

GS4GG Verification (Performance) Certification Report



Certification Pvt. Ltd.

VKU Certification Pvt. Ltd.

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Project Title
**50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar
Energy at Telangana**

Registry Project ID: 7139
Monitoring Period: **01/01/2021 to 15/11/2023 (both dates included)**

For
Parampujya Solar Energy Private Limited

VKU Project Reference No.
VKU.VER.47.25_GS_7139

Executive Summary:

A) Basic information		
Project Title	50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana	
GS4GG Project ID:	7139	
Date of Project Design Certification	16/11/2020	
Last Date of Annual Report	30/12/2024	
VKU Project Reference No.	VKU.VER.47.25 GS 7139	
Sectoral scope	Scope: 01 Energy Industries (renewable- and non-renewable sources)	
Methodology/ies applied	ACM0002: Grid-connected electricity generation from renewable sources version 20.0 ¹	
Technical Area (TA)	T.A 1.2; Solar	
Host country	India	
Location	Village: Kakkireni, District: Nalgonda, State: Telangana	
Project Representative	Parampujya Solar Energy Private Limited	
Project Developer/Investor	Parampujya Solar Energy Private Limited	
GS4GG Activity Requirements	☒ Renewable Energy Activities	
GS4GG Certified Product	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A	
Selected Sustainable Development Goals and GS4GG SDG Impact Statement	SDG 7 Affordable and Clean Energy	322,764 MWh of renewable energy generated
	SDG 8 Decent Work and Economic Growth	Training – 138 Numbers Employment- 22 Numbers Income- 16,474,632 INR
	SDG 13 Climate Action (Mandatory)	304,011 tCO ₂ e (GS VERs)
Scale of Project Activity	Large scale	
B) Verification		
Start date of crediting period	16/11/2018	
End date of crediting period	15/11/2023	
Type and Length of Crediting period	7 years; twice renewable with maximum length of crediting period of 15 years ² (7+5+3)	

¹ <https://cdm.unfccc.int/methodologies/DB/XP2LKUSA61DKUQC0PIWPGWDN8ED5PG>

² PD has applied under CDM Mechanism as well. Hence, para 6.1.10 of GHG Emissions Reduction & Sequestration Product requirements states that "CDM Project Crediting Cycle: the project cycle shall mirror the CDM Cycle in terms of any Certification Renewals (e.g. 7 years)"

As per clause 10.2.1 of GHG Emissions Reduction & Sequestration Product Requirements v.2.1 "The start date of Crediting Period is the date of start of operation (start of planting for A/R Projects) or a maximum of two years (three years for A/R & AGR) prior to the date of Project Design Certification, whichever occurs later." Therefore, the start date of crediting period is considered as 16/11/2018 which is 2 years prior to the GS Design Certification date



Monitoring Period	From 01/01/2021 to 15/11/2023 (both dates included)							
C) Monitoring report	Version	Date						
Initial	01	24/03/2025						
Final	05	19/11/2025						
D) Performance Certification report	Version	Date						
Initial	01	29/08/2025						
Final	02	21/11/2025						
E) Verification Team								
Team Leader ³	Shivani Chauhan							
Technical Expert (TA 1.2)	Shivani Chauhan							
Project Trainee	Pallavi Ahuja							
Local Expert (India)	Shivani Chauhan							
F) Approvals								
Technical Reviewer ⁴	Akhilesh Joshi							
Technical Expert (TA 1.2)	Akhilesh Joshi							
G) Final opinion								
VKU Certification has performed the 2nd verification of the GS4GG project “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana” and GS4GG Ref. Number 7139. The verification includes confirmation about the implementation of the monitoring plan of the GS PDD and the application of the monitoring methodology as per ACM0002 “Grid-connected electricity generation from renewable sources – Version 20.0). VKU Certification confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements. The emission reductions from the GS4GG project activity ID 7139 “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana” located in Village: Kakkireni, District: Nalgonda, State: Telangana, in India during the current monitoring period from 01/01/2021 to 15/11/2023 (including both days) amount to 304,011tCO₂e. <table border="1"> <tr> <td>VVB Opinion</td><td>Conclusion</td></tr> <tr> <td>Positive</td><td>☒ (Mark Tick if applicable)</td></tr> <tr> <td>Negative</td><td>☐ (Mark Tick if applicable)</td></tr> </table> Therefore, VKU certification recommends request of Issuance to GS4GG.			VVB Opinion	Conclusion	Positive	☒ (Mark Tick if applicable)	Negative	☐ (Mark Tick if applicable)
VVB Opinion	Conclusion							
Positive	☒ (Mark Tick if applicable)							
Negative	☐ (Mark Tick if applicable)							
H) Authorization								
Director	Dr. Vikas Kumar Aharwal							
Date	25/11/2025							
I) Distribution								
No public distribution without written confirmation from client.								
J) Verification Status								
Findings closed	Yes							
Draft report	Yes							
Final report	Yes							

³ Team Leader is an approved GS Auditor for VKU.

⁴ Technical Reviewer is an approved GS Auditor for VKU.

Abbreviations

AC	Alternating Current
ACM	Approved Consolidated Methodology
AGEL	Adani Green Energy Limited
AT	Assessment Team
CAR	Corrective Action Request
CDM	Clean development mechanism
CEA	Central Electricity Authority
CERs	Certified Emission Reductions
CL	Clarification Request
DC	Direct Current
DCR	Domestic Content Requirement
DGR	Daily Generation Record
DISCOM	Distribution Company (in India)
EB	Executive Board
EPC	Engineering, Procurement and Construction
ERs	Emission Reductions
FAR	Forward Action Request
FVR	Final Verification Report
GHG	Greenhouse Gas(es)
GS4GG	Gold Standard for Global Goals
INR	Indian Rupee
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organisation for Standardisation
JMR	Joint Meter Reading
JNNSM	Jawaharlal Nehru National Solar Mission
kWh	Kilo-Watt Hour
MP	Monitoring Period
MR	Monitoring Report
MW	Mega Watt
MWh	Mega- Watt Hour
NDC	Nationally Determined Contribution
NTPC	National Thermal Power Corporation
NVVN	NTPC Vidyut Vyapar Nigam Limited
O&M	Operation and Maintenance
PD	Project Developer
PDD	Project Design Document
PLF	Plant Load Factor
PPA	Power Purchase Agreement



PSEPL	Parampujya Solar Energy Private Limited
PV	Photo-voltaic
QA/QC	Quality Assurance/ Quality Check
SDG	Sustainable Development Goal
TR	Technical Review
TSSPDCL	Telangana State Southern Power Distribution Company Limited
UNFCCC	United Nations Framework Convention on Climate Change
VERs	Verified Emission Reductions
VVB	Validation and Verification Body
VVS	Validation and Verification Standard



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1. INTRODUCTION

1.1 Project Summary

The project activity is designed to generate electrical energy through sustainable means by utilizing solar photovoltaic (PV) technology, thereby contributing to national and global efforts in climate change mitigation. This initiative represents a large-scale solar PV project.

The project entails the installation of five Solar PV plants, each with an individual capacity of 10 MW_{AC}, culminating in a total installed capacity of 50 MW_{AC}. The development is undertaken under the auspices of the Jawaharlal Nehru National Solar Mission (JNNSM) Phase-II, Batch-II, Tranche-I, State Specific Bundling Scheme (Domestic Content Requirement Category). All facilities are situated within a common project boundary located at Village Kakkireni, District Nalgonda, State Telangana.

The electricity generated from the project is contracted under a Power Purchase Agreement (PPA) with NTPC Ltd., the Government of India's designated Implementation Agency for grid-connected solar PV projects under the National Solar Mission. NTPC Vidyut Vyapar Nigam Limited (NVVN), acting on behalf of NTPC, facilitates the procurement of solar power from the project and its subsequent sale to distribution companies (Discoms). 5 PPAs, each for procurement of 10 MW Solar power on long term basis, have been signed between PD and NTPC Ltd. Dated 04-August-2016/E2/. Power evacuation is achieved via a 132 kV substation at Narketpally, ensuring seamless integration into the Indian electricity grid.

The land utilized for the project was previously under private ownership and has been legally acquired by the project developer, with corresponding sale deeds duly documented. The project investor and developer is Parampujya Solar Energy Private Limited.

By displacing approximately 322,764 MWh of electricity that would otherwise have been produced predominantly by fossil fuel-based power plants, the project has mitigated 304,011 tonnes of CO₂ equivalent (tCO_{2e}) emissions in the current monitoring period.

The geo-coordinates and the map of project location are-

Plant site coordinates:

Latitude: 17° 16'18.96"N

Longitude: 79°12'16.98"E

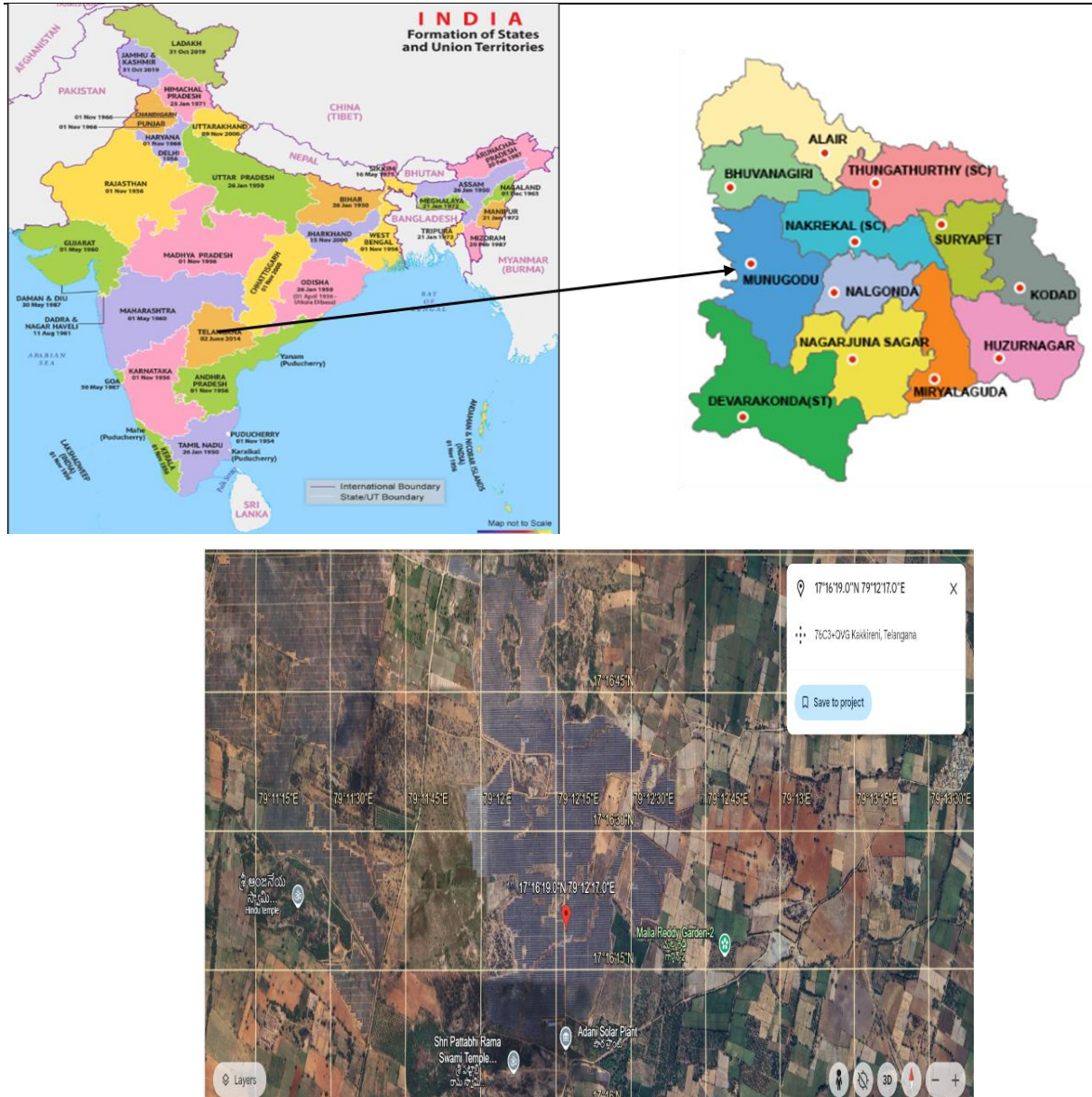


Figure 01: 50 MW (DCR) Nalgonda Solar PV Power Project Village Kakkireni, District Nalgonda, State Telangana

This project has already been registered as a CDM project (UNFCCC reference number 10593) and PD has provided a declaration that they will not move back to CDM and the project activity has not, and will not issue both a CER/other compliance unit under Paris Agreement and GS-VER for the same vintage/E11/.

As per the current status, the project activity was commissioned on 17/11/2017 as verified from registered PDD /C1/ and cross verified via commissioning certificates /E1/.

The project activity has remained operational throughout the current monitoring period, as verified through onsite interviews with the Project Developer (PD)/F2/, a site inspection of the connection line, and cross-verification of submitted JMRs/E8/ and invoices/E9/.

No irregularities were observed during the monitoring period. The plant has undergone both scheduled and emergency maintenance activities in accordance with manufacturer recommendations. During the current monitoring period, the project experienced instances of equipment breakdowns affecting plant operations. The nature, duration, and corresponding impact of these breakdowns are presented in the Appendix-1 of this report for reference. These breakdown events have been considered during the assessment of electricity generation and emission reduction calculations.

The verification team reviewed the commissioning certificate/E1/ and the Power Purchase Agreements (PPA)/E2/ to verify that the project capacity aligns with the capacity stated in the registered Gold Standard Project Design Document (GS PDD)/C1/. The verification team confirmed during onsite interviews that the project capacity has remained unchanged since registration. This has been further substantiated through the commissioning certificate/E1/, PPAs/E2/, and supporting documents such as JMRs/E8/ and invoices/E9/.

The project's installed capacity is 50 MW_{AC}, which exceeds the 15 MW threshold, thereby qualifying it as a large-scale project activity. The project location has been verified through interviews/F2/, Google Earth Pro imagery/F1/, and has been found to be consistent with the registered PDD/C1/ and the validation report/C3/. Accordingly, the location stated in the Monitoring Report (MR)/D1/ align with the registered documentation.

The project is connected to the Unified Indian Grid in accordance with the national grid structure. This connection has been verified through the review of the commissioning certificate/E1/, the PPAs/E2/, and site inspections, as well as through interviews with the PD/F2/.

1.2 Objective

Parampujya Solar Energy Private Limited (Project Developer) has contracted VKU Certification Private Limited (VKU Certification) to conduct the verification and certification of emission reductions reported for the GS4GG project activity 7139 “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana” in India for the period 01/01/2021 – 15/11/2023 (both dates included). This report contains the findings of the verification process and a certification statement for the verified emission reductions.

The verification is the periodic independent review and ex post determination by VKU Certification of the monitored reductions in GHG emissions that have occurred as a result of the registered GS4GG project activity during a defined monitoring period. Certification is the written assurance by VKU Certification that, during a specific period in time, a project activity achieved the emission reductions as verified.

The objective of this verification is to verify and certify emission reductions reported for project activity “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana” for the current monitoring period from 01/01/2021 to 15/11/2023 (both dates included) as per GS4GG validation and verification standard v2.0 para 1.1, 9.1 and sub para 9.1.1/A4/.

VKU certification conducted verification for the second monitoring period from 01/01/2021 to 15/11/2023 (both dates included) for a period of 02 years, 10 months and 15 days under first crediting period. The project activity follows a crediting period of 7 years, which can be renewed twice, with the

maximum total crediting period length of 15 years⁵, as outlined in section C.2. of GS4GG PDD dated Version 06 dated 06/01/2021 /C1/.

The objectives of this verification exercise are, by review of objective evidence, to establish that.

- The project activity has been implemented and operating as per the registered GS4GG PDD/C1/ and that all physical features (technology, project equipment, and monitoring) of the project are in place;
- Monitoring report/D1/ and other supporting documents are complete;
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan.
- To confirm that the monitoring system is implemented and fully functional, to generate Verified Emission Reductions (GS-VERs) without any double counting and confirm through Self Declaration /E11/.

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 the independent objective review and ex-post determination of the monitored reductions in GHG emissions from the “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana”. The verification of this project has been based on the validated & registered GS4GG PDD version 06, dated: 06/01/2021/C1/. and monitoring report/D1/ along with supporting documents submitted by the project representative to the AT. The documents thus submitted to the AT were reviewed against the following guidance and protocol:

1. GS4GG Validation and Verification Standard v2.0 para 1.2/A4/
2. GS4GG Principles and Requirements v2.1/A1/
3. GS4GG Stakeholder consultation and engagement requirements v2.1/A2/
4. GS4GG Renewable energy activity requirements, v1.4/A8/
5. GS4GG Monitoring Report Template Guide v1.1/A11/
6. CDM Methodology: ACM0002 “Grid-connected electricity generation from renewable sources – Version 20.0) /B1/
7. Methodological Tool 07: Tool to calculate the emission factor for an electricity system - Version 07.0/B2/

The steps involved are as follows:

⁵ PD has applied under CDM Mechanism as well. Hence, para 6.1.10 of GHG Emissions Reduction & Sequestration Product requirements states that "CDM Project Crediting Cycle: the project cycle shall mirror the CDM Cycle in terms of any Certification Renewals (e.g. 7 years)"

- To assess the project's compliance with other relevant rules including the host country (India) legislation.
- 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.
- 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 sheet /D2/.
- To confirm that the monitoring system is implemented and fully functional to generate GS-verified carbon units (GS-VERs) without any double counting/E11/
- The verification considers both quantitative and qualitative information on emission reductions.
- The verification also includes cross checking & confirmation of the monitored sustainable parameters.
- To verify that actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan

The verification method and criteria encompassed several phases, including

1. Desk Review of GS4GG project design document version 06 dated: 06/01/2021, and supporting documents listed in Section 4 of this report, which is provided by the Project Representative to verification team.
2. Onsite Interview
3. Reporting, calculation checks, QA/QC and resolution of findings
4. Drafting of verification report
5. VKU's technical review of project before completeness /Quality Check, and
6. The final issuance of the verification report

Outstanding issues were resolved and during the process of resolving issues 04 CARs and 04 CLs were raised and were closed successfully. Details are mentioned in Section 6 of this report leading to the issuance of the final verification report. It is important to note that the verification process does not involve providing consultancy to the project developer/project representative. 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 v2.0 /A4/ and GS4GG Principles and Requirements v2.1 /A1/.

