1 of MR:** The duration is not clear. Same with the rest of the parameters. 3. **In table 1 of MR:** Is this the number of employees hired during current monitoring period? 4. **In table 1 of MR:** Is the income generation that is mentioned is at individual level or group level? 5. **In section A.4. of MR:** PD has not clarified that how many times project crediting period has renewed. 6. **In section B.1. of MR:** PD has not clarified how the change in DC capacity of the project sites not affect the AC capacity. As per section A.3 of GS PDD for Site -1: Arni (80 MWac) DC capacity was 108.07158, which is now 107.6 And for Site -2 : Malkapur 70 (MWac) DC capacity was 94.50532, which is now 99.5 7. **In section B.1. of MR:** AC/ DC? 8. **In section B.1. of MR:** By performing the calculation for the mentioned values the output is 107.8521. 33.4521+33.9+20.4+19.9+0.2 = 107.8521, clarify 9. **In section B.1. of MR:** Capacity of the Inverter is in AC or DC? 10. **In section B.1. of MR:** Total capacity of the inverters was (432*185 = 79,920 kV) 79.92 MV, how it was support the 80 MW plant?		
1st Response from PP	**Date**	22/03/2024

1. **In key project information:**
   The screenshot of the webpage has been provided as supporting along with responses.
2. **In table 1 of MR:**
   The amount achieved are for current monitoring period and the same has been mentioned in the footnote.
3. **In table 1 of MR:**
   The number of employees working in the previous performance review are 41 and in the current monitoring period some of them has left. Hence, the amount achieved and mentioned is the total number of employees working in the current monitoring period.
4. **In table 1 of MR:**
   The amount mentioned is the total income generation in the current monitoring period and it is at group level.
5. **In section A.4. of MR:**
   It will be renewed twice maximum up to 15 years i.e., 5yrs+5yrs+5yr and the same has been mentioned in the revised MR.
6. **In section B.1. of MR:**
   The change in DC capacity of the project activity does not affect the AC capacity as the AC capacity remains the same as per the registered PDD. Thus, the change in DC capacity does not impact the project's Additionality, Baseline, design, crediting period and applicability of methodology in any way.
7. **In section B.1. of MR:**
   It is the AC capacity and the same has been mentioned.
8. **In section B.1. of MR:**
   It has been revised and corrected.
9. **In section B.1. of MR:**
   The capacity of invertor is in AC and the same has been mentioned in the revised MR.
10. **In section B.1. of MR:**
    The actual capacity of the plant is 79.92 MW as per the actual scenario hence the invertor capacity is also same and it has been rounded to 80 MW.

1st Assessment by Audit Team	**Status**	Closed	**Date**	28/03/2024

1. **In key project information:**
   The screenshot of the webpage has been provided as supporting along with responses to verify the date.
2. **In table 1 of MR:**
   The duration has been updated as the amount achieved are for current monitoring period and the same has been mentioned in the footnote.
3. **In table 1 of MR:**
   PD has updated the table in the updated version of MR.
4. **In table 1 of MR:**
   PD has clarified that the amount mentioned is the total income generation in the current monitoring period and it is at group level.
5. **In section A.4. of MR:**
   PD has clarified about the number of times project crediting period can be renewed and the same has been mentioned in the revised MR.
6. **In section B.1. of MR:**
   PD has clarified about the change in DC capacity of the project activity does not affect the AC capacity as the AC capacity remains the same as per the registered PDD. Thus, the change in DC capacity does not impact the project's Additionality, Baseline, design, crediting period and applicability of methodology in any way, which is accepted by the assessment team.

7. **In section B.1. of MR:**
   PD has mentioned that the capacity is in AC.
8. **In section B.1. of MR:**
   PD has revised and corrected the values.
9. **In section B.1. of MR:**
   The capacity of invertor is in AC and the same has been mentioned in the revised version of MR.
10. **In section B.1. of MR:**
    PD has clarified that the actual capacity of the plant is 79.92 MW as per the actual scenario hence the invertor capacity is also same and it has been rounded to 80 MW.

Hence, CL#03 is closed successfully.

