VERIFICATION REPORT FOR

"BUNDLED SOLAR POWER PROJECT BY SOLARARISE INDIA PROJECTS PVT. LTD."

Document Prepared by LGAI Technological Center, S.A. (Applus+)

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Summary:

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by SolarArise India Projects Private Limited to conduct the verification of the project - "Bundled Solar Power Project by SolarArise India Projects Pvt. Ltd.", VCS ID 1762 regarding the relevant requirements of VCS programme guidelines and standard (VCS standard version 4.3, & VCS program guide version 04.1). Relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting has been applied for verification.

The monitoring period covers under this verification are from 01/09/2021 to 31/03/2022 (both days included).

The verification includes confirming the implementation of the monitoring plan of the registered Joint VCS PD (v 02, dated 09/06/2018) and MR (version 02, dated 18/07/2022) and the application of the monitoring methodology as per ACM0002, Version 18.1 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources".

The project involves installation of solar PV project in three different states of India. The total installed capacity of the project is 120 MW. The details of the each for the sub-project and their location of installation are provided in the table below:

State	District/Village	Capacity (MW)	Project Developer	Date of commissioning
Telangana	Mahbubnagar/ Palwai	10	Talettutayi Solar Projects Pvt Ltd	23/06/2016
	Mahbubnagar/ Palwai	10	NV Vogt Solar One Pvt Ltd (previously known as	23/06/2016

			Talettutayi Solar Projects Six Pvt Ltd)	
Karnataka	Koppal/ Chikkoppa and Mudhol	30	Talettutayi Solar Projects One Pvt Ltd	05/01/2018
	Koppal/ Kerahalli	20	Talettutayi Solar Projects Two Pvt Ltd	07/08/2019
Maharashtra	Beed/Chatgaon	50	Talettutayi Solar Projects Four Pvt Ltd	10/08/2017
Total (MW)	-	120	-	-

The project activity involves electricity generation by the solar power supplying the generated electricity to respective state DISCOM (part of integrated Indian grid). The project being a renewable energy generation activity, leads to reduction in fossil fuel dominated electricity generation. The project activity results in reductions of greenhouse gas (GHG) emissions that are real, measurable, and verifiable and plays beneficial role in the mitigation of climate change.

A risk-based approach has been followed to perform this verification. During verification, 02 Corrective Action request (CARs), 00 Forward Action request (FARs), and 01 Clarification request (CLs) were raised and successfully closed.

The review of the Monitoring report and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and project owners have provided LGAI Technological Center S.A. (Applus+ Certification) with sufficient evidence to verify the fulfilment of the stated criteria of VCS.

LGAI Technological Center S.A. (Applus+ Certification) confirms that the project is implemented in accordance with the registered Joint VCS PD & MR. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the project's GHG emissions, and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information seen and evaluated we confirm that the emission reductions from the project activity "Bundled Solar Power Project by SolarArise India Projects Pvt. Ltd." in India during the period 01/09/2021 to 31/03/2022 (including both days) amount to 126,432 tons of CO_2e.

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1 INTRODUCTION

1.1 Objective

LGAI Technological Center S.A. (Applus+ Certification) (Hereafter referred as Applus+ Certification) has been contracted by SolarArise India Projects Private Limited, to undertake the verification of the renewable energy project titled "Bundled Solar Power Project by SolarArise India Projects Pvt. Ltd." (VCS ID-1762) The verifiers have reviewed the GHG data collected to date for the monitoring period from 01/09/2021 to 31/03/2022 (both days included) covered in this verification. The objective of this verification is a thorough and independent assessment of registered project activities against the applicable VCS requirement by the VVB. The verification process shall determine whether the proposed project activity complies with the requirements of latest VCS guidelines, applicability conditions of the selected methodology, relevant host country regulations and guidance issued by the VCS Board.

1.2 Scope and Criteria

The scope of verification is to assess the claims and assumptions made in the VCS monitoring report (MR) against the VCS criteria, including but not limited to, VCS standard, applied methodology and other relevant rules and requirements established for VCS project activities.
The Verification is not meant to provide any consulting towards the project participants. However, stated requests for clarification and/or correction actions request may have provided inputs for improvement of the project design.