VKU Certification applies the general requirements, consideration of materiality in planning verification and for conducting verification is as per the GS4GG validation and verification standard v2.0, para 9.6/A4/.

For the identification of materiality threshold VVB referred para 9.6.3 of GS validation verification standard v2.0 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.

Application of Materiality Threshold as per the GS4GG VVS v2.0 para 9.6.3 (c)	Materiality threshold value (tCO ₂ e)	Reported ERs (tCO ₂ e)		Justification (If any deviation)
		In Initial MR	In Final MR	
2.0 %	5,585.48 tCO ₂ e	279,274 tCO ₂ e	304,011 tCO ₂ e	The change in ERs value from the initial MR is 24,737 which is 8.13% higher than the initial MR but this change is due to editorial error in ER sheet, hence this change is acceptable.

1.5 Information of VVB

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
Name, position of the approver of the verification report	Akhilesh Joshi Technical Reviewer cum Technical Expert (TA 1.2)
Signature	
Name, position of the authorized signatory for issuance of the verification report	Dr. Vikas Kumar Aharwal Director, VKU Certification Pvt. Ltd.
Signature (Final version only)	

1.6 Sustainable Development Contributions

Table 03: Sustainable Development Contributions for verification

Sustainable Development Goals Targeted	SDG Impacts	Amount Achieved	Units
7 Affordable and Clean Energy	MWh of renewable energy generated	322,764	MWh
8 Decent Work and Economic Growth	Training/Employment/ Income (INR)	Training- 138 Employees- 22 Income- 16,474,632	Number Number INR
13 Climate Action (Mandatory)	Emission Reduction	304,011	tCO ₂ e (GS VERs)

2. METHODOLOGY

Verification team of VKU 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 an **on-site visit**. The personnel employed and their roles in this assessment are mentioned below;

Table 04- Verification Team member(s)

S.No.	Full Name	Gender <i>Mention (M) for male & (F) for Female</i>	Role(s)	Type of Resource	Type of Activity(ies) carried out
1	Shivani Chauhan	F	Team Leader and Technical Expert (TA 1.2)	Internal Resource	DR/OSV/I/VF/FVR ⁶
2	Pallavi Ahuja	F	Project Trainee	Internal Resource	DR

Table 05- Technical Reviewer(s) and approver(s) of the verification report

S.No.	Full Name	Gender <i>Mention (M) for male & (F) for Female</i>	Role(s)	Type of Resource	Type of Activity(ies) carried out
1	Akhilesh Joshi	M	Technical Reviewer cum Technical Expert (TA 1.2)	External Resource	Technical Review

⁶ DR- Desk Review
OSV- Onsite Visit
I-Interview
VF- Verification Findings
FVR- Final Verification Report

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

Verification milestones:

Monitoring report submission:	24/03/2025
On-site assessment and Interview:	03/04/2025
Draft Verification Report	29/08/2025
Final Verification Report	21/11/2025

VKU Certification followed a risk-based verification approach, wherein, the contract review is undertaken as per valid/effective version of GS4GG accreditation Standard. 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;

- A review of the data and information presented to verify their 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 06 dated 06/01/2021/C1/ and the monitoring plan, including any approved revised monitoring plan and/or changes from the registered PDD, and the corresponding validation opinion;
- The GS4GG Validation Report Version 02 dated 17/12/2020 /C3/;
- Previous verification report/C5/;
- The applied monitoring methodology (ACM0002 Version 20.0/B1/) and, where applicable, the applied standardized baseline;
- The monitoring report (all versions/D1/) to verify that it is as per the standardized format;
- Any other information and references relevant to the project activity's emission reductions

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

2.2 Site Visits (Onsite inspection)

A site visit was undertaken by Team Leader on 03/04/2025 as per the “GS4GG site visit and remote audit requirements and procedures” v2.0 dated 30/05/2023 and “GS4GG applicability of minimum site visit requirement by VVB” dated 16/08/2021 v2.0 and mentioned to carry out following;

- An assessment of the implementation and operation of the registered project activity as per the registered PDD or any approved revised PDD;
- 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;
- A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources;
- 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.

The verification team also confirm that there is no deviation(s) to address a non- compliance with the minimum site visit requirement as per the GS4GG requirements.

Interview

A site inspection /F2/ has been performed by the verification team using for verification of this project activity “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana” following audit techniques mentioned the GS4GG Site visit and remote audit requirements and procedures/A5/ and Applicability of minimum site visit requirement by VVB /A6/.

Representatives of the PD and O&M team were interviewed/F2/ by the verification team on 03/04/2025 at Village: Kakkireni, District: Nalgonda, State: Telangana, India. Personnel responsible for monitoring project activity, data collection, management, and QA/QC procedures were also interviewed. 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.

Duration of Onsite Inspection: One day- 03/04/2025				
Name	Gender <i>Mention (M) for male & (F) for Female</i>	Role	Location of Site	Activity Performed On-Site

Shivani Chauhan	F	Team Leader and Technical Expert (TA 1.2)	Village: Kakkireni, District: Nalgonda, State: Telangana, India	• An assessment of the implementation and operation of the GS4GG project activity as per the PDD • A review of information flows for generating, aggregating and reporting of the monitoring parameters. • Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the Monitoring Plan • A cross-check between information provided in the MR and data from other sources • A check of the monitoring equipment including calibration performance, and observations of monitoring practices against the requirements of the PDD and the applied methodology • A review of calculations and assumptions made in determining the GHG data and ERs. • An identification of QA/QC procedures in place to prevent, or identify and correct, any errors or omissions in the reported monitoring parameters
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The topics covered during interview ranges from 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, and data archiving procedures. The assessment has been based on the feedback received during onsite audit interview coupled with the documentation in **VKU.F64W.Field Assessment Checklist** for onsite audit /F6/. The tables serve to identify the individuals interviewed and provide relevant information regarding their roles within the project.

During Onsite Audit, local stakeholders involved in the project i.e., people living in the village or nearby areas where the project is implemented have also been interviewed to verify implementation of grievance mechanism and process of its resolution, as mentioned in the Monitoring report/D1/. It also included confirmation of sustainable development claims and verification of the socio-economic impact made by the project in nearby villages and on the local people. VKU assessment team also cross-

checked records and observed that the PD has provided opportunities for the locals to express their opinions and grievances in the grievance register placed at the plant office. Project developer has put efforts to resolve issues through effective communication & consultation with stakeholders. VKU assessment team could verify & confirm all the above statements via focussed group discussions and personnel interview /F2/ with stakeholders. VVB has included the gender information of stakeholders included as per the requirements of 9.7.2 (e) of GS4GG as tabulated below:

Personnel Interview

S.NO	INTERVIEWEE			DATE	SUBJECT	TEAM MEMBER INVOLVED
	Name	Gender <i>Mention (M) for male & (F) for Female</i>	Affiliation			
1	Narendra Kumar	M	Manager, AGEL	03/04/2025	• Operation and maintenance Procedures, Calibration, JMR. • Local employment, trainings, suitable shift timings • Monitoring of SDG parameters • Data archiving, breakdown details • O&M of the plant site and personnel responsible for monitoring of required monitored parameters and implementation of QA/QC Procedure.	Shivani Chauhan
2	Rajeshwar	M	DM, AGEL			
3	V. Bhaskar Rama Murthy	M	AM, AGEL			
4	Valluri N.	M	AM, AGEL			
5	K. Prasad Reddy	M	Assistant Engineer, AGEL			
6	G. Bhargav Prasad	M	AE/BD, AGEL			

During the onsite audit, the assessment team conducted interviews with local stakeholders to verify the project's grievance redress process and to confirm the Sustainable Development Goal (SDGs) claim, as outlined in the Monitoring Report submitted by the Project Developer. These interviews also assessed the socio-economic impact of the project on the local people. Prior to each interview, the **assessment team sought explicit personal consent** in writing from each participants, as the interviews were recorded for VKU's internal documentation. All recordings and personal data were handled in line with the confidentiality agreement established between VKU and the PD, ensuring a high level of data privacy and ethical compliance.

Local Stakeholder's Interview

S.NO	INTERVIEWEE		DATE	SUBJECT	TEAM MEMBER INVOLVED
	Name	Gender <i>Mention (M) for male & (F) for Female</i>			
1.	V. Venkanna	M	03/04/2025	- Awareness and participation in stakeholder consultation meeting - Employment opportunities generated by the project for family members. - Impact of the project on the standard of living of local residents. - Implementation of Corporate Social Responsibility (CSR) initiatives in the village under the project. - Challenges or issues encountered during or after the installation of the project. - Awareness and utilization of the grievance redressal mechanism related to the project.	Shivani Chauhan
2.	G. Saikumar	M			
3.	B. Venkatasahan	M			
4.	K. Saiprakash	M			
5.	A. Swami Shapally	M			

Stakeholder Consultation and Interview Summary-

As part of the verification process, VKU's Verification team documented the names of all personnel present during the opening and closing meetings, as well as those interviewed, in the designated form VKU.F46W – Attendance Sheet of Onsite Audit /F4/. Also, the name of the stakeholders interviewed were recorded in the same. Stakeholder consultation interviews were conducted, with site personnel assisting in coordinating the presence of local stakeholders, while the Assessment Team ensured that the consultation process remained fully impartial. During the interaction with local stakeholder's details about the positive and negative impact of plant activities on their lives and the nearby village have been collected along with any kind of CSR activities that has been conducted by PD in the villages & no negative comments have been received during the interviews with these local stakeholders during the onsite visit.

The Verification team confirms that there is no perceived or potential conflict of interest and provides the complete list of the people interviewed during the onsite audit including information on the organization they represent is disclosed in public documents by their consent.

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 onsite 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 participants, or if the evidence provided to prove conformity is insufficient;
- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

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 before submitting a request for issuance.

In summary, 04 CLs, 04 CARs and 00 FAR were raised which is closed successfully in current monitoring period.

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 participants 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 **“50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana”** for the current monitoring period from 01/01/2021 – 15/11/2023 (both dates included).

The project is registered under the Gold Standard (GS) with ID 7139, as confirmed by the verification team through a review of the GS registry. Initially, the project was registered under the Clean Development Mechanism (CDM), and the relevant CDM registry details⁷ have been reviewed by the verification team. PD has not applied for Certified Emission Reductions (CERs) for any vintage within the crediting period and has explicitly stated no intention to do so in the future. This has been formally declared in a self-declaration/E11/, confirming that the project will not revert to CDM for issuance and will not seek issuance of both CERs or any other compliance units under the Paris Agreement and GS VERs for the same vintage.

To ensure the exclusivity of GS VER issuance, the verification team conducted a comprehensive cross-check across multiple carbon credit registries, including the Verified Carbon Standard (VCS), Global Carbon Council (GCC), and Universal Carbon Registry (UCR). This cross-verification involved matching details such as project title, scope, capacity, and Project Developer identity. No evidence was found of the project being registered with or listed under any other registry or comparable carbon crediting mechanism, aside from its initial CDM registration.

Additionally, the PD has submitted a signed declaration/E11/, dated 19/06/2025, confirming that the greenhouse gas (GHG) emission reductions achieved during the current monitoring period have not been claimed or submitted under any registry other than the Gold Standard. The verification team has reviewed this declaration and confirms that the project is independently developed, is not subject to any national climate change policies, and that the Verified Emission Reductions (VERs) claimed are not included in any regulated mitigation targets or India's Nationally Determined Contributions (NDCs). This supports the assurance of no double counting of emission reductions

The verification team has cross-verified this through national policy documents and the Climate Action Tracker website (<https://climateactiontracker.org/countries/india/>), confirming that solar power projects are not part of India's NDC commitments. The authenticity of the PD's self-declaration is reviewed and found appropriate. Additionally, the AT confirms that the claimed VERs are not included in or counted toward any regulated domestic mitigation target or NDC.

Cross-Verification of GHG Benefits:

An independent search was carried out to confirm that the project has not been registered under, nor claimed benefits from, other greenhouse gas (GHG)-related mechanisms such as Renewable Energy

⁷ <https://cdm.unfccc.int/Projects/DB/Applus1597924591.34/view>

Certificates (RECs) or International Renewable Energy Certificates (I-RECs). This verification, supported by a declaration from the PD, affirms that there is no risk of double counting of GHG-related benefits associated with the project activity.

The project's non-rejection status across other GHG programs has also been verified through a thorough review process. The PD's declaration regarding the absence of any rejections by other GHG-related entities was reviewed and found to be accurate. Additionally, independent checks across relevant registries confirm that the project has not been rejected or delisted by any other crediting mechanism.

In conclusion, the verification team confirms the project's valid registration under the Gold Standard (GS) for the current monitoring period and its clean status across other GHG-related programs. These findings support the credibility and exclusivity of the project's GHG benefit claims.

The registries reviewed as part of this verification process include:

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/>

This section summarises the findings from the verification of the emission reductions reported for this project activity for the current monitoring period i.e. 01/01/2021 to 15/11/2023 (both dates included).

3.1 Description of project

3.1.1 General description of project

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021/C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/ 3. Commissioning certificate/E1/ 4. PPAs/E2/
Findings	A CL has been raised under Finding No. 01 and a CAR has been raised under Finding No. 04; and resolved successfully. For more details refer <u>section 6</u> of this report.

Conclusions

The project activity was commissioned on 17/11/2017. It was subsequently registered under the CDM mechanism on 27/08/2020, and received Design Certification under the Gold Standard on 16/11/2020. This is the second verification under GS and verification is done in accordance with the registered PDD. The project comprises of 5 solar power plants of 10 MW_{AC} each (total 50 MW_{AC}) under JNNSM Phase-II, Batch-II, Tranche-I, State Specific Bundling Scheme. Located in Village: Kakkireni, District: Nalgonda, State: Telangana, the power is sold to NTPC Ltd. under a PPA. NTPC, through NVVN, supplies it to Discoms via a 132 kV sub-station located at Narketpally, feeding into the Indian grid

Technical details of the project activity are as follows:

Solar PV modules:

Module Supplier	Module Model	Capacity (p)	Number	Total Capacity (MWp)
Adani	Poly C-Si	315	61905	19.50
Adani	Poly C-Si	320	83871	26.84
Adani	Poly C-Si	325	57419	18.66
Total Capacity in MWp				64.99

Invertors:

S.No.	Make	
1.	Manufacturer	Huawei
2	Model	SUN2000-43KTL
3	Rated Capacity	43 KW, 52.5 KVA
4	No. of Inverters	1163
5	Rated Input Voltage (Max.Input Voltage)	500 V

Transformer:

S. No	Make		
1	Manufacturer	CGL	T&R
2	Capacity	50/60 MVA	5MVA
3	No. of Transformers	10	10
4	Voltage Ratio	33/132 KV	500/33 KV

Metering Equipment Details

S.No.	Make	Sub-Station	Solar Plant End
1	Manufacturer	Secure Make	Secure Make
2	Type	ABT meters	ABT meters
3	Accuracy Level	0.2s	0.2s

4	Total no of meter	3	5*2 = 10
The technical specifications outlined above have been confirmed through an onsite visit through the technical specification documents, PPA provided by PD & the interviews during the site visit /F2/. This information has been verified as accurate and cross-checked with the registered PDD/C1/. General description of the project has been verified with the help of supporting documents and same has been cross checked during onsite audit of the project activity through interviewing the site personnels and GS4GG project webpage. Since all data has been verified thoroughly, the verification team can ascertain that the description of the project mentioned is in line with GS4GG Principle and Requirements v2.1 /A1/ and GS4GG Validation and Verification Standard Version 2.0/A4/.			

3.1.2 Location of Project

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021 /C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/ 3. <u>Google Earth Pro for the geocoordinates/F1/</u> 4. Photographs through GPS Map camera/F5/								
Findings	CAR has been raised under Finding No. 04; and resolved successfully. For more details refer <u>section 6</u> of this report.								
Conclusions	Verification is done in accordance with the registered monitoring plan. Locations have been verified using Google Earth during the desk review and via the GPS Map Camera app during the onsite audit. Details of the project location are as follows: - <table><tr><th>Investor's Name</th><th>Capacity</th><th>Latitude</th><th>Longitude</th></tr><tr><td>Parampujya Solar Energy Pvt. Ltd.</td><td>50</td><td>17°16'18.96"N</td><td>79°12'16.98"E</td></tr></table> Since location of the project activity has been verified during the onsite audit using Google Earth Pro and onsite photographs taken from GPS Map Camera, the verification team confirms that the project location is accurate as mentioned in the Monitoring Report/D1/ and found it to be consistent with the PDD /C1/.	Investor's Name	Capacity	Latitude	Longitude	Parampujya Solar Energy Pvt. Ltd.	50	17°16'18.96"N	79°12'16.98"E
Investor's Name	Capacity	Latitude	Longitude						
Parampujya Solar Energy Pvt. Ltd.	50	17°16'18.96"N	79°12'16.98"E						

3.1.3 Reference of applied methodology

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and Ex-post ER calculation sheet of the current monitoring period/D2/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021/C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/ 3. Approved Large Scale Consolidated CDM Methodology: ACM0002 “Grid- connected electricity generation from renewable sources” (Version 20, EB 105) /B1/ 4. CDM Methodological Tool: Tool to calculate the emission factor for an electricity system - Version 07.0/B2/
Findings	No finding has been raised for reference of applied methodology.
Conclusions	The assessment has been carried out in accordance with the registered PDD and the applied methodology ACM0002 Version 20.0, appropriate for a large-scale solar project. Furthermore, the use of the referenced Tool to Calculate the Emission Factor for an Electricity System, as stipulated in the methodology, has been correctly applied. Based on a comprehensive review of the data presented in the MR against the registered PDD, the verification team concludes that the application and description of the methodology are fully consistent with GS4GG requirements.