2nd Response from PP	**Date**	DD-Month-YYYY

2nd Assessment by Audit Team	**Status**	Open/Closed	**Date**	DD-Month-YYYY

Type	**Date**	13/03/2024
CL#04	**Reference**	Section C of verification protocol /DR/OSV/AT Section D of verification protocol /DR/OSV/AT Section E of verification protocol /DR/OSV/AT Section F of verification protocol /DR/OSV/AT Section G of verification protocol /DR/OSV/AT

Description of the Non-Conformance

1. **In section C. of MR:**
   Is there any in-house O & M or third-party O&M has been contracted by the PD?
2. **In section C of MR:**
   PD to clarify the significance of w in the sentence.
3. **In section C of MR:**
   This terminology is not consistent as per GS4GG Monitoring report template.
4. **In section C of MR:**
   In case of manmade or natural calamities when both the meters are damaged, how will the energy generation measured? What mechanism or redundancy is available at site to account for such exigencies.
5. **In section C of MR:**
   Is plant helpers writing the reports, if yes then which kind of reports.
6. **In section D.1. of MR:**
   Not able to trace any calculation for the mentioned parameter in ER Sheet.
7. **In section D.2. of MR:**
   Why this section is left blank?

8. **In section D.2. of MR:**
   PD has not specified site-wise training in this section.
9. **In section D.2. of MR:**
   As per Appendix -2 of this report, 18 trainings was held on site 1 and 12 trainings was held on site 2, as a total of 30 trainings.
10. **In section D.2. of MR:**
    Prior in this report, it is mentioned that these are the people hired during the current monitoring period, why the same specification not provided in this section.
11. **In section D.2. of MR:**
    Pd has not explained how the income of the employees is at par with State regulation. Neither has PD specified the wage provided to employees based upon their skillset & site wise.
12. **In section E. of MR:**
    What about employment in baseline?
13. **In section E.1 of MR:**
    Is this a CDM project activity or VCS Project activity?

1st Response from PP	**Date**	22/03/2024

1. **In section C. of MR:**
   There is in-house O&M and the same has been mentioned.
2. **In section C of MR:**
   It has been revised.
3. **In section C of MR:**
   The terminology has been revised as per GS4GG monitoring report template.
4. **In section C of MR:**
   In case of manmade or natural calamities when both the meters are damaged or not function properly than error factor will be applied as per the accuracy class of the meter.
5. **In section C of MR:**
   The sentence has been revised.
6. **In section D.1. of MR:**
   It has been revised and the values are as per the registered PDD.
7. **In section D.2. of MR:**
   It has been revised.
8. **In section D.2. of MR:**
   Site wise training has been incorporated.
9. **In section D.2. of MR:**
   It has been revised and made in line throughout the MR.
10. **In section D.2. of MR:**
    The number of employees working in the previous performance review are 41 and in the current monitoring period some of them has left. Hence, the number of employees mentioned is the total number of employees working in the current monitoring period.
11. **In section D.2. of MR:**
    It is the total income generated in the current monitoring period

    Approximate calculations: -
    19,618,055/275= 43,704 of all employees per day

    For per employee-
    43,704/32 = 1,986 approx. (per day wages)

    which is more than the minimum wage criteria. Thus, the wages provided to all the employees are as per state regulations and based upon their skillset but site wise income bifurcation is not justified as not specified in registered PDD.

12. **In section E. of MR:**
    There are no employment generation in the baseline and the same has been mentioned.
13. **In section E.1 of MR:**
    This is GS project activity and as GS standard follows the guidelines of CDM therefore it is in line with the guidelines.

1st Assessment by Audit Team	**Status**	Closed	**Date**	28/03/2024

1. **In section C. of MR:**
   PD has clarified there is in-house O&M in this project.
2. **In section C of MR**
   PD has revised the sentence.
3. **In section C of MR:**
   The terminology has been made consistent as per GS4GG Monitoring report template.
4. **In section C of MR:**
   PD has clarified, in case of manmade or natural calamities when both the meters are damaged or not function properly than error factor will be applied as per the accuracy class of the meter.
5. **In section C of MR:**
   PD has revised this section in the updated version of MR.
6. **In section D.1. of MR:**
   PD has revised this section in the updated version of MR.
7. **In section D.2. of MR:**
   PD has revised this section in the updated version of MR.
8. **In section D.2. of MR:**
   PD has revised this section in the updated version of MR.
9. **In section D.2. of MR:**
   PD has revised this section in the updated version of MR.
10. **In section D.2. of MR:**
    PD has clarified the number of employees working in the previous performance review are 41 and in the current monitoring period some of them has left. Hence, the number of employees mentioned is the total number of employees working in the current monitoring period.
11. **In section D.2. of MR:**
    PD has explained that the income of the employees is at par with State regulation.
12. **In section E. of MR:**
    There are no employment generation in the baseline and the same has been mentioned in the updated version of MR.
13. **In section E.1 of MR:**
    PD has clarified that this is GS project activity and as GS standard follows the guidelines of CDM therefore it is in line with the guidelines.