1.3 Level of Assurance

The level of assurance of the verification report falls under reasonable assurance engagements. Reasonable assurance is a high level of assurance regarding material misstatements, but not an absolute one.
Reasonable assurance includes the understanding that there is a remote likelihood that material misstatements will not be prevented or detected on a timely basis. To achieve reasonable assurance, the auditor needs to obtain sufficient appropriate audit evidence to reduce audit risk to an acceptably low level. This means that there is some uncertainty arising from the use of sampling, since it is possible that a material misstatement will be missed.
The evidence used to achieve a reasonable level of assurance is specified in section 2.3 and 2.4 of this report. Materiality for the project is 5%, however the assessment team has verified 100% data (no sampling plan is applied), hence it is sufficient to meet the materiality requirements of the project.

1.4 Summary Description of the Project

The project activity comprises installation of grid connected solar photovoltaic based power project in the state Telangana, Karnataka, and Maharashtra in India. The project activity involves installation of 20 MW solar project in Mahbubnagar District of Telangana, 50 MW solar project in Koppal district- Karnataka, 50 MW solar project in Beed District of Maharashtra, India.

There are 5 SPDs (solar project developer) involved in the project activity and each SPD is subsidiary of SolarArise India Projects Pvt. Ltd. (project proponent). The details of investors (SPDs) installed capacity with location and commissioning status is provided under "summary" section of this report.

The sub-projects of capacity 10 MW each located in Telangana is developed by Talettutayi Solar Projects Pvt Ltd and Talettutayi Solar Projects Six Pvt Ltd, has signed power purchase agreement (PPA) with the Southern Power Distribution Company of Telangana (TSSPDCL), is the Electricity Distribution company owned by the government of Telangana for the five southern districts of Telangana.

The sub-project 50 MW located in Maharashtra developed by Talettutayi Solar Projects Four Pvt Ltd and sub-project 30MW located in Karnataka developed by Talettutayi Solar Projects One Pvt Ltd, both the SPDs has signed power purchase agreement (PPA) with SECI (Solar Energy Corporation of India Limited), is a company of the Ministry of New and Renewable Energy, Government of India, established to facilitate the implementation of the National Solar Mission. It is the only Central Public Sector Undertaking dedicated to the solar energy sector.

The sub-project 20 MW located in Karnataka developed by Talettutayi Solar Projects Two Pvt Ltd, has signed power purchase agreement (PPA) with Bangalore Electricity Supply Company (BESCOM) is the Electricity Distribution company owned by the government of Karnataka.

The commissioning date of each sub-project is verified though the through the respective commissioning certificate/14/. Technical specifications of the equipment's i.e., solar PV modules, investors and transformers involved in the project activity as reported under section 3.1 of the MR are verified through the physical inspection during the site visit and are found to be consistent with the same as mentioned in the MR and registered PD.

Location of the project was verified through Google Map (https://www.google.co.in/maps) and found consistent with the data provided in the registered Joint VCS PD & MR/01/. The emission reductions from the project activity during the period 01/09/2021 to 31/03/2022 (including both days) amount to 126,432 tons of CO2e.

Based on the information's verified during the site, interviews with PPs representatives and desk review of the documents, the assessment team is able to confirm that the project activity is fully functional and implemented as described in the registered joint VCS PD &MR.

2 VERIFICATION PROCESS

The registered VCS project is undergoing fourth verification under VCS, the approach adopted to ensure the quality of emission reductions is described in the following sections.

2.1 Method and Criteria

The verification approach consists of two phases.

In the first phase, Applus+ Certification completed a strategic review and risk assessment of the project's activities and processes to gain a full understanding of:

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

At the end of this phase, Applus+ Certification produced a Verification Checklist which, based on the risk assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

In the second phase using the Verification checklist, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the VCS MR/04/ for the period in question. This involved interview of project proponent representative's and a desk review of the Monitoring Report. This verification report describes the findings of this assessment.

2.2 Document Review

The verification is performed primarily as a document review of the registered joint VCS PD&MR/01/, previous MR and Verification report/03/ and associated documents as stated in detail in appendix 1 of this document. The assessment is performed by a verification team using a protocol. The cross checks between information provided in the Monitoring report, registered VCS PD and information from sources other than those used, if available, the team's sectoral or local expertise and, if necessary, independent background investigations.

2.3 Interviews

The site visit for the project location, by the assessment team, was conducted on 20/06/2022, 22/06/2022, 08/07/2022 and the following stakeholders were interviewed.