3.1.4 Crediting period of Project

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021/C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/ 3. CDM PDD v03, dated 05/08/2020/C2/
Findings	A CL has been raised under Finding No. 01 and a CAR has been raised under Finding No. 04; and resolved successfully. For more details refer <u>section 6</u> of this report.
Conclusions	The project has initially been registered under <u>CDM with project ID 10593</u> on 27/08/2020. Later the project got registered under GS with ID 7139 on 16/11/2020. The start date of crediting period is 16/11/2018 under GS registry. And the length of crediting period is 7 years, renewable twice with maximum total crediting period of 15 years (i.e., 7+5+3). This is found to be in accordance with para 6.1.10 of GHG Emissions Reduction & Sequestration Product requirements⁸ stating "CDM Project Crediting Cycle: the project cycle shall mirror the CDM Cycle in terms of any Certification Renewals (e.g. 7 years)."

⁸ <https://globalgoals.goldstandard.org/501-pr-ghg-emissions-reductions-sequestration/>

	Based on this, it can be concluded that the crediting period start date and its length are correct and in line with GS4GG Validation and Verification Standard Version 2.0/A4/ and GS4GG Principles and Requirements 2.1/A1/.
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3.2 Remaining Issues (FAR(s) from validation or previous verification)

This is 2nd verification of the project activity. There are no FAR(s) from validation or previous verification that need to be closed during this verification, as checked from the GS4GG validation report/C3/ and verification report of the 1st monitoring period/D1/

3.3 Post registration changes

Type of change(s)	Not applicable
Description of change(s)	Not applicable
Assessment of change(s)	Not applicable
Opinion on change(s)	The verification team has reviewed section B.2 of MR/D1/ and conducted the onsite audit; and confirms that there is no post-registration changes identified during the current monitoring period.

Type of change(s)	Corrections																									
Description of change(s)	In the registered PDD, the number of modules was mentioned incorrectly. A correction has been requested during the current monitoring period. The actual number of solar modules is detailed below:																									
	<table><tr><th>Module Supplier</th><th>Module Model</th><th>Capacity (Wp)</th><th>Number</th><th>Total Capacity (MWp)</th></tr><tr><td>Adani</td><td>Poly C-Si</td><td>315</td><td>61905</td><td>19.50</td></tr><tr><td>Adani</td><td>Poly C-Si</td><td>320</td><td>83871</td><td>26.84</td></tr><tr><td>Adani</td><td>Poly C-Si</td><td>325</td><td>57419</td><td>18.66</td></tr><tr><td></td><td></td><td colspan="2">Total Capacity in MWp</td><td>64.99</td></tr></table>	Module Supplier	Module Model	Capacity (Wp)	Number	Total Capacity (MWp)	Adani	Poly C-Si	315	61905	19.50	Adani	Poly C-Si	320	83871	26.84	Adani	Poly C-Si	325	57419	18.66			Total Capacity in MWp		64.99
	Module Supplier	Module Model	Capacity (Wp)	Number	Total Capacity (MWp)																					
	Adani	Poly C-Si	315	61905	19.50																					
	Adani	Poly C-Si	320	83871	26.84																					
Adani	Poly C-Si	325	57419	18.66																						
		Total Capacity in MWp		64.99																						
	The relevant changes are reflected in Section B.1 of the monitoring report																									
Assessment of change(s)	The PD has mentioned the revised solar module numbers in section B.1 of the MR. The verification team has reviewed and cross verified the revised module numbers through the commissioning certificate/E1/ and PPAs /E2/ and found the change to be correct.																									
Opinion on change(s)	The VVB confirms that this correction relates only to the clarification of the solar module numbers and does not impact any key parameters, the applicability of the selected methodology, additionality, or the appropriateness of the baseline scenario as established during the validation. Therefore, the change is accepted by assessment team.																									

Type of change(s)	Changes to the start date of the crediting period
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Description of change(s)	Not applicable
Assessment of change(s)	Not applicable
Opinion on change(s)	The verification team has reviewed section B.2.3 of MR/D1/ and conducted the onsite audit; and confirms that there is no change to the start date of the crediting period identified during the current monitoring period.

Type of change(s)	Permanent changes from the design Certified registered monitoring plan, applied monitoring methodology or standardized baseline
Description of change(s)	Not applicable
Assessment of change(s)	Not applicable
Opinion on change(s)	The verification team has reviewed section B.2.4 of MR/D1/ and conducted the onsite audit; and confirms that there are no permanent changes from the design Certified registered monitoring plan, applied monitoring methodology, or standardized baseline identified during the current monitoring period.

Type of change(s)	Changes to the project design of approved project activity
Description of change(s)	Not applicable
Assessment of change(s)	Not applicable
Opinion on change(s)	The verification team has reviewed section B.2.5 of MR/D1/ and conducted the onsite audit; and confirms that there are no changes to the project design of approved project activity identified during the current monitoring period.

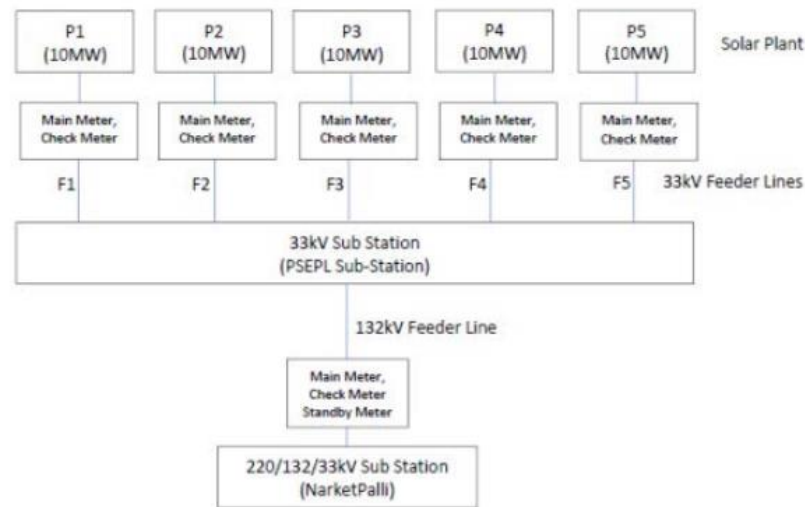
3.4 Description of monitoring system applied by the project

3.4.1 Compliance of monitoring plan with monitoring methodology

The verification team confirms that the monitoring plan and the monitoring system implemented are in compliance with the applied monitoring methodology, ACM0002 “Grid- connected electricity generation from renewable sources”, Version 20.0/B1/. All other requirements of the applied methodology have been met.

During the verification, all relevant monitoring parameters (as listed in the GS4GG Monitoring Report /D1/) have been reviewed with respect to the appropriateness of the applied measurement and determination methods, the correctness of the values used for emission reduction (ER) calculations, and the accuracy of the data.

The monitoring



Responsibilities of Site In-Charge: The Site In-Charge is responsible for the overall operation and maintenance of the project activity. This role involves coordination with both the O&M operator and site supervisors to ensure smooth functioning of the site. The site in-charge is responsible for collecting metering data to maintain electricity generation records, managing employee salaries, and maintaining related records for SDG 8. Additionally, he/she is accountable for addressing any grievances raised by stakeholders or employees and for assigning appropriate personnel to resolve them.

Responsibilities of O&M Representative: The O&M Representative serves as a liaison between the Site In-Charge of the O&M operator and the Project Participant. They are responsible for coordination and reporting to the PD Head Office.

Responsibilities of Site In-Charge (O&M Operator): The Site In-Charge from the O&M Operator is responsible for maintaining accurate and complete data records. This includes ensuring data reliability, overseeing the calibration of equipment, and recording all relevant operational parameters.

Responsibilities of Shift In-Charge: The Shift In-Charge is responsible for the daily collection and maintenance of monitored data, ensuring consistency and accuracy in day-to-day records.

The responsibilities given in section C of the Monitoring Report /19/ has been verified during the on-site assessment through interview of concerned personnel and found correct.

Data Measurement: The project activity involves the installation of 13 Energy meters out of which 10 meters are placed in Solar plant end (2 Energy meters at each 10 MW; 1 main meter and 1 check meter) and 3 Energy meters (1 main, 1 check & 1 Standby meter) sealed and under control of TSSPDCL used for joint metering installed at interconnection point of the Grid at project site.

Export and import energy are measured continuously using Main and Check meters. Monthly readings are jointly taken by an authorized officer of TSSPDCL in the presence of PD or representative of Project Developer. The meter reading will be taken jointly and signed by the representatives of the TSSPDCL and project investors. Based on the readings, invoices will be raised by project investors. These invoices can be used for cross checking the meter readings taken for the project activity. It is to be noted though PD or PD representative is available during meter reading, the calculations of net electricity supplied to grid is completely under purview of TSSPDCL officer and PD do not have any control on it. Also, accuracy class of meters and calibration frequency is under purview of TSSPDCL officer and PD do not have any control on it. PD got the monthly credit report from where net electricity supplied to grid is obtained and used for emission reduction calculations.

Data collection and archiving

Export and import meter readings are collected under the supervision of authorized PD representatives. Net electricity to the grid is calculated from these readings, which are stored in electronic and/or paper formats. The data is periodically reviewed by the Head of Operations with the O&M team. All records are retained for at least two years after the crediting period or until the final issuance of GS VERs, whichever is later.

Apportioning: Mismatch in Monitoring Period and the Billing Period

In case the dates of a particular monitoring period do not match with the dates of the billing period, the net electricity exported to the grid would be calculated from:

Net electricity exported to the grid (D) = (A/B) *C

Where;

D = Apportioned net electricity for the period/month

A = Difference of number of days which are not matching of billing period and monitoring period

B = Total Number of days of the billing period/month

C = Net Electricity supplied to the grid for that given billing period/ month

The calculated value after apportioning would be used for calculation of emission reductions during that period.

The current monitoring period starts from 01/01/2021 to 15/11/2023 (inclusive of both dates). As the monitoring period does not cover the full month of November 2023, an apportioning approach has been applied to estimate the net electricity supplied to the grid during this partial month.

Based on the apportioning procedure:

- A (Number of days which are not matching for November): 15
- B (Total number of days in November): 30
- C (Net electricity supplied to the grid in November): 7,118 MWh

The net electricity exported to the grid for the period 01/11/2023 to 15/11/2023 is calculated as:

$$D = (A/B) \times C$$

$$= (15/30) \times 7,118$$

$$= 3,559 \text{ MWh}$$

Emergency Preparedness: The project activity does not pose any risk of substantial unforeseen emissions during current MP; hence, no specific emergency preparedness for data monitoring is deemed necessary. In the rare event of simultaneous failure of all meters at the substation (Main, Check, and Standby), backup readings from meters installed at the project site interconnection point will be used to monitor net electricity exported to the grid.

Personnel training

In order to ensure a proper functioning of the project activity and a proper monitoring of emission reductions, the staffs (GS team) are trained. The plant helpers are also trained in equipment operation, data recording, reports writing, operation and maintenance and emergency procedures in compliance with the monitoring plan. During the current Monitoring period 138 trainings were conducted based on yearly training calendar planned of 48 trainings/year. Verification team has verified all the trainings conducted during current monitoring period with the help of training records provided by PD and also cross verified during onsite visit.

VVB's Opinion: The monitoring mechanism is consistent with the applied methodology and is deemed effective and reliable. The monitoring plan outlined in the GS4GG Monitoring Report /D1/ aligns with the applied methodology, ACM0002 "Grid- connected electricity generation from renewable sources", Version 20.0, as well as the approved standardized baseline referenced in the registered GS4GG Project Design Document /C1/. Based on the onsite audit and desk review of supporting documents submitted by the Project Representative, which describe the current implementation status of the project activity, the verification team attests to the accuracy and appropriateness of the stated monitoring procedures, data archiving practices, and emergency protocols.

3.4.2 Compliance of monitoring activities with the registered Monitoring plan

The verification team confirms that the monitoring activities and the monitoring system implemented are in full compliance with the applied monitoring methodology, ACM0002 "Grid- connected electricity generation from renewable sources", Version 20.0. All other requirements of the applied methodology have also been met. During the verification, all relevant monitoring parameters (as listed in the GS4GG Monitoring Report /D1/) have been assessed with respect to the appropriateness of the applied measurement and determination methods, the correctness of the values used for emission reduction (ER) calculations, the accuracy of the data, and the implementation of quality assurance and quality control (QA/QC) measures.

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

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/, Ex-post ER calculation sheet of the current monitoring period/D2/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021/C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/ 3. CEA database, v15.0/E12/
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Findings	No finding has been raised for data and parameter fixed ex-ante.			
Conclusions	Details of ex-ante parameters			
	Parameter	Unit	Description	Value
	EF _{OM,y}	tCO ₂ e/MWh	Operating Margin Emission Factor of Indian Grid	0.9622
	EF _{BM,y}	tCO ₂ e/MWh	Build Margin Emission Factor of Indian Grid	0.8811
	EF _{CM,y}	tCO ₂ e/MWh	Combined Margin Emission Factor of Indian Grid	0.9419
	The verification has been carried out in accordance with the registered PDD and the applied methodology ACM0002 Version 20.0. Based on the assessment, it is concluded that the data used for the calculation of baseline emissions are appropriate and reliable. The emission factors have been correctly sourced from the "CO2 Baseline Database for Indian Power Sector," Version 15.0, published by the Central Electricity Authority, Ministry of Power, Government of India, in alignment with the requirements of the applied methodology.			

3.4.2.2 Data and Parameters monitored

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and Ex-post ER calculation sheet of the current monitoring period/D2/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021/C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/ 3. Joint Meter Readings/E8/ 4. Invoices/E9/ 5. Employee records/E6/ 6. Training records/E4/ 7. Salary records/E5/ 8. Calibration certificate/E15/ 9. Technical Specifications/E14/ 10. Meter change details/E16/
Findings	Two CL have been raised under Finding No. 01 and 03, and a CAR has been raised under Finding No. 05; and resolved successfully. For more details refer <u>section 6</u> of this report.
Conclusions	Details of monitored parameters

	SDG	Parameter s	Source	Value Applied	Purpose of Data										
	7.2.1: Affordab le and Clean Energy	EG _{PJ, y}	Monthly joint meter reading reports.	322,764 MWh	To Monitor the SDG 7 Indicator and calculati on of baseline emission s										
	8.5.1: Decent Work and Econom ic Growth	• Quality of employ ment • Income generat ion • Quantit ative employ ment	Training Attendance sheets and record Employment Records Salary slips of the employees	Vintage wise Trainings conducted	To Monitor the SDG 8 Indicator										
				<table><tr><td>Yea r</td><td>Nu mbe r of Trai ning</td></tr><tr><td>2021</td><td>48</td></tr><tr><td>2021</td><td>48</td></tr><tr><td>2023</td><td>42</td></tr><tr><td>Tota l</td><td>138</td></tr></table>		Yea r	Nu mbe r of Trai ning	2021	48	2021	48	2023	42	Tota l	138
				Yea r		Nu mbe r of Trai ning									
				2021		48									
				2021		48									
				2023		42									
				Tota l		138									
				22 nos. of employees											
				<table><tr><td>Un- skill ed</td><td>3</td></tr><tr><td>Skill ed</td><td>19</td></tr></table>		Un- skill ed	3	Skill ed	19						
				Un- skill ed		3									
Skill ed	19														
Vintage-wise salary in INR:															
<table><tr><td>Yea r</td><td>INR</td></tr><tr><td>2021 9</td><td>3,13 0,03 2</td></tr><tr><td>2022 10</td><td>6,10 4,96 4</td></tr></table>	Yea r	INR	2021 9	3,13 0,03 2	2022 10	6,10 4,96 4									
Yea r	INR														
2021 9	3,13 0,03 2														
2022 10	6,10 4,96 4														

⁹ For Telangana year 2021: https://comply4hr.com/minimum-wages.asp?stdate=2021-04-01&ust1=TEL++&utm_

¹⁰ For Telangana year 2022: https://dev.simpliance.in/minimum-wages/telangana?utm_source

				<table><tr><td>2023¹¹</td><td>7,239,636</td></tr><tr><td>Total</td><td>16,474,632</td></tr></table>	2023 ¹¹	7,239,636	Total	16,474,632	
	2023 ¹¹	7,239,636							
	Total	16,474,632							
	13.2.1: Climate Action	Air Quality	Calculated as per “Tool to calculate the emission factor for an electricity system,”. The data are obtained from “CO ₂ Baseline Database for Indian Power Sector” version 15.0, published by the Central Electricity Authority, Ministry of Power, Government of India.	304,011 tCO ₂ e	To Monitor the SDG 13 Indicator and calculation of emission reductions				
-	Safeguarding principle 4.3.5 - Hazardous and Non-hazardous Waste	Plant records	0	Analysis of safeguarding principle					
VVB’s Assessment for each monitored parameter:									
SDG 7.2: Affordable and Clean Energy									
EG_{PJ,y}: Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh									

¹¹ For Telangana year 2023: https://ascent-hr.com/notification/telangana-minimum-wages-revision-0423/?utm_source

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 TSSPDCL as per the below equation:

$$EG_{PJ,y} = EG_{Export} - EG_{import}$$

The net electricity supplied to the grid by the project plant for a given month is calculated as the difference between the Export kWh and Import kWh. The metering point is located at the receiving end of the TSSPDCL substation. For the purpose of energy accounting, an ABT-compliant meter has been installed at this point by the project owner. Both main and check meters—ABT meters with an accuracy class of 0.2s—are installed at the 132 kV substation in Narketpally.