Hence, CL#04 is closed successfully.

2nd Response from PP	**Date**	DD-Month-YYYY

2nd Assessment by Audit Team	**Status**	Open/Closed	**Date**	DD-Month-YYYY

Type	Date	19/01/2024
CAR#01	Reference	Section A of verification protocol /DR/OSV/AT Section B of verification protocol /DR/OSV/AT
Description of the Non-Conformance		

1. **In Key Project information of MR:**
   - Date not consistent with dates of latest annual report
   - Link Not working
   - No product requirement mentioned
   - Monitoring period dates are not consistent
2. **In section A.3. of MR:**
   - Link not working
   - Data Not consistent with registered PDD

1st Response from PP	Date	24/01/2024

1. **In Key Project information of MR:**
   - Date is made consistent with dates of latest annual report in the revised MR.
   - Link has updated and is working in the revised MR.
   - The product requirement is mentioned in the revised MR.
   - Monitoring period dates is made consistent in the revised MR.
2. **In section A.3. of MR:**
   - Link has updated and is working in the revised MR.
   - Data is made consistent with registered PDD

1st Assessment by Audit Team	Status	Open	Date	07/02/2024

1. **In Key Project information of MR:**
   - Date is made consistent by the PD with dates of the latest annual report present at the site and the same has been updated in the revised version of MR. (Closed)
   - The link has been updated and is working in the revised and updated MR. (Closed)
   - The product requirement is mentioned in the MR version 2.0. (Closed)
   - Monitoring period dates is made consistent by the PD but SDG 8 not corrected properly in the MR. (open)
   - Date of project design certificate found inconsistent. (open)
2. **In section A.3. of MR:**
   - The link has been updated and the same is mentioned in the revised MR. (Closed)
   - Data is made consistent with registered PDD by the PD and is now corrected. (Closed)
3. **In section A.1 of MR:**
   - PD shall include a statement that PD cannot claim VERs for the same vintage in another standard other than GS. PD also shall confirm that the emission reductions form the project are not included within and counted under a regulated domestic climate mitigation target or NDC. (open)

4. **In section A.1 of MR:**
   - PD has not provided images of site correctly. (open)

2nd Response from PP	Date	28/02/2024

1. **In key project information of revised MR:**
   - The value of SDG 8 has been revised and corrected as per the ER sheet.
   - The date of project design is consistent with the registered performance review document and the same has been mentioned on the webpage.

3. **In section A.1 of revised MR:**
   - The PD has not claimed VERs for the same vintage in any other standard other than GS. The PD has also confirmed that the emission reductions from the project are not included within and counted under a regulated domestic climate mitigation target or NDC and the supporting for the same has been provided but there is no such point mentioned as per the monitoring template filling guild line version 1.1.

4. **In section A.1 of revised MR:**
   - The images of site have been incorporated.

2nd Assessment by Audit Team	Status	Closed	Date	29/02/2024

1. **In key project information of revised MR:**
   - The value of SDG 8 has been revised by the PD and corrected as per version 3 of ER sheet. **(Close)**
   - The date of project design is consistent with the registered performance review document and the same has been mentioned on the webpage. **(Close)**

2. **In section A.1 of revised MR:**
   - The PD has not claimed VERs for the same vintage in any other standard other than GS. The PD has also confirmed that the emission reductions from the project are not included within and counted under a regulated domestic climate mitigation target or NDC and the supporting for the same has been provided but there is no such point mentioned as per the monitoring template filling guild line version 1.1. **(Close)**

3. **In section A.1 of revised MR:**
   - The images of site have been incorporated. **(Close)**

Hence, CAR#01 is closed successfully.