Location: Mahabubnagar district, Telangana

Date: 20/06/2022

S N	Name	Organization

1	Mr. Rakesh Patel	Assistant GM, SolarArise
2	Mr. T. Prashanth Reddy	SeniorEngineer, SolarArise
3	Mr. Kiran N	In Charge (EPC)
4	Mr. Rakesh Munduli	Engineer (EPC)

Location: Beed district, Maharashtra

Date: 22/06/2022

S N	Name	Organization
1	Mr. Rakesh Patel	Assistant GM, SolarArise
2	Mr. Akash Salgar	Engineer, SolarArise
3	Mr. Abhishek Argutia	Engineer, (EPC)

Location: Koppal district, Karnataka

Date: 08/07/2022

S N	Name	Organization
1	Mr. Rakesh Patel	Assistant GM, SolarArise
2	Mr. Jafer Jagirdar	Assistant Manager, SolarArise
3	Mr. Chanikya L	Site Engineer, (EPC)

The topics covered during interview ranges from general features and implementation of project to technical details of the project like calibration details, monitoring and measuring system and data collection, recording and archiving procedures. The assessment was drawn based on the feedback received during interview coupled with the documentation and on-site observations.

Interviews with local stakeholders:

The verification team has interviewed the local stakeholders and they were questioned for various topics as summarized below.

a) Effect of project on their livelihood and income
b) Any problem related to project installation in nearby areas
c) Are they happy with the benefits and development as CSR activity of the PP?
d) General feedback about the project
e) Do they know about the grievance and feedback back register/mechanism?
f) Any feedback; Concern (C) Positive (P) and Negative (N)

S. No.	Name of stakeholder	Village	Feedback (Positive/Negative/Concerns)
Location: Koppal district, Karnataka			
1	Mallappa Adiveppa Batageri	Mudhol	Positive
2	Muttappa Hdagali	Hosalli	Positive

3	Sharanappa Adiveppa Batageri	Mudhol	Positive
4	Irappa Kolli	Chikkoppa	Positive
5	Shivayya Hiremath	Hosalli	Positive
6	Amaresh Ramachandrappa Hugar	Kerehalli	Positive
7	Shekharappa Bheemappa Hugar	Agalakera	Positive
8	Eshappa Uppar	Kerehalli	Positive
9	Mahesh	Kerehalli	Positive
10	Sharanappa Betadappa Karkihalli	Agalakera	Positive
Location: Mahabubnagar district, Telangana			
1	K Ramesh	Palwai	Positive
2	R Devadash	Palwai	Positive
3	Chanti	Palwai	Positive
4	R Yellappa	Palwai	Positive
5	Ramadu	Palwai	Positive
6	B Anji	Palwai	Positive
7	G Ramesh	Palwai	Positive
8	S Nalla Reddy	Palwai	Positive
9	R Laxmanna	Palwai	Positive
10	P Ratnam	Palwai	Positive
Location: Beed district, Maharashtra			
1	Deepak Sangle	Telgaon	Positive
2	Abhiman Patekar	Telgaon	Positive
3	Ajay Wanve	Telgaon	Positive
4	Avanish Solanki	Telgaon	Positive
5	Babasaheb Kubhar	Telgaon	Positive
6	Babasaheb Rambau Tidke	Telgaon	Positive

2.4 Site Inspections

The onsite visit was undertaken by the verification team member Ravi Kant Soni (Lead Auditor) at respective locations, to carry out the following.

a) An assessment of the implementation and operation of the registered project activity as per the registered VCS PD and VCS MR.
b) A review of information flows for generating, aggregating, and reporting the monitoring parameters.
c) Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD.
d) 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.
e) A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PD, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline.
f) A review of calculations and assumptions made in determining the GHG data and emission reductions.
g) 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.

2.5 Resolution 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 interaction with site personnel over phone. 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 CDM requirements have been met. All CARs and CLs raised by the Applus+ Certification during verification shall be resolved prior to submitting a request for issuance.

FAR (Forward Action Request) is raised during verification if the monitoring and reporting require attention and/or adjustment for the next verification period. During the current verification, 02 Corrective Action request (CARs), 00 Forward Action request (FARs), and 01 Clarification request (CLs) were raised and successfully closed. All the findings that are raised and communicated to project participant during the verification are included under Appendix 3. 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.