A comprehensive schedule detailing the calibration status of the energy meters—including their accuracy class, serial numbers, calibration frequency, last calibration date, and calibration validity applicable to the current monitoring period—is presented in the table below

Meter details:

Make	Sub-Station	Solar Plant End
Manufacturer	Secure Make	Secure Make
Type	ABT meters	ABT meters
Accuracy Level	0.2s	0.2s
Total no of meter	3	5*2 = 10
Main meter	APZ00364	APZ00369 APZ00371 APZ00373 APZ00381 APZ00171
Check meter	APZ00365	APZ00370 APZ00372 APZ00374 APZ00382 APZ00383
Standby meter	APZ00366	-
Date of calibration	07/03/2022	03/03/2022
Due date of calibration	06/03/2027	02/03/2027

The net electricity supplied to the grid is calculated by subtracting the import from the export values, and this figure is used for Emission Reductions (ER) calculations in accordance with the individual JMRs issued by TSSPDCL.

	For the current monitoring period of 1,049 days, the estimated electricity generation was 273,237 MWh, based on the annual projection of 95,073 MWh. However, actual net electricity supplied during this period was 322,764 MWh—an increase of 18.13%. This variance is attributed to fluctuations in solar radiation, a factor which is beyond the control of the Project Developer. Despite this increase, the performance remains within acceptable benchmarks- The breaching value of PLF is 28.04%, which represents +10% increase in the PLF value from the considered PLF, as per CDM PDD/C2/ The reported electricity generation has been verified against JMRs /E8/ and cross-checked with invoices/E9/ provided by the PD. Meter calibration, which is carried out every five years, has been verified through calibration certificates/E15/, and the meters are maintained under the authority of state electricity boards, with no direct control by the Project Developer. Furthermore, during the onsite audit, the verification team interviewed the site in-charge, plant manager, O&M representative, and other staff/F2/ to confirm technical specifications/E14/, calibration details/E15/, and operational practices. Based on this assessment, the reported net electricity generation of 322,764 MWh, as indicated in Monitoring Report/D1/ and ER sheet/D2/, is verified as accurate and compliant with the requirements outlined in Paragraphs 364 and 395(e) of the CDM Validation and Verification Standard for Project Activities, Version 03.0/A4/ SDG 8.5.1: Decent Work and Economic Growth The assessment confirms that the project contributes positively to SDG Indicator 8.5.1 by ensuring decent work conditions and promoting inclusive economic growth. Employment records, including salary slips/E5/, training records/E4/, and attendance registers/E6/, have been reviewed to verify compliance with applicable labor standards. Quality of Employment: The project employs 22 employees including skilled and unskilled workers and total wage paid to all employees is 16,474,632 for the period 2021 to 2023. This has been verified by verification team independently through Telangana labour rules and wage calculation sheet provided by PD. The yearly minimum wages are mentioned in MR Section D.2 under the SDG Indicator 8.5, and are in accordance with the yearly revisions in Telangana Minimum Wages Act. The verification team verified compliance with SDG 8.5.1: Decent Work and Economic Growth by referencing applicable labor laws issued by the Central Government of India, specifically those published on the Office of the Chief Labour Commissioner's official
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website¹². According to the notification dated 28 October 2021 (File No. 1/26(1)/2021 – LS-II), all unskilled workers employed in Category B areas are required to be paid at least the minimum wage as prescribed by the government of Telangana.

Additionally, priority is given to hiring local residents where possible, fostering regional economic participation. Compliance with national labor laws and alignment with SDG 8.5.1 has been satisfactorily demonstrated through documentation and interviews with site personnel.

The verification team conducted interviews with site personnel and their supervisors, and reviewed the corresponding training records and MR and confirms that 138 trainings have been conducted in current MP as per training schedule of PD.

Some of the trainings & workshops that are given to the respective O&M staffs. List of trainings provided is mentioned in Appendix-2 of MR/D1/.

- HSE Training Record
- Regular Drill Record
- Handling of Equipment Training
- Soft Skill Training

Quantitative Employment:

The project employs 22 employees including skilled and unskilled workers, with a clear commitment to equal pay for equal work. Employment data reviewed by the verification team confirmed that all employees receive equitable compensation based on job roles, with no discrimination. Employment status (temporary or permanent) and job classification (skilled or unskilled) were transparently documented.

Un-skilled	Skilled
3	19

SDG 13.2.1: Climate Action

The project contributes significantly to SDG 13.2.1 by reducing CO₂ emissions through the generation of renewable electricity. Baseline emissions are calculated as the product of the net electricity generated (EG_{PJ,y} in MWh) and the applicable grid emission factor, as detailed in the Emission Reduction (ER) Sheet/D2/.

During the current monitoring period of 1,049 days, the project achieved verified emission reductions of 304,011 tCO₂e. This exceeds the estimated reductions of 257,361 tCO₂e for the same period (based

¹² <https://clc.gov.in/clc/sites/default/files/MinimumWagesact.pdf>

	on an annual estimate of 89,549 tCO₂e) by 18.13%. The PLF achieved during current monitoring period is 25.64% and is within the +10% of sensitivity range which does not breach the PLF Value as mentioned in the registered PDD, hence, complies with the para 2.1.3 of the <u>Rule Clarification “ASSESSMENT APPROACH FOR REPORTING HIGHER EX-POST EMISSION REDUCTIONS.”</u> The verification team reviewed the emission reduction calculations, supporting data, and ER documentation, and found them to be accurate and compliant with the applied methodology/B1/. The verification was carried out in line with the registered monitoring plan and frequency, as specified in registered PDD/C1/. Employee interviews/F2/ conducted during the onsite audit further supported the validity of the reported data. Based on 100% data verification, the verification team confirms that the emission reductions, and the related contributions to SDG 7, SDG 8, and SDG 13, are accurate and reliable. Safeguarding principle 4.3.5 - Hazardous and Non-hazardous Waste The assessment confirms that the solar PV project has established appropriate measures for the safe handling, storage, and disposal of both hazardous and non-hazardous waste in accordance with applicable environmental regulations and best practices. Waste generated during operation—such as electrical components, and maintenance-related waste—is segregated and managed responsibly. No evidence of improper waste disposal or environmental contamination was observed during the onsite audit. The EPC contractor is responsible for ensuring the safe handling and disposal of hazardous and non-hazardous waste during the construction phase. Authorized vendors are engaged for final disposal as required.
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3.4.2.3 Implementation of Sampling Plan

Verification Means	Not Applicable
Findings	Not Applicable
Conclusions	No sampling has been involved in the assessment of this project activity. The verification team has checked 100% data for the verification of the current monitoring period. Hence, this section is not applicable

3.4.3 Compliance with the calibration frequency requirements for measuring instruments

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021/C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/ 3. Calibration certificates/E15/ 4. CEA notification/E13/
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Findings	CL has been raised under Finding No. 01 and resolved successfully. For more details refer section 6 of this report.
Conclusions	Based on the desk review of project documents and the information obtained during the onsite audit of the project activity, including interviews with site personnel, calibration certificate /E15/, the verification team confirms that monitoring equipment (energy meters) has been used for continuous monitoring and monthly recording. The project activity involves the installation of 10 energy meters at the project site and 3 energy meters at interconnection substations for accurate monitoring of electricity generation and export: (2 main meter and 2 check meters for each 10 MW) at project site and 3 Energy meters. (1 main meter, 1 check meter, 1 standby meter) for joint metering at substation (132 kV sub-station located at Narketpally). These meters at substation end are used for generation of JMRs and Invoices and further ER accounting under this project activity. During the onsite audit, the verification team physically inspected the installed energy meters. This included verification of the correct installation, condition, and operational status of the meters, ensuring that all equipment is properly functioning and secured against tampering. Operation and Maintenance (O&M) responsibilities are handled by authorized representative of PD. They conduct scheduled maintenance checks and respond promptly to any operational issues. To date, no malfunctions or failures have been reported in the energy meters or associated monitoring systems. The period of storage of the monitored data is 2 years after the end of crediting period or till the last issuance of GS VERs for the project activity whichever occurs later. In case the dates of a particular monitoring period do not match with the dates of the billing period, the net electricity exported to the grid is calculated through apportioning procedure. Emergency Procedure: In the unlikely event of simultaneous failure of all main, check, and standby meters installed at the substation, the fallback method involves using meter readings from the project site interconnection point to determine the net electricity exported to the grid. This contingency ensures the continuity and reliability of monitoring. Meter details are already discussed in above table. Conclusion: The monitoring system, including the configuration of energy meters, calibration schedules, maintenance protocols, and data handling procedures, is found to be robust, compliant, and suitable for the accurate measurement of net electricity generation. The project meets the relevant requirements under applicable standards i.e. Gold Standard and CEA regulations, supporting the credibility of emission reduction claims associated with the project activity.

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, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and Ex-post ER calculation sheet of the current monitoring period/D2/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021/C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/ 3. Joint Meter Readings/E8/ 4. Invoices/E9/
Findings	CL has been raised under Finding No. 03 and a CAR has been raised under Finding No. 06; and resolved successfully. For more details refer section 6 of this report.
Conclusions	The verification has been conducted in accordance with the registered monitoring plan/C1/, following the specified measurement methods, procedures, and the applied methodology/B1/. Monitoring results have been found to be consistently recorded in line with the approved monitoring frequency. Baseline Emissions SDG 13 The baseline emissions for the project activity are restricted to CO₂ emissions resulting from the generation of electricity by fossil fuel-fired power plants that are displaced by the renewable electricity generated by the project. In accordance with the applied approved methodology, it is assumed that all electricity generated by the project activity, above the established baseline, would otherwise have been produced by the existing mix of grid-connected power plants, including both: • Existing operational fossil fuel-based generation sources, and • Newly built grid-connected fossil fuel-based power plants added to meet growing demand. Baseline emissions are calculated using the formula $BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ Where, BE_y - Baseline emissions in year y, (tCO₂e/yr) EG_{PJ,y} = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh/yr)

	$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y Accordingly, the baseline emissions- $BE_y = 322,764 * 0.9419$ $= 304,011 \text{ tCO}_2\text{e (Rounded down)}$ The calculation has been verified and found to be accurate and compliant with the applied methodology. The emission factor used is derived from the latest version of the official database published by the Central Electricity Authority (CEA), and the net electricity exported to the grid is accurately determined based on monitored export and import readings. However, SDG 13 impact considered by PD is emission reductions, which is a result of the project activity. Hence, the ERs in baseline scenario is 0 tCO₂e SDG 7 – Affordable and Clean Energy: The project contributes to clean electricity generation, which would not occur under the baseline scenario. As a result, the baseline value for SDG 7 is considered to be 0 MWh. SDG 8 – Decent Work and Economic Growth: Employment and training opportunities generated by the project would not exist under the baseline scenario. Therefore, the baseline value for SDG 8 is taken as zero. The data presented in the final Monitoring Report (Section E.1)/D1/ and the Emission Reduction sheet/D2/ were reviewed and cross-verified against the registered PDD. The verification team confirms that all values are accurate and align with the requirements of ISO 14064-2, Clauses 6.4 and 6.5/A13/.
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3.5.2 Calculation of project value or estimation of project situation of each SDG Impact

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and Ex-post ER calculation sheet of the current monitoring period/D2/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021/C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/ 3. Joint Meter Readings/E8/ 4. Invoices/E9/ 5. Employee records/E6/ 6. Training records/E4/ 7. Salary records/E5/
Findings	CAR has been raised under Finding No. 06; and resolved successfully. For more details refer <u>section 6</u> of this report.

Conclusions	The verification has been conducted in accordance with the registered monitoring plan, following the specified measurement methods, procedures, and the applied methodology/B1/. Monitoring results have been found to be consistently recorded in line with the approved monitoring frequency. Project Emissions SDG 7 – Affordable and Clean Energy: SDG 7: As per the ACM0002 ver-20.0, Project Emission for most renewable energy power generation project activities, $PE_y = 0$. However, some project activities may involve project emissions that can be significant. These emissions shall be accounted for as project emissions by using the following equation: $PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$ Where: PE_y = Project emissions in year y (tCO_2e/yr) $PE_{FF,y}$ = Project emissions from fossil fuel consumption in year y (tCO_2/yr) $PE_{GP,y}$ = Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year y (tCO_2e/yr) PE_{HP} = Project emissions from water reservoirs of hydro power plants in year y (tCO_2e/yr). The project activity involves the generation of electricity from the installation of solar power plant. Hence, as per ACM0002, Version 20.0, there is no project emission for solar projects. Therefore, project emissions are zero. Hence $PE_y = 0$ The value for affordable and clean energy is the summation of monthly net electricity supplied to the grid. The values are sourced from Monthly Joint Meter Reading records, which can be crosschecked with the invoices. The verification team has reviewed the invoices and JMRs on a monthly basis and breakdown details/33/ for the current monitoring period and has been cross verified during onsite audit. The electricity generated is calculated as per the following equation- $EG_{PJ,y} = EG_{y, Export} - EG_{y, Import}$ Where the export and import values are taken from JMRs issued by TSSPDCL/E8/ and these JMRs has been cross-verified by the
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	verification team with the invoices/E9/ raised by PD towards NTPC Ltd. The net generation value calculation is mentioned in ER sheet/D2/ and the values are found to be consistent and correct as per the JMRs and invoices. Thus, the verification team confirms that the value of $EG_{PJ,y}$ i.e., the MWh of renewable energy generated by the project activity in the project scenario is 322,764 MWh. SDG 13 – Climate Action: Baseline emissions are calculated using the formula $BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ Where, $EG_{PJ,y}$ = the net electricity generated by the project $EF_{grid,CM,y}$ = the combined margin grid emission factor Accordingly, the baseline emissions- $BE_y = 322,764 * 0.9419$ $= 304,011 \text{ tCO}_2\text{e (Rounded down)}$ Further, $ER_y = BE_y - PE_y - LE_y$ Where, ER_y = Emission reductions in year y (tCO_2e) BE_y = Baseline emissions in year y (tCO_2e) PE_y = Project emissions in year y (tCO_2e) LE_y = Leakage emissions in year y (tCO_2e) Thus, $ER_y = 304,011 - 0 - 0 = 304,011 \text{ tCO}_2\text{e}$ $= 304,011 \text{ tCO}_2\text{e}$ However, SDG 13 impact considered by PD is emission reductions, which is a result of the project activity. Hence, the ERs in baseline scenario is 304,011 tCO_2e Since 100% data has been verified, the verification team can ascertain that the values for the emission reductions calculated are accurate and cross- verified from credit notes, Invoices, and it is in line with ISO 14064-2 clause 6.7 /A13/. SDG 8 – Decent Work and Economic Growth: The monitoring parameters relevant to SDG 8 include the number of trainings provided to employees and O&M staff, the total number of
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	personnel engaged in O&M activities, and the associated operational expenditure. During the current monitoring period, the project demonstrated the following outcomes: - Quality of Employment: A total of 138 training sessions were conducted for employees and O&M staff and 16,474,632 INR during current monitoring period). - Quantitative Employment and Income Generation: 22 (19 Skilled and 3 Unskilled). These values have been cross-verified against the supporting training records and employment documentation provided by the Project Developer and are deemed accurate and in line with the monitoring requirements. The income to all the workers is made on day-to day basis as per the Minimum Wages Act, 1948¹³
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3.5.3 Calculation of Leakage

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and Ex-post ER calculation sheet of the current monitoring period/D2/ and following supporting documents and evidences- - GS PDD v06, dated 06/01/2021/C1/ - GS Validation Report, v02, dated 17/12/2020/C3/ - CDM Methodology ACM0002, v20.0/B1/
Findings	No finding has been raised for the calculation of leakage.
Conclusions	The verification has been conducted in accordance with the registered PDD and the applied methodology ACM0002 Version 20.0. Leakage: As per section 5.6 (71) of the applied methodology ACM0002 “Grid- connected electricity generation from renewable sources”, Version 20 /12/, leakage does not need to be considered for this project activity as emissions potentially arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g., extraction, processing, transport etc.) are neglected. The verification team confirms that there is no leakage emissions associated with the electricity generation from the renewable energy project, in line with the provisions of the applied methodology.

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 Benefit	Conclusion
SDG 13 Climate Action	304,011 tCO ₂ e	0 tCO ₂ e	304,011 tCO ₂ e	As explained in Section 3.5.2 above, the resulting

¹³ <https://clc.gov.in/clc/sites/default/files/MinimumWagesact.pdf>

(mandatory)- Emission Reduction				baseline emissions for the monitoring period amount to 304,011 tCO ₂ e.
SDG 7 Affordable and Clean Energy- MWh of renewable energy generated	0 MWh	322,764MWh	322,764MWh	Similarly, as outlined in Section 3.5.3, project emissions for the monitoring period are zero, and leakage emissions are also considered zero, since the project activity supplies electricity to the grid defined in the applied methodology. The assessment team verified this during the onsite audit.
SDG 8 Decent work and economic growth- Trainings, Employees, Income (INR)	0	138 nos. of trainings 22 nos. Of employees 16,474,632 INR	138 nos. of trainings 22 nos. Of employees 16,474,632 INR	Accordingly, the resulting emission reductions for the monitoring period total 304,011 tCO ₂ e. The data presented in the Monitoring Report /D1/ and the Emission Reduction calculation sheet /D2/ have been assessed through a detailed review of the project documentation, evaluation of the collected monitored data, observation of established monitoring and reporting practices, and an assessment of the reliability of the monitoring equipment. Sufficient evidences including the JMRs /E8/ and Invoices /E9/, breakdown details has been provided by the PD and verified by verification team to support the reported emission reductions as stated above.