Type	Date	19/01/2024
CAR#02	Reference	Section C of verification protocol /DR/OSV/AT Section D of verification protocol /DR/OSV/AT Section E of verification protocol /DR/OSV/AT Section F of verification protocol /DR/OSV/AT Section G of verification protocol /DR/OSV/AT
Description of the Non-Conformance		

1. **In section D.2. of MR:**
   - PD shall add a table site-wise mentioning the person employed based upon skill level. (open)
   - PD has not mentioned the nature of employment permanent/ temporary. Also, PD has not distinguished O&M employees based on skills. (open)

1st Response from PP	**Date**	24/01/2024

1. **In section D.2 of revised MR:**
   - The bifurcation of the employees is done on the basis of permanent/temporary, skilled/unskilled and male/female as mentioned in the registered PDD. As the project activity is of capacity 150 MW as a whole so there is no requirement of site wise bifurcation as per template and also site wise bifurcation is not mentioned in registered PDD.
   - The bifurcation and nature of employment all the employees in the current monitoring period on the basis of permanent/ temporary, skilled and unskilled has already been mentioned in the given table.

1st Assessment by Audit Team	**Status**	Open	**Date**	07/02/2024

1. **In section D.2. of MR:**
   - PD shall add a table site-wise mentioning the person employed based upon skill level. (open)
   - PD has not mentioned the nature of employment permanent/ temporary. Also, PD has not distinguished O&M employees based on skills. (open)

2nd Response from PP	**Date**	28/02/2024

1. **In section D.2. of MR:**
   - Added a table site-wise mentioning the person employed based upon skill level.
   - Mentioned the nature of employment permanent/ temporary. Also, PD has not distinguished O&M employees based on skills.

2nd Assessment by Audit Team	**Status**	Closed	**Date**	29/02/2024

1. **In section D.2. of MR:**
   - PD has added a table site-wise mentioning the person employed based upon skill level and it is found correct by the assessment team. **(Close)**
   - PD has mentioned the nature of employment permanent/ temporary. Also, PD has not distinguished O&M employees based on skills. **(Close)**

Hence, CAR#02 is closed successfully.

Type	**Date**	13/03/2024
CAR#03	**Reference**	Section A of verification protocol /DR/OSV/AT Section B of verification protocol /DR/OSV/AT Section C of verification protocol /DR/OSV/AT Section D of verification protocol /DR/OSV/AT

		Section E of verification protocol /DR/OSV/AT Section F of verification protocol /DR/OSV/AT Section G of verification protocol /DR/OSV/AT

Description of the Non-Conformance

1. **In key project information:**
   The link in the footnote is not working.
2. **In section A.2. of MR:**
   As per section B.1. of this monitoring report generated energy is exported to grid through 132kV dedicated lines.
3. **In section A.4. of MR:**
   PD has not specified the number of crediting period.
4. **In section C of MR:**
   This terminology is not as per GS4GG Monitoring report template.
5. **In section C of MR:**
   In case there is delay in calibration as per the calibration dates, how is the procedures for determine the energy generation applied.
6. **In section D.2. of MR:**
   PD has not stated the total number of employees per site, assuming that same employees might have attended different training sessions.
7. **In section D.2. of MR:**
   Relevant SDG Indicator 4.3.5 is not as per section B.7.1 of Registered GS4GG PDD.
8. **In section D.2. of MR:**
   The transformers used in the project activity using oils for cooling purposes generate waste oil which is a HW. How is this handled at site.
9. **In section E.2 of MR:**
   PD has not specified how installation of solar projects fall in category of green field project.
10. **In section E.2. of MR:**
    What is the source of energy to fulfill the needs of the site office and others during non-availability of grid.
11. **In Appendix 2 of MR:**
    PD has not provided the calibration agency name and the certificate number under calibration details of the meter.
12. **In Appendix 2 of MR:**
    PD has not mentioned the last date of calibration.

1st Response from PP	**Date**	22/03/2024

1. **In key project information:**
   The weblink in the footnote has been revised and now in working condition.
2. **In section A.2. of MR:**
   It has been revised and updated as per the actual scenario and made in line with section B.1 of MR.
3. **In section A.4. of MR:**
   It is the 1st CP and it will be renewed twice maximum up to 15 years i.e., 5yrs+5yrs+5yr and the same has been mentioned in the revised MR.
4. **In section C of MR:**
   The terminology has been revised as per GS4GG monitoring report template.

5. **In section C of MR:**
   The meters are calibrated once in 5 years as per CEA database and registered PDD. In case there is delay in calibration as per the calibration dates than error factor will be applied as per the accuracy class of the meter for the delayed calibration days.
6. **In section D.2. of MR:**
   The bifurcation of employees is done for Quantitative employment as per registered PDD as on the basis of permanent/temporary, skilled/unskilled, male/female and bifurcation not stated for quality of employment.
7. **In section D.2. of MR:**
   It has been revised and removed as not there in the registered PDD.
8. **In section D.2. of MR:**
   It has been revised as indicator is not there in the registered PDD.
9. **In section E.2 of MR:**
   It is as per the registered PDD. Kindly refer section B.6.1 of the registered PDD.
10. **In section E.2. of MR:**
    In situations where the grid is unavailable, site offices and other facilities often rely on alternative sources of energy to meet their power needs such as battery storage and invertors and in that case, there is no project emission from fossil fuel.
11. **In Appendix 2 of MR:**
    The calibration agency name and the certificate number are clearly been mentioned in the calibration certificate and supporting has been provided with responses.
12. **In Appendix 2 of MR:**
    As the meters are new so the date mentioned is the first calibration date and before this is not there. Also, as it is covering the complete monitoring period and the frequency of meters is as per CEA guidelines so no need to mentioned the last date of calibration.

1st Assessment by Audit Team	**Status**	Closed	**Date**	28/03/2024

1. **In key project information:**
   The link in the footnote is now working as updated by the PD.
2. **In section A.2. of MR:**
   PD has updated this section in the updated version of MR.
3. **In section A.4. of MR:**
   PD has specified in the revised MR that it is the 1st CP and it will be renewed twice maximum up to 15 years i.e., 5yrs+5yrs+5yr.
4. **In section C of MR:**
   This terminology has been updated by PD as per GS4GG Monitoring report template.
5. **In section C of MR:**
   PD has specified that the meters are calibrated once in 5 years as per CEA database and registered PDD. In case there is delay in calibration as per the calibration dates than error factor will be applied as per the accuracy class of the meter for the delayed calibration days.
6. **In section D.2. of MR:**
   PD has specified that the bifurcation of employees is done for Quantitative employment as per registered PDD as on the basis of permanent/temporary, skilled/unskilled, male/female and bifurcation not stated for quality of employment.
7. **In section D.2. of MR:**
   PD has revised this section in the updated version of MR.
8. **In section D.2. of MR:**
   PD has revised this section in the updated version of MR.
9. **In section E.2 of MR:**
   PD has revised this section in the updated version of MR.
10. **In section E.2. of MR:**

PD has specified that in situations where the grid is unavailable, site offices and other facilities often rely on alternative sources of energy to meet their power needs such as battery storage and invertors and in that case, there is no project emission from fossil fuel.

11. **In Appendix 2 of MR:**
    PD has provided the calibration agency name and the certificate number under calibration details of the meter.
12. **In Appendix 2 of MR:**
    PD has specified that as the meters are new so the date mentioned is the first calibration date and before this is not there. Also, as it is covering the complete monitoring period and the frequency of meters is as per CEA guidelines so no need to mentioned the last date of calibration.

Hence, CAR#03 is closed successfully.

2nd Response from PP			**Date**	DD-Month-YYYY
2nd Assessment by Audit Team	**Status**	Open/Closed	**Date**	DD-Month-YYYY

~~**Type**~~			~~**Date**~~	~~DD-Month-YYYY~~
~~FAR~~			~~**Reference**~~	~~Section of Val/Ver protocol~~
~~**Description of the Non-Conformance**~~				
~~**1st Response from PP**~~			~~**Date**~~	~~DD-Month-YYYY~~
~~**1st Assessment by Audit Team**~~	~~**Status**~~	~~Open/Closed~~	~~**Date**~~	~~DD-Month-YYYY~~
~~**2nd Response from PP**~~			~~**Date**~~	~~DD-Month-YYYY~~
~~**2nd Assessment by Audit Team**~~	~~**Status**~~	~~Open/Closed~~	~~**Date**~~	~~DD-Month-YYYY~~

Declaration

All CARs, CLs, and FARs from the Verification

Total Number of CAR s	03	**Total Number of CLs s**	04	**Total Number of FAR s**	00
Status of CARs	☐ Open ☒ Closed ☐ Turned to a FAR	**Status of CLs**	☐ Open ☒ Closed ☐ Turned to a FAR	**Status of FARs**	☐ Open ☒ Closed ☐ Turned to a FAR