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
SDG 13 Climate Action (mandatory)- Emission Reduction	89,549 tCO ₂ e/year 257,361 tCO ₂ e for the current MP	304,011 tCO ₂ e	Assessment team conducted desk review and an onsite inspection and verified the net electricity generation reported in the ER sheet /D2/ and MR/D1/ for current monitoring period via JMRs /E8/ and Invoices /E9/ of the current monitoring period. The achieved electricity generation and, thus, emission reductions are 18.13% higher than the estimated values of the respective parameters. The increase in electricity generation during the current monitoring period is attributed to the solar radiation availability, a factor on which PD has no control. Hence, increase in SDG 7 and, in turn, 13 is found to be appropriate.
SDG 7 Affordable and Clean Energy- MWh of renewable energy generated	95,073 MWh/year 273,237 MWh for the current MP	322,764 MWh	
SDG 8 Decent work and economic growth- Trainings, Employees, Income (INR)	1 training/year 20 employees Minimum wage Rs 350/Day	138 nos. Of trainings 22 nos. Of employees 16,474,632 INR	Total employment generated and trainings conducted in the current monitoring period has been also verified via employment records of employees and training records and found to be correct. The value achieved during the current monitoring period is higher than the value estimated by the Project Developer. This is subjective to the needs of the plant and it can vary accordingly. Hence found to be justified.

3.5.6 Remarks on difference from estimate value in registered PDD

Verification Means	During desk review, onsite audit and resolution of findings, the verification team reviewed all the versions of MR/D1/ and Ex-post ER calculation sheet of the current monitoring period/D2/ and following supporting documents and evidences- 1. GS PDD v06, dated 06/01/2021/C1/ 2. GS Validation Report, v02, dated 17/12/2020/C3/
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	3. CDM Methodology ACM0002, v20.0/B1/ 4. Employment records/E6/ 5. Training records/E4/ 6. Salary slips/E5/ 7. JMRs/E8/ 8. Invoices/E9/
Findings	CAR has been raised under Finding No. 06; and resolved successfully. For more details refer <u>section 6</u> of this report.
Conclusions	SDG 7.2 Affordable and Clean Energy: For the current monitoring period of 1,049 days, the estimated electricity generation was 273,237 MWh, based on the annual projection of 95,073 MWh. However, actual net electricity supplied during this period was 322,764 MWh—an increase of 18.13%. This variance is attributed to fluctuations in solar radiation, a factor which is beyond the control of the Project Developer. Despite this increase, the performance remains within acceptable benchmarks- The breaching value of PLF is 28.04%, which represents +10% increase in the PLF value from the considered PLF, as per CDM PDD/C2/ SDG 8.5.1 Decent Work and Economic Growth: Verification team based on review of documents (training records, Employment records, salary slips) and interview with site personnel, Verification team confirms that the actual value of this SDG exceeds the estimated value. This is subjective to the needs of the plant and it can vary accordingly. Hence found to be justified. SDG 13.2.1 Climate Action: During the current monitoring period of 1,049 days, the project achieved verified emission reductions of 304,011 tCO₂e. This exceeds the estimated reductions of 257,361 tCO₂e for the same period (based on an annual estimate of 89,549 tCO₂e) by approximately 18.13%. The increment in achieved ERs is directly attributed to increase in electricity generation, as the ERs are directly proportional to the electricity generated, as described in section 3.5.2 of this report. The PLF achieved during current monitoring period is 25.64% and is within the +10% of sensitivity range which does not breach the PLF Value as mentioned in the registered PDD, hence, complies with the para 2.1.3 of the Rule Clarification “ASSESSMENT APPROACH FOR REPORTING HIGHER EX-POST EMISSION REDUCTIONS.” Hence, the increase in ERs is found to be appropriate by the verification team. Breakdown Time Assessment: Based on the information provided in the Monitoring Report Appendix 1 Breakdown details, the total breakdown duration recorded during the current monitoring period amounts to 2,024 hours and 41 mins, as detailed in Appendix 1 of the MR/D1/.

	The total operational time for this period is calculated as 25,176 hours. When compared, the breakdown duration constitutes approximately 8.04% of the total operational hours. This level of downtime is considered within reasonable operational limits for a utility-scale solar PV project of this nature. Therefore, the VVB concludes that the breakdown durations have not significantly impacted the project's overall performance or emission reduction achievement during the monitoring period.
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3.6 Safeguards Reporting

Safeguarding Principle 4.3.5 Hazardous and Non-hazardous Waste

The project activity involves the generation of both hazardous and non-hazardous waste during its operation phase. As part of its environmental management plan, the project proponent has implemented appropriate waste handling and disposal procedures, ensuring compliance with all applicable local and national regulations.

All waste generated onsite is collected, segregated, and handed over to authorized waste handlers for safe treatment and disposal. The project entity has confirmed that the entire waste management process aligns with legal requirements and environmental safeguards.

Source of Verification:

The waste disposal practices have been verified through a review of plant records, including waste tracking logs, and corroborated by entries in the Health, Safety, and Environment (HSE) logbook maintained at the site. Additionally, discussions with the Operations and Maintenance (O&M) team during the onsite audit further confirmed that all mitigation measures are actively implemented and regularly monitored.

Conclusion:

The project demonstrates effective waste management practices and adherence to environmental safeguards related to the generation, handling, and disposal of hazardous and non-hazardous waste. No non-compliance or risk of environmental harm has been identified.

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, the Verification team checked the project activity is already registered with GS4GG and section E of PDD/C1/ describes the Local Stakeholder Consultation Process which is in line with VVS requirements and the Stakeholder Meetings took place on 07/10/2016 at the Project site, Village: Kakkireni, District: Nalgonda, State: Telangana and same has been verified through the validation report /C3/. The continuous grievance is a part of the continual improvement process and

procedure is also mentioned in the MR/D1/. During onsite inspection; verification team cross verified the same information via interviews of site personnel and stakeholders /F2/ that as a part of the continual improvement process- PD has kept a grievance register /E7/ at the project site which is accessible to stakeholders to provide their feedback on the project. A Grievance register has been appropriately placed at security gate of the site and is publicly accessible at the plant location where local stakeholders can provide their feedback. Project site location is also conducive to continuous and regular checks for stakeholder comments. Grievance register is being continuously monitored and addressed by the site in charge at the site on regular basis.

In the current monitoring period, a few grievances were received and resolved successfully as checked from the grievance register checked during the onsite audit and interviews with local stakeholders and site personnels.

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

During onsite inspection, Verification team verified grievance register /E7/ placed on site and conducted personnel interviews /F2/ and could confirm that there was no negative feedback logged during the current monitoring period, hence no stakeholder mitigation needs to be monitored.

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

The Verification team confirms that the given GS4GG project “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana” 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 v2.0 /A4/ 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

Based on the verification of the Emission Reduction (ER) calculation process, the verification team confirms that all necessary parameters for determining emission reductions have been appropriately included in the Monitoring Report, Version 04 dated 12/08/2025/D1/, and the corresponding ER calculation spreadsheet/D2/. These are consistent with the applied methodology ACM0002, Version 20.0/B1/, and align with the monitoring plan outlined in the registered PDD/C1/. All parameters used during this monitoring period have been fully monitored in accordance with the registered PDD.

During the desk review and onsite audit, the verification team has verified the reported ERs using supporting documents such as JMRs/E8/, invoices/E9/, and through interviews with relevant personnel to ensure the adequacy and aggregation of the data.

No significant data gaps, missing evidence, or inconsistencies has been identified during the verification process. Therefore, the verification team concludes that the monitoring plan provides for effective management of the monitoring system to ensure the integrity and quality of the monitored data. All internal data is subject to quality assurance and quality control (QA/QC) measures, as detailed in the preceding sections of this report.

The emission reductions have been calculated based on the parameter “Quantity of net electricity supplied from the project (solar) plant/unit to the grid in year y,” denoted as $EG_{PI,y}$ (MWh), which

corresponds to SDG 7 indicator. This parameter is monitored through readings from energy meters installed at the site, which have an accuracy class of 0.2s/E15/.

Quantity of Net Electricity supplied to grid has been checked via JMRs /E8/ and has been crosschecked with records of electricity sale -Invoices /E9/. Calibration of all the meters is undertaken once in five years as per CEA guideline/E13/. Interview 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 and verification standard /A4/.

3.9 Management system and quality assurance

The final verification report has passed an independent technical review process 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 also Technical Reviewer is an approved GS Auditor for VKU.

The comments raised during the technical review stage is thoroughly addressed by the verification team and PD. 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

The verification team attests to correctness of the formulas and methodologies used to compute baseline emissions as per GS4GG Validation and Verification Standard V2.0 /A4/. Applied default values, emission factors, and assumptions in the calculations are all reasonable. Assumptions, emission factors and default values applied in the calculations are justified.

SDG13– Climate Action: The actual emission reduction achieved during the monitoring period is 304,011 tCO_{2e}. This figure was calculated by multiplying the net electricity generation of 322,764 MWh by an emission factor of 0.9419. The emission factor has been verified against the registered PDD/C1/ and is derived in accordance with the “Tool to calculate the emission factor for an electricity system.” The emission factor is based on data from the CO₂ Baseline Database for the Indian Power Sector, Version 15.0, published by the Central Electricity Authority under the Ministry of Power, Government of India. The calculation was further verified using the ER spreadsheet/D2/ submitted by PD and has been found to be acceptable by the verification team.

SDG 7 – Affordable and Clean Energy: The net electricity generated during the current monitoring period is 322,764 MWh. This value has been verified through JMRs/E8/ and cross-checked against invoices provided by the PD/E9/, confirming its accuracy.

SDG 8 – Decent Work and Economic Growth: The project activity supported the employment of 22 individuals during the current monitoring period, with income dissemination of 16,474,632 INR. This was verified by the verification team through employment records/E6/ and salary slips/E5/. Additionally, a total of 138 training sessions were conducted across this monitoring period, as confirmed through training records/E4/ provided by the PD

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.
- **Onsite audit:** This included cross-checking 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: 04, CL: Clarification Request: 04** were raised and resolved.

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

3.11 Verification Opinion

VKU Certification, contracted by Parampujya Solar Energy Private Limited (Project Developer), has performed the independent verification of the emission reductions for the GS Project ID 7139 “**50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana**” for the monitoring period from 01/01/2021 to 15/11/2023 (both dates included) as reported in the Monitoring Report, Version 04 dated 12/08/2025 /D1/. Supervision of the O&M Team or authorized representative of PD is 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 the monitoring plan contained in the PDD Version 06 dated 06/01/2021.

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 v2.1 /A1/ and GS4GG validation and verification standard v2.0 /A4/.

The verification activities have been conducted in accordance with VKU Certification’s Quality Manual System and SOP-4/F7/ and as per the GS4GG validation and verification standard v2.0 /A4/.

As a result, it is concluded that the emission reductions from the **GS Project Activity ID 7139 “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana”** are correctly reported in the Monitoring Report Version 04 dated 12/08/2025 and corresponding ER sheet for the monitoring period **01/01/2021 to 15/11/2023 (including both days)** amounted as **304,011 tCO₂e**.

VVB issues a positive opinion on issuance as per the ISO 14064-3, clause 9 which is in compliance with GS4GG principles and requirement v2.1/A1/ and GS4GG validation and verification standard v2.0/A4/. 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 has been accounted for 2% materiality as per



GS4GG VVS & the data/information is thoroughly supported by the evidence furnished by the Project Developer (PD), comprehensively presented in this report.

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

4. REFERENCE/DOCUMENTS USED IN THE VERIFICATION

S.NO	AUTHOR	TITLE	REFERENCE TO THE DOCUMENT	PROVIDER
Guideline and Requirement Documents				
A1	Gold Standard	<u>Principles and Requirements</u>	Version 2.1 and Dated: 05/12/2024	Gold Standard Website
A2	Gold Standard	<u>Stakeholder consultation and engagement requirements</u>	Version 2.1 and Dated: 14/06/2022	Gold Standard Website
A3	Gold Standard	<u>Safeguarding principles & requirements</u>	Version 2.1 and Dated: 29/06/2023	Gold Standard Website
A4	Gold Standard	<u>Validation and verification standard</u>	Version 2.0 and Dated: 12/11/2024	Gold Standard Website
A5	Gold Standard	<u>Site visit and remote audit requirements and procedures</u>	Version 2.0 and Dated: 30/05/2023	Gold Standard Website
A6	Gold Standard	<u>Applicability of minimum site visit requirement by VVB</u>	Dated: 16/08/2021	Gold Standard Website
A7	Gold Standard	<u>Validation & verification body requirements</u>	Version 3.0 and Dated: 12/11/2024	Gold Standard Website
A8	Gold Standard	<u>Renewable energy activity requirements</u>	Version 1.4 and Dated: 16/08/2021	Gold Standard Website
A9	Gold Standard	<u>Gold standard eligible impact quantification methodologies</u>	Version 2.4 and Dated: 22/06/2023	Gold Standard Website
A10	Gold Standard	<u>GHG Emissions Reductions & Sequestration Product Requirements</u>	Version 3.1, dated 24/04/2025	Gold Standard Website
A11	Gold Standard	<u>Template guide Monitoring report</u>	Version 1.1 dated 14/10/2020	Gold Standard Website
A12	Clean Development Mechanism	<u>CDM validation and verification standard for project activities</u>	Version 3.0	Clean Development Mechanism
A13	NA	ISO Standards: <u>ISO 14064-2:2019</u> & <u>ISO 14064-3:2019</u>	Year 2019	ISO Standards
Methodology and Tool Applied				
B1	Clean Development Mechanism	<u>ACM0002- Grid-connected electricity generation from renewable sources</u>	Version 20.0	Clean Development Mechanism
B2	Clean Development Mechanism	<u>Tool to calculate the emission factor for an electricity system</u>	Version 07	Clean Development Mechanism
Certification document on the Assurance Platform				

C1	PSEPL	GS Project Design Document	Version 06 and Dated 06/01/2021	Gold Standard Website
C2	PSEPL	CDM Project Design Document	Version 03, Dated 05/08/2020	Gold Standard Website
C3	ESPL	GS Validation Report	Version 02, Dated 17/12/2020	Gold Standard Website
C4	PSEPL	Annual report	30/12/2024	Gold Standard Website
C5	TUV SUD South Asia Pvt Ltd	Performance Review Report 1: 16/11/2018 to 31/12/2020 (Inclusive of both days)	Version 06, Dated 18/10/2022	Gold Standard Website
Documents to be verified (submitted by PD)				
D1	PSEPL	Monitoring Report for the current MP- 01/01/2021 to 15/11/2023 (both dates included)	Version 01, dated 24/03/2025 Version 02, dated 17/06/2025 Version 03, dated 14/07/2025 Version 04, dated 12/08/2025 Version 05, dated 19/11/2025	PSEPL
D2	PSEPL	Ex-post ER calculation sheet for the current MP- 01/01/2021 to 15/11/2023 (both dates included)	Version 01, dated 24/03/2025 Version 02, dated 17/06/2025 Version 03, dated 14/07/2025 Version 04, dated 12/08/2025	PSEPL
Supporting Documents and Evidences				
E1	TSSPDCL Nalgonda	Commissioning certificate between TSSPDCL and PSEPL	Dated 17/11/2017	PSEPL
E2	e-stamp	5 Power Purchase Agreements for procurement of 10 MW solar power on long term basis- between NTPC Ltd. and PSEPL	Dated 04/08/2016	PSEPL
E3	PSEPL	Single Line diagram of the project (SLD)	-	PSEPL
E4	PSEPL	Training Records applicable for current monitoring period- 01/01/2021 to 15/11/2023 (both dates included)	-	PSEPL
E5	PSEPL	Salary Slip	-	PSEPL

E6	PSEPL	Employment records and HR letter of personnels working in the current monitoring period - 01/01/2021 to 15/11/2023 (both dates included)	-	PSEPL
E7	PSEPL	Grievance Register Photograph for current monitoring period - 01/01/2021 to 15/11/2023 (both dates included)	-	PSEPL
E8	TSSPDCL	JMRs for current monitoring period -01/01/2021 to 15/11/2023 (both dates included)	-	PSEPL
E9	PSEPL	Invoices for the current monitoring period -01/01/2021 to 15/11/2023 (both dates included)	-	PSEPL
E10	PSEPL	O&M Agreement between PSEPL and Adani Infrastructure Management Services Limited	Dated 22/03/2019	PSEPL
E11	PSEPL	Self-declaration for no double counting		PSEPL
E12	Central Electricity Authority	<u>CDM- CEA Baseline Database</u>	Version 15.0, dated December 2019	Publicly available
E13	Central Electricity Authority	<u>Compendium of Regulations by CEA</u>	Dated- July 2024	Publicly available
E14		Technical specifications	-	PSEPL
E15		Calibration certificate for check meters and main meters		PSEPL
E16		Meter Change Details		PSEPL
E17	-	CEIG Report	21/08/2017	PSEPL
Tools, Forms and referred Documents				
F1		Google Inc. <u>Google Earth Pro</u>	-	Publicly available
F2	VKU Certification Pvt. Ltd.	Onsite audit and interviews conducted: 03/04/2025	-	N/A
F3	VKU Certification Pvt. Ltd.	VKU.F24W. Audit Plan_VKU.VER.47.25_GS_7139 prepared by VKU Certification Pvt. Ltd.	Dated: 02/04/2025	N/A
F4	VKU Certification Pvt. Ltd.	VKU.F46W. Attendance Sheet for Audit_VKU.VER.47.25_GS_7139	Dated: 03/04/2025	N/A



F5	VKU Certification Pvt. Ltd.	Photographs collected through GPS Map Camera	Dated: 03/04/2025	N/A
F6	VKU Certification Pvt. Ltd.	VKU.F64. Field assessment checklist VKU. VER.47.25_GS_7139	Dated: 03/04/2025	
F7	VKU Certification Pvt. Ltd.	QMS Procedures and SOPs of VKU Certification Pvt. Ltd.	-	N/A

5. Certification Statement

VKU Certification Private Limited (VKU Certification), contracted by Parampujya Solar Energy Private Limited (Project Developer), has performed the independent verification of the emission reductions for the GS4GG project activity **7139 “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana”** in India for the monitoring period 01/01/2021 to 15/11/2023 (both dates included) as reported in the Monitoring Report Version 04 dated 12/08/2025/D1/. The PD or PD authorised representative (O&M contractor) 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 Version 20.0 /B1/, the monitoring plan contained in the PDD Version 06 dated 06/01/2021, Monitoring Report Version 04 dated 12/08/2025/D1/ 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 monitoring period from 01/01/2021 to 15/11/2023 (both dates included) are fairly stated in the Monitoring Report (final) Version 04 dated 12/08/2025/D1/. The GHG emission reductions has been calculated correctly on the basis of the approved baseline and monitoring methodology ACM0002 Version 20.0 /B1/ and the monitoring plan contained in the PDD Version 06 dated 06/01/2021.