7 COMPETENCE OF VERIFICATION TEAM AND TECHNICAL REVIEWER

Team Leader-

COMPETENCE STATEMENT

Name	Barun Kumar
Nationality	Indian
Countries of Experience	India, South Africa, Kenya, Uganda, DR Congo, Zambia
Education Qualification	B.Sc. (Environmental Science & Water Management) M.Sc. (Ecology & Environmental Sciences)
Year of Experience	12 Years +
Area of Expertise	Climate Change & Environment
Eligible Sectoral Scope	TA 1.2 - Renewables TA 3.1 - Energy Demand TA 6.1 - Construction TA 7.1 - Transport

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	NO
Verifier	NO
Team Leader	YES
Technical Reviewer	YES
Local Expert (Country Wise)	NO
TA Expert (1.2, 3.1, 6.1, 7.1)	YES
Financial Expert	NO

Reviewed by	Vandana Gupta (Quality Manager)	Date	06/12/2022
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	06/12/2022

Validator/ Verifier- Trainee

COMPETENCE STATEMENT

Name	Monika Jha
Nationality	India
Countries of Experience	India
Education Qualification	M.Sc. - Environmental Sciences PG Diploma - Environmental Sciences and Sustainable Development B.Sc. – CBZ
Year of Experience	2 Years
Area of Expertise	Climate Change &Environment Industry
Eligible Sectoral Scope	N/A

Roles

Project Trainee	NO
Validator/Verifier Trainee	YES
Validator	NO
Verifier	NO
Team Leader	NO
Technical Reviewer	NO
Local Expert (Country Wise)	NO
TA Expert (X.X)	NO
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	23/10/2023
Approved by	Barun Kumar (Technical Manager)	Date	23/10/2023

Project Trainee

COMPETENCE STATEMENT

Name	Priyanshee Modi
Nationality	Indian
Countries of Experience	India
Education Qualification	M.Sc. (Biotechnology) B.Sc. (Biotechnology)
Year of Experience	Fresher
Area of Expertise	NA
Eligible Sectoral Scope	NA

Roles

Project Trainee	YES
Validator/Verifier Trainee	NO
Validator	NO
Verifier	NO
Team Leader	NO
Technical Reviewer	NO
Local Expert (Country Wise)	NO
TA Expert (X.X)	NO
Financial Expert	NO

Reviewed by	Vandana Gupta (Quality Manager)	Date	05/06/2023
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	05/06/2023

Technical Reviewer

COMPETENCE STATEMENT

Name	Vivek Kumar Ahirwar
Nationality	Indian
Countries of Experience	India, Madagascar, Thailand, Nepal, South Africa, Vietnam, Mozambique, Kenya, Ethiopia, Spain, Singapore, Zimbabwe, Columbia, Zambia, Libya, Indonesia, Myanmar
Education Qualification	B.E.(Mechanical) M.Tech.(Energy Management)
Year of Experience	15 Years +
Area of Expertise	Climate Change & Environment & Industry
Eligible Sectoral Scope	TA 1.1 Thermal Energy & Biomass TA 1.2 Renewables/Non-renewables TA 2.1 Energy Distribution TA 3.1 Energy Demand TA 13.1 Solid waste and Wastewater

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (Country Wise)	YES
TA Expert (TA 1.1, 1.2, 2.1, 3.1, 13.1)	YES
Financial Expert	YES

Reviewed by	Apoorva Gupta (Quality Manager)	Date	11/10/2023
Approved by	Barun Kumar (Technical Manager)	Date	11/10/2023

History of the Document

Version	Date	Amendment Summary*	Prepared By	Approved By
2.0	28/08/2023	Revisions done in all sections as per the requirement of GS4GG Standard	Vandana Gupta	Dr. Vikas Kumar Aharwal
1.1	22/07/2021	NA	Ayushi Garg	Vikas Aharwal
1.0	17/03/2020	NA	Ayushi Garg	NA

*Amendment Summary adopted in VKU System on 12.10.2022

Appendix 1: Commissioning Details

Project Investors' Name	Commissioning Date	Capacity in MW	District	State
Juniper Green Field Private Limited.	01/06/2022	80 MW_{AC}/ 107.6 MW_{DC}	Yavatmal (Site-1)	Maharashtra
	08/08/2022	70 MW_{AC}/ 99.5 MW_{DC}	Buldhana (Site-2)	Maharashtra

Appendix 2: Technical Specifications

Site -1: Arni (80 MW_{AC})

Solar PV modules:

Site Name	Module Make	Type	Capacity (p)	Number of Module	Total DC Capacity (MWp)
Arni - 80 MW_{AC}	Trina Solar	DEG19C.20	545	60,944	33.4521
	Trina Solar	DEG19C.20	540	62,689	33.9
	JA Solar	JAM72D30	540	37,828	20.4
	JA Solar	JAM72D30	535	37,212	19.9
	JA Solar	JAM72D30	545	308	0.2
	Total			198,981	107.6

Inverters:

S.No.	Parameter	Details
1.	Make	HUAWEI
2.	Model	SUN2000-200KTL-H2/ SUN2000-200KTL-H3
3.	Rated Capacity	185 kW
4.	No. of Inverters	432

Site -2: Malkapur 70 (MW_{AC})

Solar PV modules:

Site Name	Module Make	Type	Capacity (p)	Number of Module	Total DC Capacity (MWp)
Malkapur – 70 MW_{AC}	JA Solar	DEG19C.20	535	86,620	46.3
	JA Solar	DEG19C.20	540	89,208	48.2
	Trina Solar	DEG19C.20	545	4,572	2.5
	Trina Solar	DEG19C.20	540	4,572	2.5
	Total			184,972	99.5

Inverters:

S.No.	Parameter	Details
1.	Make	HUAWEI
2.	Model	SUN2000-200KTL-H2
3.	Rated Capacity	185 kW
4.	No. of Inverters	378

Appendix 3: Calibration Details

For 70 MW solar Malkapur site[5]**:**

S.No.	Meter Number	Type	Make	Accuracy class	Date of calibration	Due date[6]
1	22004105	Main	L&T	0.2s	21/06/2022	20/06/2027
2	22004106	Check	L&T	0.2s	21/06/2022	20/06/2027

For 80 MW Arni site[7]:

S.No.	Meter Number	Type	Make	Accuracy class	Date of calibration	Due date
1	22001180	Main	L&T	0.2s	18/04/2022	17/04/2027
2	22001181	Check	L&T	0.2s	20/04/2022	19/04/2027

Appendix 4: Training Details

Arni, Yavatmal Site			
S.No.	**Date**	**Topic**	**No of attendees**
1	13-Apr-23	National Fire Safety Awareness training	20
2	28-Apr-23	Electric shock & CPR mock drill awareness training	13
3	12-May-23	Electrical safety awareness training	11
4	14-Jul-23	National Electrical Safety Awareness training	18
5	26-Jul-23	Snake Bite Awareness training	17
6	28-Aug-23	ERT LOTO Training	11

[5] Commissioning date is 08/08/2022 so meter has been calibrated before the Commissioning.
[6] As per PDD Calibration frequency is once in 5 years as per CEA guidelines
[7] Commissioning date is 01/06/2022 so meter has been calibrated before the Commissioning.

7	12-Apr-23	Fire safety training	8
8	21-Apr-23	Fire safety training	7
9	28-Apr-23	Fire safety training	11
10	06-May-23	PPE Awareness safety training	7
11	10-May-23	General Safety	4
12	23-May-23	Electrical safety training	5
13	23-May-23	Electrical safety training	8
14	14-May-23	General Safety	9
15	08-Jul-23	Electrical safety training	4
16	13-Jul-23	Electrical safety training	6
17	25-Jul-23	snake-bite awareness training	12
18	07-Aug-23	Electrical safety training	4

Malkapur site			
S.No.	**Date**	**Topic**	**No of attendees**
1	07-Apr-23	World Health Day	5
2	08-Apr-23	LOTOTO Awareness	5
3	16-Apr-23	Fire Safety Training	17
4	26-May-23	111 A H&S Training	11
5	30-May-23	Emergency Response & Preparedness	5
6	06-Jun-23	EPR Training	3
7	27-Jun-23	Electrical Safety	13
8	25-Jul-23	Snake Bite Awareness Training	8
9	26-Aug-23	EHS Training (Ele Safety, LOTOTO, CEA)	13
10	28-Apr-23	Electrical Safety	4
11	24-Jun-23	Manson alert training	6
12	22-Jul-23	Snake and insect bite awareness	5