VKU Certification Private Limited is able to certify that the emission reductions from the GS4GG project activity 7139 “50 MW (DCR) Nalgonda Solar PV Power Project by Parampujya Solar Energy at Telangana” in India during the current monitoring period from 01/01/2021 to 15/11/2023 (including both days) amount to 304,011 tCO₂e.

Verified and certified emission reductions as per commitment period:



Commitment period	Amount
From 01/01/2021 to 31/12/2021 (Inclusive of both days)	105,077 tCO ₂ e
From 01/01/2022 to 31/12/2022 (Inclusive of both days)	104,026 tCO ₂ e
From 01/01/2023 to 15/11/2023 (Inclusive of both days)	94,909 tCO ₂ e
From: 01/01/2021 to 15/11/2023 (both dates included)	304,011 tCO ₂ e

Dr Vikas Kumar Aharwal
Founder and Director
VKU Certification Private Limited

25/11/2025
Indore, India

6. VERIFICATION FINDINGS (CAR/CL/FAR)

Finding No. 01	Date: 23/04/2025
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised:	
Desk Review	☒
On-site/remote/hybrid assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
▪ GS4GG Principles and Requirements, Version 2.1 ▪ GS Validation and Verification Standard Version 2. ▪ Template guide monitoring report version 1.1 dated 14-October-2020	
Non-Conformity	
PD has not provided enough supporting documents to support the information and data presented in the Monitoring Report, v01 dated 24-March-2025	
Evidence	
PD has not provided evidences to verify- 1. Trainings and relate evidence 2. Expense and Income generation evidence to verify the values. 3. Employee count confirmation/ Attendance record. 4. The project is not moving back to CDM and that it will not issue CER and VER for same vintage. 5. The technical specifications of the components/equipment involved in the project activity 6. The calibration dates. 7. Meter replacement certificate 8. The monitored hazardous and non-hazardous waste during the current monitoring period 9. EPC Contractor details and forms as applicable for hazardous and non-hazardous waste	
1st Response from PD	Date: 17/06/2025
1. Trainings and relate evidence has been submitted. 2. Expense and Income generation evidence to verify the values has been submitted 3. Employee count confirmation/ Attendance record has been submitted 4. No double counting has been submitted. 5. The technical specifications of the components/equipment involved in the project activity has been submitted 6. The calibration certificate has been submitted. 7. Meter replacement certificate has been submitted. 8. The monitored hazardous and non-hazardous waste during the current monitoring period has been submitted. 9. EPC Contractor details and forms as applicable for hazardous and non-hazardous waste has been submitted.	
Documents provided by PD for review	
1. Training register 2. Sample Salary slip 3. Attendance register 4. No double counting certificate 5. Technical specification of certificate. 6. Meter calibration certificate	



7. Register of hazardous waste.	
1st Review by Assessment Team	Date: 19/06/2025
Assessment team has not received the following supporting documents along with the response provided by PD to verify the information and data mentioned in MR and ER sheet- (open)	
1. Trainings and related evidences 2. Expense and Income generation evidences 3. Employee count confirmation/ Attendance records 4. No double counting declaration 5. The technical specifications of the components/equipment involved in the project activity. 6. Calibration certificates. 7. Meter replacement certificate. 8. The monitored hazardous and non-hazardous waste during the current monitoring period. 9. EPC Contractor details and forms as applicable for hazardous and non-hazardous waste.	
Hence, Finding No. 01 is open	
2nd Response from PD	Date: 14/07/2025
1. Training and related documents will be provided along with DVR 2 response. 2. Sample salary slip provided along with DVR 2 response. 3. Employee record provided along with DVR 2 response. 4. No double counting declaration provided along with DVR 2 response. 6. Calibration certificates provided along with DVR 2 response. 7. There is no meter replacement. 8. Hazardous and non-hazardous waste record provided along with DVR 2 response.	
Documents provided by PD for review	
Trainings and related evidences Sample salary slip Employee records No double counting declaration Calibration certificates. Hazardous and non-hazardous waste record	
2nd Review by Assessment Team	Date: 22/07/2025
Assessment team has not received the following supporting documents along with the response provided by PD to verify the information and data mentioned in MR and ER sheet-	
1. Training record submitted on sample basis but the complete training schedule and trainings conducted are not provided by PD to verify the claimed value. 2. Some sample salary slips are provided but some evidence is required to cross check the INR value claimed in the MP. 3. Employee record submitted in excel format which is not acceptable- kindly share the attendance record of the site or give it in an acceptable format. 4. Calibration certificate is not provided for the entire monitoring period. 5. Meter replacement certificate	
Hence, Finding No. 01 is open	
3rd Response from PD	Date: 12/08/2025
1. Now the complete training schedule and trainings records are provided along with this submission. 2. Now the evidence to cross check the INR value claimed in this MP provided along with this submission. 3. Now attendance record of the site is provided along with this submission. 4. Now Calibration certificates is provided for the entire monitoring period along with this submission. 5. PD wants to clarify that there is no meter replacement in this Monitoring period, also share calibration certificate along with this submission to cross check this.	

Documents provided by PD for review	
1. Training schedule and trainings records 2. INR value records 3. attendance record 4. Calibration certificates	
3rd Review by Assessment Team	Date: 25/08/2025
Assessment team has received all the supporting documents along with the response provided by PD to verify the information and data mentioned in revised MR and ER sheet.	
Hence, Finding No. 01 is Closed	

Finding No. 02	Date: 23/04/2025
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised:	
Desk Review	☒
On-site/remote/hybrid assessment	☒
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
- GS4GG Principles and Requirements, Version 2.1 - Clause 9.3.10 of the GS4GG Validation and Verification Standard, Version 2.0	
Non-Conformity	
1. The supporting evidence/documents required to substantiate the information and data presented in the Monitoring Report, as listed in the List of Documents, have not been submitted. 2. Certain information provided in the Monitoring Report, version 01, dated 24-March-2025, lacks clarity for the VVB.	
Evidence	
Throughout the Monitoring Report v01 dated 24/03/2025-	
1. It is not clear why PD has repeated statements at a few places in the document. 2. Some of the phrases are incomprehensible, hence, not clear to the assessment team.	
Key Project Information-	
3. It is not clear to the assessment team that why the date of last annual report is mentioned as “NA”?	
Table 1-	
4. PD has not provided SDG Impact Tool as per the requirements of the registry. 5. During site visit it has been observed by TL that the number of trainings conducted and employees listed are more than the reported value, kindly clarify and provide the supporting evidence for same.	
Table 2-	
6. It is not clear to AT why SDG 7 and SGD 8 is not included in the table.	
Section B.1-	
7. The unit of ‘Capacity’ in the table under point A. <i>Solar PV Modules</i> is not clear to the assessment team.	

8. During site visit TL identified that the number of modules implemented at site and the number of modules listed in MR does not match and slightly exceeds the total DC capacity of the plant site although the AC capacity remains unaffected, how is this justified?

Section C-

9. The meter details referred to in the section, are not traceable by the assessment team. PD to clarify on the reference provided.
10. It is not clear to the assessment team that why PD has apportioned value for 16 days in Nov 2023, whereas a total of 15 days is included in the current monitoring period for Nov 2023

1st Response from PD

Date:17/06/2025

1. The repeated statement has been removed from the document
2. The sentence has been revised in the entire document.
3. The date of the annual report has been mentioned in the MR
4. The SDG impact tool has been submitted to the assessment team.
5. The no. of training mentioned is correct and the supporting document has been submitted to the assessment team
6. Now the SDG 7 and 8 has been mentioned under the table 2.
7. The unit of capacity has been mentioned
8. A few modules were replaced at the project site in the year 2024. Since the site visit was conducted in April 2025, this has resulted in a discrepancy between the current number of installed modules observed onsite and the figures reported in the Monitoring Report. However, the values mentioned in the MR are accurate and reflect the status of the plant during the defined monitoring period (01/01/2021 to 15/11/2023), during which no such replacements had taken place. Therefore, the slight variation noted during the site visit is due to post-monitoring period updates and does not affect the reported AC capacity
9. The meter details referred has been mentioned under the section D.2
10. The PD has now revised the apportioned value in Monitoring Report (MR) to reflect 15 days for November 2023, in alignment with the monitoring period. The previously mentioned 16 days was an error and has been corrected accordingly.

Documents provided by PD for review

1. MR V.02
2. SDG Tool
3. Training Register

1st Review by Assessment Team

Date: 19/06/2025

1. PD has removed the repeated statements from the monitoring report and the sections are revised to provide more clarity to the project activity description and monitoring.
2. PD has revised the phrases in the monitoring report and the sections are revised to provide more clarity to the project activity description and monitoring.
3. PD has now mentioned the date of last annual report and it is now consistent with the latest Annual report.
4. PD as now provided the SDG impact tool as per the GS registry requirements. However, the values in SDG impact tool are inconsistent with the values mentioned in this table and ER sheet. Open
5. PD has not provided any supporting evidence to verify the no. of employees and trainings. Open
6. PD has now mentioned the vintage-wise contribution of project towards SDG 8. However, the project contribution towards SDG 13 (last column) has been repeated and the values in the column are not consistent with the ER sheet. Additionally, as per the SDG 8 contribution, the total number of trainings provided in the current monitoring period are 30 in number, which is

inconsistent with the value mentioned in the Table- 1 of MR, v02. Also, PD has mentioned partial information of SDG 8 in the table. Open 7. PD has now mentioned the unit of Capacity of the modules and it is found to be consistent with the registered PDD. 8. PD has clarified that the modules are replaced in 2024, before the site visit. And the Monitoring period ends in November 2023. However, PD has not provided any evidence to substantiate this claim. Additionally, the number of modules mentioned here are inconsistent with the number of modules mentioned in the Commissioning certificate. Open 9. PD has clarified that the meter details are provided in Section D.2 of MR, and updated the section accordingly. It is found to be correct and meter details are now traced in Section D.2 of MR. 10. PD has now revised the section and apportioned the value of electricity generation of Nov 2023 to 15 days. It is found to be correct as the total number of days of Nov 2023 in the current monitoring period are 15.	
Finding No. 02 is Open	
2nd Response from PD	Date: 14/07/2025
4. The SDG impact tool is revised and all the values are made consistent in all the documents. 5. Employee details and training documents will be provided along with DVR 2 response. 6. The table is revised in the MR and all the values are made consistent. 8. The CEIG Report is provided for your reference.	
Documents provided by PD for review	
SDG Impact Tool Monitoring Report	
2nd Review by Assessment Team	Date: 22/07/2025
4. The SDG impact tool is not revised properly and the findings were also not addressed in the SDG Impact tool. It is found that one sub-sheet named “Use-case” is removed from the SDG impact tool which is not consistent with the SDG impact tool template available on the GS4GG portal. Open. 5. PD has now provided the employment sheet and training records, and the number of training and employments mentioned can be cross checked but the documents are incomplete and values could not be cross verified. Open. 6. PD has now updated the table and revised the SDG impact values vintage-wise. The mentioned values are now found to be consistent with the ER sheet. Hence, closed 8. PD has provided CEIG report, but the report is dated 21/8/2017. It is not clear how the report dated 2017 during the project installation is justified for the change in modules happened in current years and also the number of modules is not consistent with this document? Open	
Hence Finding No. 02 is Open	
3rd Response from PD	Date: 12/08/2025
4. Now SDG tool has been revised and included the Use-case tab. 5. Now the complete training schedule and trainings record are provided along with this submission. 8. PD wants to clarify that CEIG report date is 21/08/2017 is for the others project, now commissioning certificate dated 17/11/2017 provided to the VVB in which modules details are provided and same has been revised in this section and also share correct CEIG report for this project activity.	
Documents provided by PD for review	
4. Revised SDG tool. 5. training schedule and trainings record 8. commissioning certificates and CEIG report.	
3rd Review by Assessment Team	Date: 25/08/2025
4. SDG tool has been revised by PD and the Use-case tab has now been included in revised SDG impact tool. 5. PD has provided the complete training schedule and trainings records along with this submission.	



8. PD has clarified and provided the commissioning certificate dated 17/11/2017 as evidence for the modules details and revised the MR as required and this is found to be correct by assessment team.

Hence, Finding No. 02 is Closed

Finding No. 03	Date: 23/04/2025
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised:	
Desk Review	☒
On-site/remote/hybrid assessment	☒
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
- GS4GG Principles and Requirements, Version 2.1 - GS4GG Validation and Verification Standard, Version 2.0	
Non-Conformity	
Certain information provided in the Monitoring Report, version 01, dated 24/03/2025 and ER sheet v1.0, lacks clarity for the VVB.	
Evidence	
Section D- - The reference mentioned for CEA database is directed to old website of CEA, and it is not a direct link to the database. PD has not provided a reference that gives reproducible value of emission factor Section D.2- - PD to provide reference to verify the calibration frequency mentioned for parameter 'EG_{facility,y}' - The invoices provided by PD refers to the PPA dated 23.08.2016 whereas the PPAs provided for the project activity are dated 04.08.2016. PD to clarify the PPA date and provide evidence accordingly - It is not clear that how the emissions are calculated from "Tool to calculate the emission factor for an electricity system"; and why the emissions are being estimated and on per annum basis for this parameter Section E.1- - Under <i>SDG 7 & 13</i>-The data/parameter EG_{PJ,y} is replaced with data/parameter EG_{facility,y} in the calculation of Baseline emission BE_y. PD to clarify on the correlation of these two data/parameters Section G.1- - During site visit some grievances have been found at the site, kindly justify the statement.	
1st Response from PD	Date: 17/06/2025
- The reference to the CEA database has now been updated. The provided link is a direct link to the official CEA website and leads to the relevant database, ensuring that the emission factor value is reproducible and verifiable. - Calibration certificates will be provided along with this submission and as per registered PDD, calibration will take place once in 5 years. - The Correct date of the PPA is 04.08.2016	



4. The emission is calculated as per the tool and the actual emission has been mentioned in the MR and the sentence has been revised. 5. The section has been revised to clarify the correlation between the data/parameters EGPI,y and EGfacility,y used in the calculation of Baseline Emission (BEy). 6. There were no grievances received for the monitoring period. The relevant required document has been submitted to the assessment team.	
Documents provided by PD for review	
1. Meter calibration certificate. 2. ER Sheet V.02 3. Grievance register	
1st Review by Assessment Team	Date: 19/06/2025
1. PD has updated the link for CEA database and the link now directs to the CEA database v15.0, which is being used for the calculations of ER in the current crediting period, and are consistent with the registered PDD. 2. PD has not provided calibration certificates with the response to verify the calibration details of energy meters. Open 3. PD has clarified the correct date of PPA as 04.08.2016. However, the invoices are dated 23.08.2016. Provide invoices corresponding to PPA dated 04.08.2016. Open 4. PD has revised the section and removed the phrase. It is found to be appropriate as per the current status of the project activity. 5. PD has revised the section and removed the statement. Hence, the assessment is not required 6. PD has not provided any evidence to verify the grievances received in the current monitoring period. Open	
Finding No. 03 is Open	
2nd Response from PD	Date: 14/07/2025
2. Calibration Certificate will be provided along with DVR 2 response. 3. The updated ER sheet along with the Invoice and JMR will be provided along with DVR 2 response 6. The grievances received in the current monitoring are added in the MR.	
Documents provided by PD for review	
Monitoring Report	
2nd Review by Assessment Team	Date: 22/07/2025
2. PD has now provided only one calibration certificate dated 04/07/2017 which is not applicable for the entire monitoring period. Open 3. PD has now provided the invoices of PPA dated 04/08/2016. However, the value of the invoices provided do not match with the values mentioned in the Revised ER sheet, v02. Open 6. PD has now provided the grievance records of the current monitoring period. However, the same are not mentioned in the revised Monitoring Report. Open	
Finding No. 03 is Open	
3rd Response from PD	Date: 12/08/2025
2. Now calibration certificates for the entire monitoring period are provided along with this submission. 3. PD wants to clarify that value is correct also share the invoice screen short to cross check the same. 6. Now MR has been revised and provided the details of grievance records of the current monitoring period.	
Documents provided by PD for review	
2. Calibration certificates 3. Invoice screen short 6. Revised MR	
3rd Review by Assessment Team	Date: 25/08/2025

2. PD has submitted all the calibration certificates required and they were found to be correct as per updated details in revised MR version 04, hence accepted.
3. PD has submitted all the invoices of PPA dated 04/08/2016 and all the values mentioned in the Revised ER sheet, found to be correct, hence accepted
6. PD has revised the MR and included details about the grievance records of the current monitoring period which is found to be correct.

Hence, Finding No. 03 is Closed

Finding No. 04	Date: 23/04/ 2025
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☒
On-site/remote/hybrid assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
▪ GS4GG Principles and Requirements, Version 2.1 ▪ GS4GG Validation and Verification Standard, Version 2.0 ▪ GS4GG Monitoring Template Guide, Version 1.1	
Non-Conformity	
Inconsistencies have been observed by the VVB in the formatting, status of project, monitoring period and crediting period mentioned in MR v01, dated 24-March-2025 w.r.t the MR Template Guide v.1.1 and registered PDD	
Evidence	
Throughout the Monitoring Report v01 dated 24/03/2025-	
1. The font colour of the information mentioned in this table and in various sections throughout this report have been altered, leading to a discrepancy with point 13 of the 'Guide to Completing Monitoring Report' of Monitoring Report Template Guide v1.1. 2. PD has used futuristic statements at many places throughout the report 3. Word 'Project proponent' and acronym 'PP' is mentioned at various places in the document, which is inconsistent with the registry guidelines	
Key Project Information-	
4. The monitoring period number is inconsistent with the Guidelines provided in the KPI table of the Template Guide for Monitoring Report; Version 1.1	
Table 2-	
5. The end date of 2023 vintage is inconsistent with the end date of current monitoring period.	
Section A.2-	
6. The name of village mentioned in this section is inconsistent with the name of village mentioned in section A.1 of MR 7. The project location has not been demonstrated in accordance with the requirements outlined in the MR template guide, specifically incorporated location details are incomplete, as the project name, project ID, scale, and GPS grid have not been included.	
Section A.4-	

8. The length of crediting period mentioned in the section i.e., 5 years, is inconsistent with the length of crediting period mentioned in Section C.2.2 of registered GS PDD i.e., 07 years	
1st Response from PD	Date: 17/06/2025
1. The font colour throughout the report, including in the referenced table and sections, has been revised in accordance with Point 13 of the 'Guide to Completing Monitoring Report' from the Monitoring Report Template Guide v1.1. 2. The futuristic sentence has been removed from the MR 3. The word 'PP' has been replaced with 'Project Developer' throughout the document to ensure consistency with the registry guidelines. 4. The monitoring period No. has been revised 5. The end date of the vintage 2023 has been corrected and revised. 6. The name of village is Kakkireni and it has been corrected and revised in the MR. 7. It has been corrected and revised in the MR. 8. Now it has been aligned with the registered PDD.	
Documents provided by PD for review	
1. MR Version 02	
1st Review by Assessment Team	Date: 19/06/2025
1. PD has revised the report and the font colour and style are now found to be consistent with the MR template guidelines. 2. PD has revised the report. However, futuristic statements are still mentioned in Section C. Open 3. PD has revised the term "Project participant throughout the document. However, the acronym "PP" is still mentioned at various places in the monitoring report. Open 4. The monitoring period number is still inconsistent with the Guidelines provided in the KPI table of the Template Guide for Monitoring Report; Version 1.1- "Indicate if this monitoring period is the 1st, 2nd, 3rd etc". Open 5. PD has revised the end date of the monitoring period and it is now consistent with the end date of the current monitoring period. 6. PD as revised the village name of the village and it is found to be consistent with section A.1 of this document and registered PDD. 7. PD has now incorporated the location details and it is found to be consistent with the evidences collected during the onsite audit, but the name/title of the project is still not included. Open 8. PD has revised the length of the crediting period as 7 years. And the total length of crediting period is 15 years, as per the GS guidelines. It is found to be consistent with the registered PDD.	
Finding No. 04 is Open	
2nd Response from PD	Date: 14/07/2025
2. The statements are revised in the MR. 3. The same will be revised throughout the MR. 4. The monitoring period number is made consistent with the GS guidelines. 7. The name/title of the project is added in the MR.	
Documents provided by PD for review	
Monitoring Report	
2nd Review by Assessment Team	Date: 22/07/2025
2. PD has revised the monitoring report. However, futuristic statements are still mentioned in Section C. Open 3. PD has revised the acronym in the document and revised it to PD as per the registry guideline throughout the monitoring report. Hence, closed	



4. Monitoring period number is now revised in the revised MR. Hence, closed 7. PD has now added the title of project and it is found to be consistent with the tile of the project under assessment. Hence, closed Finding No. 04 is Open	
3rd Response from PD	Date:12/08/2025
2.Now MR has been revised and removed the futuristic statements	
Documents provided by PD for review	
Revised MR	
3rd Review by Assessment Team	Date:25/08/2025
2. MR has been revised by PD and they have removed all the futuristic statements in revised MR version 04 submitted for review, hence accepted.	
Hence, Finding No. 04 is Closed	

Finding No. 05	Date: 23/04/2025
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☒
On-site/remote/hybrid assessment	☒
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
▪ GS4GG Principles and Requirements, Version 2.1 ▪ GS4GG Validation and Verification Standard, Version 2.0 ▪ GS4GG Monitoring Template Guide, Version 1.1	
Non-Conformity	
Inconsistencies have been observed by the VVB in technical details, description of project and data and parameters mentioned in MR v01, dated 24/03/2025 w.r.t the registered PDD and evidences provided by PD at the time of initial submission.	
Evidence	
Section B.1-	
1. The project location has not been demonstrated in accordance with the requirements outlined in the MR template guide, specifically incorporated location details are incomplete, as the project name, project ID, scale, and GPS grid have not been included. 2. The number of modules mentioned in the table under point <i>A. Solar PV Modules</i> are inconsistent with the number of modules mentioned in the commissioning certificate. 3. The make of meters mentioned in the table under point <i>D Meter Equipment Details</i> is L&T which is inconsistent with the make mentioned in Commissioning certificate and JMRs i.e., Secure	
Section C-	
4. During site visit it was observed that there are minor breakdowns that happened during the reported period and they need to be provided in listed format and their details need to be demonstrated in this report as applicable.	

5. PD has not mentioned all the required information in the section including- the location of meters and substation, O&M entity name for the 'Description of monitoring system applied by the project'
6. The calculated value for the 'net electricity exported to the grid' does not match with the formulated value

Section D.2-

7. Data and parameters mentioned in the section are inconsistent with data and parameters mentioned in the registered GS PDD.
8. The description of SDG indicator 7.2.1, 8.5.1 and 13.2.1 are inconsistent with the SDG Indicator Metadata.
9. The parameter 'EG_{facility,y}' and its source of data mentioned for SDG 7.2.1 is inconsistent with the registered GS PDD
10. It has been observed during the site visit that the energy meters have been replaced with new set of meters in November 2023, whose meter replacement certificate and calibration certificate need to be provided by PD.
11. The meter nos. mentioned- in Measurement methods and procedures for 'EG_{facility,y}' - for meters installed at substation and at plant end are inconsistent with the meter nos. mentioned in commissioning certificate provided by PD during initial submission
12. The unit mentioned for the parameter- 'Quality of employment' is inconsistent with registered GS PDD.
13. The Monitoring Report does not include a tabulated summary of training details. The table should include, but not be limited to, the date of training, training topic, number of attendees, and training venue.
14. QA/QC procedure for the monitored parameter- 'Quality of employment' is not mentioned as required by GS MR Template v1.1

1st Response from PD

Date: 17/06/2025

1. The project location details, including the project name, project ID, scale, and geographical coordinates, have already been provided under Sections A.1 and A.2 of the Monitoring Report. These sections have been completed in accordance with the MR template guide and cover the required information related to the project's location and scale.
2. A few modules were replaced at the project site in the year 2024. Since the site visit was conducted in April 2025, this has resulted in a discrepancy between the current number of installed modules observed onsite and the figures reported in the Monitoring Report. However, the values mentioned in the MR are accurate and reflect the status of the plant during the defined monitoring period (01/01/2021 to 15/11/2023), during which no such replacements had taken place. Therefore, the slight variation noted during the site visit is due to post-monitoring period updates and does not affect the reported AC capacity.
3. The make of meter is L&T and the relevant document has been submitted to the assessment team.
4. The breakdown details has been mentioned under the Appendix.
5. The location of meter has been mentioned under the data measurement.
6. The Calculated value has been corrected now its matching with the formulated value.
7. The parameter mentioned has been made consistent with the registered GS PDD.
8. The description of SDG indicator 7.2.1, 8.5.1 and 13.2.1 has been made consistent with the SDG Indicator Metadata.
9. The parameter mentioned has been made consistent with the registered GS PDD.
10. The meter replacement, and calibration Certificate will be provided along with the DVR responses.

11. The meter nos. mentioned- in Measurement methods and procedures for ‘EGfacility.y’- for meters installed at substation and at plant end are consistent with the meter nos. mentioned in commissioning certificate provided by PD during initial submission. 12. Now it has been made consistent with the registered PDD. 13. The Tabulated summary of training details has been mentioned under the Appendix. 14. QA/QC procedure for the monitored parameter- ‘Quality of employment’ has been mentioned	
Documents provided by PD for review	
1. Meter calibration Certificate 2. Excel sheet for Breakdown detail	
1st Review by Assessment Team	Date: 19/06/ 2025
1. PD has included the required information in the section as per the GS MR template guidelines and it is found to be consistent with the project activity and the observations made during the onsite audit. 2. PD has clarified that the modules are replaced in 2024, before the site visit. And the Monitoring period ends in November 2023. However, PD has not provided any evidence to substantiate this claim. Additionally, the number of modules mentioned here are inconsistent with the number of modules mentioned in the Commissioning certificate. Open 3. Make of solar plant end meters are still inconsistent with the commissioning certificate. Also, PD has not submitted any other document to verify the make of Solar plant end meters. Open 4. The breakdown details are nowhere to be found in the Appendix of MR, v02. Additionally, evidence to verify the breakdown details are not provided by PD. Open 5. PD has now included the meter and substation location and added a figure to show the connections of Solar plant to the substation. This is found to be consistent with the observations made during the onsite audit. 6. PD has revised the value and mentioned the correct calculated value of the electricity exported in Nov 2023. 7. A parameter “Quantitative employment” is not mentioned in this section. Hence, still inconsistent with the registered PDD. Open 8. The description of SDG indicator 7.2.1, 8.5.1 and 13.2.1 are consistent with the registered PDD but are inconsistent with the SDG Indicator in UN Metadata . Open 9. PD has now revised the parameter to “EG _{PJ,y} ” and it is found to be consistent with the registered PDD. 10. PD has not provided the meter replacement and calibration certificates with the response. Open 11. PD has mentioned in MR that meters are replaced. However, PD has not provided evidence to verify the meter change details with this response. Open 12. PD has made the unit consistent with registered PDD. However, the representation of qualitative and quantitative employment in a single parameter is inconsistent with registered PDD. Open 13. The training details are nowhere to be found in the appendix of MR, v02. Open 14. PD has revised the QA/QC procedure and it is found to be consistent with the registered PDD and in line with the GS MR Template Guide v1.1	
Finding No. 05 is Open	
2nd Response from PD	Date: 14/07/2025
2. The CEIG report is provided for your reference. 3. The solar make is made consistent with the commissioning certificate. 4. The breakdown details are added in the MR and the records for the same will be provided along with DVR 2 response. 7. The section is made consistent with the PDD. 8. The SDG indicators are added in the SDG tables. 10. All calibration certificates will be provided along with DVR 2 response.	



11. MR talks about replacement of meters in case of fault or functional issue. The calibration certificates will be provided along with DVR 2 response. 12. The employment records are made consistent with the PDD. 13. The training records will be provided along with DVR 2 response.	
Documents provided by PD for review	
Monitoring Report	
2nd Review by Assessment Team	Date: 22/07/2025
2. PD has provided CEIG report, but the report is dated 21/8/2017. It is not clear how the report dated 2017 justified the change in modules done in 2024? Open 3. PD has revised the make of Solar Plant End meters, but the make is still inconsistent with the commissioning certificate. It is not clear why Mehru make is mentioned. Open 4. PD has now added the breakdown details in the appendix, and these are found to be correct by the assessment team as per the observations made during onsite audit. Hence, closed 7. PD has now mentioned the parameter of “Quantitative employment” and it is found to be consistent with the registered PDD. Hence, closed 8. PD has now revised the SDG indicators 7.2.1, 8.5.1 and 13.2.1, and these are found to be consistent with the UN Metadata. Hence, closed 10. PD has now provided the calibration certificates. However, the calibration certificates are dated 04/07/2017. How are these certificates relevant for current MP? Also, PD has not provided any meter change replacement in the supporting documents provided by PD along with the response. Open 11. As per previous response from PD, the replacement certificate for meters will be provided but it is not provided to verify the same. Open 12. PD has now provided the employment sheet with the list of employees, skill-wise but it needs to be cross-checked with the attendance record at site. Open. 13. PD has now provided the training records and mentioned the details of the same in the appendix of the MR but they are not complete. Open	
Finding No. 05 is Open	
3rd Response from PD	Date: 12/08/2025
2. PD wants to clarify that CEIG report date is 21/08/2017 is for the others project, now commissioning certificate dated 17/11/2017 provided to the VVB in which modules details are provided and same has been revised in this section and also share correct CEIG report for this project activity. 3. There is a typo error now PD has revised the MR and make a consistent with the commissioning certificate details. 10. Now PD has provided the current MP calibration certificates along with this submission and there is no meter replacement in the current MP. 11. There is a typo error and there is no meter replacement in the current MP. 12. Now attendance record is provided along with submission to cross check the same. 13. Now MR has been revised and the training records are mentioned in the appendix of the MR.	
Documents provided by PD for review	
2. Commissioning certificates and CEIG report 10. Calibration certificates 12. Attendance record	
3rd Review by Assessment Team	Date: 25/08/2025
2. PD has clarified and provided the commissioning certificate dated 17/11/2017 as evidence for the modules details and revised the MR as required and this is found to be correct by assessment team. 3. PD has updated the revised MR and removed the typo error and make is now consistent with the commissioning certificate, calibration certificate of meters, hence accepted. 10. PD has provided the current MP calibration certificates along with this it is clarified that there is no meter replacement in the current MP, which is found to be correct by assessment team. 11. PD has updated the MR and no meter replacement found in the current MP.	

12. PD has provided the attendance record to cross check the employees and it is found to be correct.
13. PD has revised the MR and included the training records in the appendix of the MR which is found to be correct as per the training details provided.

Hence, Finding No. 05 is Closed

Finding No. 06	Date: 23/04/2025
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☒
On-site/remote/hybrid assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
- GS4GG Principles and Requirements, Version 2.1 - GS4GG Validation and Verification Standard, Version 2.0 - GS4GG Monitoring Template Guide, Version 1.1	
Non-Conformity	
Some of the information in Sections D.3, E.1, E.2, E.4 and E.6 in MR v01, dated 24/03/2025 are not provided as per the requirements of GS4GG MR Template Guide, v.1.1	
Evidence	
Section D.3- 1. Template guideline has not been followed to fill table" Comparison of monitored parameters with last monitoring period". Section E.1- 2. PD has not mentioned baseline value for each SDG as required by GS Monitoring Template Guide v1.1- i. Under a heading for each SDG, provide sample calculations for all formulae used to calculate/estimate baseline values (SDG 13 - emissions or net baseline removals), applying actual values. ii. Clearly reference the spreadsheets used (including sheet names as necessary) and supply them as supporting evidence to the monitoring report Section E.2- 3. The description of PE_{GP,y} mentioned in this section is inconsistent with registered GS PDD Section E.4- 4. The content of the table is inconsistent with the guidelines to fill this table as per Monitoring Report Template Guide v1.1- "List the estimates for each design certified SDG impact for each numbered SDG, starting with SDG 13 first." Section E.6- 5. PD has not filled the information as per the requirement of the section mentioned in MR Template Guide v1.1- "State whether the actual SDG Impacts achieved is greater than the amount based on the ex-ante estimation in the Design Certified PDD. If so, explain the cause of	

<i>any increase in the actual Impacts achieved by the project activity during this monitoring period”.</i>	
1st Response from PD	Date: 17/06/2025
1. As per monitoring template guidelines, this section is not applicable for non- Community Service Activities, hence not applicable. 2. PD has corrected and revised the baseline value for each SDG as required by GS Monitoring Template Guide v1.1- 3. The description of PE_{GP,y} mentioned has been revised and made consistent as per the registered PDD. 4. Now it has been revised as per the guideline. 5. Filled and revised as per the MR template guideline.	
Documents provided by PD for review	
1. MR V.02	
1st Review by Assessment Team	Date: 19/06/2025
1. PD has revised the section and it is found to be updated as per the GS Template Guidelines by the assessment team. 2. PD has revised the section, but it has not mentioned the SDG impacts separately under each heading. Also, no mention of reference to spreadsheets are provided in the section, as per the requirements of GS MR Template guidelines. Open 3. PD has mentioned that it has revised the description, but the changes are not reflected in the section and it is still inconsistent with the registered PDD. Open 4. PD has revised the section and it is found to be consistent with the MR template guide v1.1. PD has now mentioned the SDG 13 impact 1st in the table. 5. PD has revised the section and justified the increase in achieved ERs as compared to estimated ERs, as per the requirement of Template guideline. It is found to be appropriate as per the project activity. The yield is not in control of PD because it depends on the sunlight intensity and hours of sunlight.	
Finding No. 06 is Open	
2nd Response from PD	Date: 14/07/2025
2. The SDG impacts are revised in the MR and are made in consistent with the GS guidelines. 3. The section is revised as per the registered PDD.	
Documents provided by PD for review	
Monitoring Report	
2nd Review by Assessment Team	Date: 22/07/2025
2. PD has revised the section and now separately mentioned the baseline estimates for each SDG. However, reference to the spreadsheet is still not mentioned. Open 3. PD has revised the statement and updated the PE_{GP,y} representation and it is now found to be consistent with the registered PDD. Hence, closed	
Finding No. 06 is Open	
3rd Response from PD	Date: 12/08/2025
3. Now MR has been revised and reference to the spreadsheet is mentioned.	
Documents provided by PD for review	
2. Revised MR	
3rd Review by Assessment Team	Date: 25/08/2025
2. PD has revised the section and reference to the spreadsheet is also mentioned, hence accepted.	

Hence, Finding No. 06 is Closed

Finding No. 07	Date: 19/06/2025
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☒
On-site/remote/hybrid assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
- GS4GG Principles and Requirements, Version 2.1 - GS4GG Validation and Verification Standard, Version 2.0 - GS4GG Monitoring Template Guide, Version 1.1	
Non-Conformity	
Inconsistencies have been observed by the VVB within the calculation in Monitoring report, v02 dated 17-06-2025 and with ER sheet, Version 02 and SDG Impact Tool.	
Evidence	
Throughout the Monitoring Report, Version 02-	
- The value of emission reduction is inconsistent with the ER sheet and SDG Impact tool, throughout the report. - The value of electricity generation is inconsistent with the ER sheet and SDG impact tool throughout the report.	
Section C of Monitoring Report, Version 02-	
The representation of apportioning parameters- B, C and D- are inconsistent with the calculations mentioned for apportioning of electricity for November 2023.	
Section D.2 of Monitoring Report, Version 02-	
The representation of qualitative and quantitative employment in a single parameter is inconsistent with registered GS PDD	
ER sheet-	
“Actual SDG” tab- PP has not mentioned the SDG contributions vintage-wise to verify the values vintage-wise provided in MR	
SDG Impact Tool-	
“Impact assessment” tab- PD has not mentioned the formulae for the difference. - The values of SDG impacts for SDG 7, 8 and 13 are inconsistent with the ER sheet and Monitoring Report.	
1st Response from PD	Date: 11/07/2025
All the data in the MR, ER and SDG impact tool is made consistent.	
Documents provided by PD for review	
Monitoring Report	
ER sheet	
SDG Impact Tool	
1st Review by Assessment Team	Date: 22/07/2025
PD has now made the emission reductions consistent with the ER sheet and SDG Impact tool, throughout the report. Hence, closed	

2. PD has now made the electricity generation values consistent with the ER sheet and SDG Impact tool, throughout the report. Hence, closed 3. PD has now clarified that the formula mentioned is a standard formula and applies for all apportioning. PD has revised the representation of “D” and it is found to be appropriate. Also, PD has clarified that B is the total number of days for which apportioning is done. However, it is not reflected in the representation of B. PD to update the same for clear representation. Open 4. PD has separated the qualitative and quantitative employment details separately, and it is now consistent with the registered PDD. Hence, closed 5. PP has not mentioned the SDG contributions vintage-wise to verify the values vintage-wise provided in MR. Open 6. PD has not mentioned the formulae for the difference in SDG Impact Tool. Open 7. The values of SDG impacts for SDG 7, 8 and 13 are now found to be consistent with the ER sheet and Monitoring Report. Hence, closed	
Finding No. 07 is Open	
2nd Response from PD	Date: 12/08/2025
3. Now section has been revised and clearly mentioned the representation of B. 5. Now MR has been revised and SDG contributions values are provided in vintage-wise in revised MR. 6. Now PD has mentioned the formulae for the difference in SDG Impact Tool.	
Documents provided by PD for review	
Revised MR	
2nd Review by Assessment Team	Date: 25/08/2025
3. PD has clearly mentioned the representation of B in the revised MR version 04, which is found to be correct by assessment team. 5. PD has revised the MR and clearly mentioned the vintage-wise values of each SDG, which is found to be correct by assessment team. 6. PD has revised the SDG impact tool and mentioned the formulae for the difference in revised SDG Impact Tool which is found to be correct by assessment team.	
Hence, Finding No. 07 is Closed	

Finding No. 08	Date: 03/09/2025
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised:	
Desk Review	☐
On-site/remote/hybrid assessment	☐
Technical Review	☒
Project Review Report by Registry	☐
Requirement	
Validation and verification Standard Version 2.0 MR Template Guide Version 1.1	
Non-Conformity	
Section D.2	
1. How it is ensured that minimum wages requirements for each worker are fulfilled?	
Section E.1	
1. Where is vintage wise breakup for SDG 13, similar to what PP has shown for other 2 SDGs.	

Section E.2

1. Project value should be Zero for SDG 13. Why this table shown here?

Section E.5

1. How the Ex-ante and Ex post values are comparable?

Section E.6

1. Ensure the compliance with para 2.1.3 and 2.1.4 of the Rule Clarification "Assessment Approach for Reporting Higher Ex-Post Emission Reductions".

Evidence

Clarification is required in various section of MR version 04, dated 12/08/2025, when compared to the MR Template Guide v1.1, registered PDD and project webpage.

1st Response from PD

Date: 17/10/2025

Section D.2

1.

The daily wage data is provided as per the Minimum Wages Act, 1948 which only includes the basic minimum wages for the un-skilled workers. The daily wages for the semi-skilled workers are provided to the VVB in the wage calculation sheet. For the skilled workers, the salary slip is taken as reference and it is on a monthly basis. All these details are specified and provided in the wage calculation sheet, these details are also added in the MR for your reference.

Section E.1

1. The vintage-wise breakup for SDG 13 has been added in Revised MR.

Section E.2

1. The SDG 13 table has been corrected.

Section E.5

1. The wage records for unskilled and semi-skilled workers are based on the Telangana government's minimum daily wage data, which indicates an annual increase in wages. For skilled workers, the data is derived from salary slips, reflecting salary increments from 2021 to 2023 in line with corporate policies. Accordingly, income generation has shown an upward trend in the subsequent years.

Section E.6

1. Section E.6 has been revised to ensure compliance with para 2.1.3 and 2.1.4 of the Rule Clarification "Assessment Approach for Reporting Higher Ex-Post Emission Reductions"

Documents provided by PD for review

Revised MR

1st Review by Assessment Team

Date: 18-Nov-2025

Section D.2-

1. PP has provided the clarification that the daily wage data is based on the Minimum Wages Act, 1948, which specifies basic wages for unskilled workers. Wage details for semi-skilled workers and monthly salary slips for skilled workers have been shared in the wage calculation sheet. However, PP has not mentioned this in MR. Open

Section E.1-

1. PP has added the vintage wise break up in MR and it is consistent with the ER sheet. Hence, closed

Section E.2-

1. PP has updated the SDG 13 table and it is found to be appropriate and consistent with the ER sheet. Hence, closed

Section E.5-



1. PP has not clarified that how the per-day wage figures have been aligned or compared with the total salary paid to all employees. Further explanation is required to demonstrate the comparability between the ex-ante daily wage assumptions and the ex-post total salary data. Open Section E.6- 1. PP has revised the section but it does not clarify how the requirement of the rule clarification has been fulfilled. Also, referred clause is also not provided. Open	
2nd Response from PD	Date: 19/11/2025
Section D.2 1. Now section has been revised and mentioned the compliance in the MR. Section E.5 1. The figure mentioned is for all the 22 employees for the current MP which is paid above the minimum wage requirements and the same has been mentioned in the footnote. However, for the daily wages it has been provided in the wage calculation sheet which has been provided as supporting document for reference. Section E.6- Now PD has revised the section as per the para 2.1.4 of the Rule Clarification "ASSESSMENT APPROACH FOR REPORTING HIGHER EX-POST EMISSION REDUCTIONS.	
Documents provided by PD for review	
1. Revised MR 2. wage calculation sheet 3. Revised MR	
2nd Review by Assessment Team	Date: 23/11/2025
Section D.2- 1. PD has now added the justification in the section and it is found to be correct and appropriate as per the prevailing laws and regulation in the host country India. Hence, closed Section E.5- 1. PP has provided the relevant references to verify the minimum wage values in the vintage 2021, 2022 and 2023 and the salary paid to the workers are found to be in compliance with it. This has been cross-checked through the salary slips and wage calculation sheet submitted by PD. Hence, closed Section E.6- 1. PD has now updated the section and provided justification of the PLF value applied as per the approved PDD and the justification is found to be appropriate. The PLF value does not breach the value approved in the PDD. The same has been justified by quoting the relevant clause 2.1.4 of the Rule Clarification "ASSESSMENT APPROACH FOR REPORTING HIGHER EX-POST EMISSION REDUCTIONS. Hence, closed	

Declaration

All CARs, CLs, and FARs from the Verification

Total Number of CARs	04	Total Number of CLs	04	Total Number of FARs	00
	☐ Open	Status of CLs	☐ Open	Status of FARs	☐ Open



Status of CARs	☒ Closed ☐ Turned to a FAR		☒ Closed ☐ Turned to a FAR		☐ Closed ☐ Turned to a FAR
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7. COMPETENCE OF VERIFICATION TEAM AND TECHNICAL REVIEWERS

Team leader & Technical Area Expert (T.A. 1.2): -



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Shivani Chauhan
Nationality	Indian
Countries of Experience	India, Kenya, Madagascar, Fiji
Educational Qualification	M.Sc. Environmental Science B.Sc. Environmental Science
Year of Experience	4 years
Area of Expertise	Climate Change & Environment Industry
Eligible Sectoral Scope	SS 1 – TA 1.2 - Energy generation from renewable energy sources SS 1 – TA 3.1. Energy demand She is a GS Approved Auditor
Approved for Registries	☒ VCS ☒ SD Vista ☐ Plastic Credit ☒ GS4GG ☒ UCR ☒ UWR ☒ ICR ☒ CERCARBONO ☒ CR-i

Roles approved in VKU

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	NO
Local Expert (India)	YES
TA Expert (1.2 & 3.1)	YES
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	09/04/2025
Approved by	Barun Kumar (Technical Manager)	Date	09/04/2025

Project Trainee: -



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Pallavi Ahuja
Nationality	Indian
Countries of Experience	India
Educational Qualification	B.E. (Electrical Engineering) M.Tech. (Renewable Energy)
Year of Experience	Fresher
Area of Expertise	NA
Eligible Sectoral Scope	NA
Approved for Registries	☒ VCS ☒ SD Vista ☒ Plastic Credit ☒ GS4GG ☒ UCR ☒ UWR ☒ ICR ☒ CERCARBONO ☒ CR-i

Roles approved in VKU

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

Reviewed by	Apoorva Gupta (Quality Manager)	Date	07/04/2025
Approved by	Barun Kumar (Technical Manager)	Date	07/04/2025

**Independent Technical Reviewer & Technical Expert (T.A. 1.2): -****COMPETENCE STATEMENT**

Name	Akhilesh Joshi
Nationality	Indian
Countries of Experience	India, China, Sri Lanka, Bangladesh, Pakistan, Bhutan, Myanmar, Lao PDR, Cambodia, Vietnam, Thailand, Malaysia, Turkey, Georgia, Jordan, Madagascar, Zambia, Malawi, Zimbabwe, Mozambique, Kenya, Angola, Uganda, Tanzania, Nigeria, Guatemala, Mexico
Educational Qualification	MBA (Oil & Gas management) BE (Chemical Engineering)
Year of Experience	17 Years
Area of Expertise	Climate Change & Environment / Industry
Eligible Sectoral Scope	TA 1.1 - Thermal Energy generation from fossile fuels as well as thermal electricity from Solar TA 1.2 - Energy generation from Renewables Energy sources TA 3.1 - Energy demand TA 4.1 – Manufacturing Industries (Cement sector) TA 8.1 - Mining and Mineral Processes TA 10.1 - Mining and Mineral Processes TA 13.1 - Solid Waste and Wastewater He is a GS Approved Auditor
Approved for Registries	☒ VCS ☒ SD Vista ☐ Plastic Credit ☒ GS4GG ☒ UCR ☒ UWR ☒ ICR ☒ CERCARBONO ☒ CR-i

Roles approved in VKU

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (<i>Country Wise</i>)	YES
TA Expert (1.1, 1.2, 3.1, 4.1, 8.1, 10.1, 13.1)	YES
Financial Expert	YES

Reviewed by	Apoorva Gupta (Quality Manager)	Date	09/04/2025
Approved by	Barun Kumar (Technical Manager)	Date	09/04/2025

APPENDIX 1: BREAKDOWN DETAILS

Date	Error Description	Action Taken	Duration (Hrs.)
May-2021	Inverter tripped on LIR, Abnormal Dc circuit, High DC input voltage	String cable rectification done, Inverter replaced with new one, Fault rectified	13:51
June-2021	Inverter tripped on Abnormal DC Circuit, Inverter tripped on internal issue, ACCB Isolator internal failure	Talked with Huawei team and replaced the inverter, replaced with the another ACCB, Found 150 Sq mm Cable fault and replaced with new cable	29:22
July-2021	String cable grounded, DC compartment burnt, Abnormal DC circuit, Incomer-5 Tripped on HT Cable ground Fault,	Removed the ground string and rectification done, 300SQ.mm cable Fault identified and Joint done, Talked with huawei team and replaced the inverter	140:38
Aug-2021	String Open due MC4 Connector loose condition, Inverter tripped due to DC Cable damage, DC Cable damage due to rodent attack, Inverter tripped on Internal Fault, Abnormal DC Circuit	Replaced DC Cable, String Rectified, Cable replaced, DC Cable damage has been rectified, Talked with huawei team and replaced the inverter	211:13
Sept-2021	Inverter Tripped on Low Insulation Resistance, MC4 melted, Cable cut by the Rodent bite, MC4 Loosen, Cable grounded	Replaced connector, MC4 Connector replaced, Recrimping done, Informed to Huawei team. No Spares Available inv at site	413:35
Oct-2021	Lug loose connection, Cable cut due to rodent attack, Y connector melted, String open due to Dc Cable damage, MC4 damaged	Mc4 connector replaced with new, Cable replaced, DC Cable replaced with new Cable	290:29
Nov-2021	String Cable grounded, ACCB OFF Due to internal problem of ACCB, String open due to DC Cable damaged condition, Crimping done	Cleared the fault and ON the Inv, Replaced with new cable and String connected properly, Replaced the connector, Cleared the fault and ON the Inv	54:95
Dec-2021	Connector Damaged, Mc4 connector damaged, Lug Disconnected, Cable cut by rodent attack, DC Cable grounded	Mc4 replaced, Lugging done, Connector replaced, LIR Cleared, Crimping done	70:96
Jan-2022	Lug melted, MC4 Damaged	Relugging done, MC4 Replaced	1:63
Feb-2022	MC4 Damaged, Cable Cut Due to Rodent Attack, Connector Damaged, String open due to Y-Connector Loose condition	MC4 Replaced, Cable Replaced, Cable identified & Rectified, Y-String connected properly after crimping	31:29
March-2022	Y connector Damaged, String Open due to Cable grounded, Grid failure from TSTRANSCO	Y Connector replaced, String connected properly after placing new cable, Cable replaced	12:97

Apr-2022	LIR, 50 SQ mm cable fault, DC Cable cut, Cable ground fault	Ground fault cleared.And turned ON inverter, MC4 melted replaced new, Cable replaced	11:55
May-2022	one string ground fault, Lug loosen, Y CONNECTOR MELTED, High Dc input voltage	Dc cable replaced, Recrimpping done, Replaced Y connector, inverter replaced after confirming HUAWEI TEAM	06:07
June-2022	Abnormal Inverter Circuit, String cable damaged, Inverter Internal Failure	Spoken with Huawie team and replaced, String cable damaged	13:03
July-2022	Inverter Abnormal DC Circuit, Internal Fault, High dc input voltage	Spoken with Huawei Team And replaced The Inverter	62:47
Aug-2022	Inverter tripped on low Insulation Resistance, MC4 connector melted, DC cable damaged, Cable fault, Y-connector melted, Grid Curtilamate	Spoken with huawie team and replaced with new one, new MC4 connector replaced, New DC cable replaced, Grid Restored	27:67
Sept-2022	132KV Line shutdown, Inverter tripped on Internal Fault, Inverter tripped on Abnormal DC Circuit,	Spoken with huwaie team, WIP, Inspection done and found CT Damaged and same replaced	484:17
Oct-2022	Inverter tripped on Internal Fault, DC Cable fault, PTR-01 Tripped on REF LV & Differential Protection, Incomer-05 tripped on OC/EF	Spoken with huwaie team and replaced the same, Visual Inspection and Cable IR Values Checked Found Y-Phase Grounded, Faulty cable jointing work completed	82:06
Nov-2022	DC Cable ground fault, Y-connector melted, Inverter tripped on Low Insulation resistance, Y-connector melted	new cable replaced, New y-connector replaced done, Spoken with huwaie team and replaced the same	30:75
Dec-2022	DC Cable fault, Inverter tripped on internal fault	New cable replaced, Logs sent to Huwaie team	06:25
Jan-2023	Connctor damaged, Inverter Tripped on Abnormal Grid voltage, Due to relay malfunction, String Cable Damaged	Connector replaced, Invereter Replaced, Relay NO , NC Contacts checked and restored the feeders, new cable replaced	06:12
Feb-2023	Inverter internal failure, MC4 Loose connection, Grid side shutdown taken due to ABT Meter calibration and CT,PT Testing work purpose	Spoken with Huawei team. And mail sent, Recrimpping done, Once conform the grid side restoration	13:02
March-2023	Y-connector damage	replaced new	03:07
Apr-2023	y connector damage	replaced new	02:50

History of the Document

Version	Date	Amendment Summary*	Prepared By	Approved By
3.2	30.07.2025	Inclusion of Column for Gender in tables of Section 2	Apoorva Gupta	Dr. Vikas Kumar Aharwal
3.1	14.09.2024	Duplicacy of executive summary and table is removed from section 1	Apoorva Gupta	Dr. Vikas Kumar Aharwal
3.0	21/05/2024	Signature of TR added as approver	Apoorva Gupta	Dr. Vikas Kumar Aharwal
2.1	23/04/2024	Change in VKU address at front page	Apoorva Gupta	Dr. Vikas Kumar Aharwal
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