2.5.1 Forward Action Requests

The project activity is undergoing fourth verification in VCS, there were no FARs raised during the validation/02/ or previous verification/05/.

2.6 Eligibility for Validation Activities

This section is not applicable for present verification, as Applus+ Certification holds the accreditation for Validation of projects under this Sectoral Scope.

3 VALIDATION FINDINGS

Not applicable.

3.1 Participation under Other GHG Programs

The project activity is registered under the VCS only (VCS Project ID 1762) and is not registered under any other emissions trading program or any other mechanism that includes GHG allowance trading. PP also confirms that net GHG emission reductions or removals generated during this monitoring period shall not be used for compliance under any such programs or mechanisms. This was confirmed through a declaration/14/ submitted by the PP and hence accepted by the assessment team.

3.2 Methodology Deviations

There is no methodology deviation identified during the current monitoring period.

3.3 Project Description Deviations

There is no project deviation identified during the current monitoring period. However, during the previous monitoring periods following deviation was considered:

In accordance with the registered PD, the net electricity supplied to the grid (for Karnataka site) is calculated as the difference of electricity exported to the grid and electricity from grid by the project activity. However, in actual practice net electricity supplied to the grid ($EG_{PJ,y}$) is calculated as electricity exported after deduction of 115%* import and transmission losses. The project proponent has corrected the formula used in the calculation of $EG_{PJ,y}$ and considered this change as project deviation in the previous monitoring period.

The project deviation considered by the project proponent during the previous monitoring period is valid for the current monitoring period.
The assessment team can confirm that the deviation identified during the previous monitoring period is appropriately described and justified and the project remains in compliance with the VCS rules. Also, the deviation does not have an impact on the applicability of the methodology, additionality, or the appropriateness of the baseline scenario.

3.4 Grouped Project

Not applicable. The project activity is not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The project activity involves the installation of Solar PV project. The total installed capacity of the project is 120 MW and located in three different states in India. The project is promoted by SolarArise India Projects Private Limited.
This project will reduce the GHG emissions generated by the current generation energy mix in India's Power Grid, which is dominated by fossil fuel-based grid connected power plants. The power generated through the proposed project activity being supplied to Indian grid through a contractual arrangement (PPA) with the respective state utilities.
The technical specification of the project activity equipment's has been checked physically during the site visit and are found to be consistent with the mentioned under section 3.1 of MR. The SCADA system, indicating the real-time generation data is also checked and hence it is confirmed that the project is fully functioning.

The monitoring plan of registered VCS PD/01/ includes the parameter "Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh), $EG_{PJ,y}$.

Monitoring procedure (Location- Telangana):

There are two sub-projects 10MW each are implemented in Mahabubnagar district in Telangana state of India. During the site visit the assessment team has observed that both the sub-projects are connected to 132/33 kV Substation at Gadwal maintained by the state utility (TSSPDCL). There are separate set of dedicated meters (main, check and standby meter) are installed at the Gadwal substation for monitoring of net electricity supplied to the grid ($EG_{PJ,y}$) through the individual project plant. All the energy meters used for the monitoring are of accuracy class 0.2s and to be sealed & calibrated by the state utility once in 5 years. The assessment team has verified the calibration certificates/06/ and confirmed that the meters are calibrated in accordance with the frequency as outlined in the registered monitoring plan/01/.

The state utility issues month wise "JMRs" which contains the value of net elasticity exported to the grid by each sub-project. The values (mentioned in "JMRs") are the main source to calculate the baseline emission by this project activity and same is in line with the information provided in registered monitoring plan /01/. The measurement results are cross checked with records of invoices, and it is in line with applied methodology. Thus, this parameter is considered in emission reduction calculations.

The assessment team has physically verified the metering arrangement during the site visit, and it is observed that, the project activity is connected to the grid through an appropriate power evacuation system. Appropriate metering system and calculation procedures are transparently described in the monitoring plan to enable accurate determination of emission reductions achieved by the project activity.

The net electricity supplied to the grid by project activity is being measured continuously by energy meters of accuracy class 0.2s located at the sub-station and recorded at least monthly basis. This is in line with methodology and is accepted.

Monitoring procedure (Location- Maharashtra):

The sub-project activity of capacity 50MW is implemented by the developer Talettutayi Solar Projects Four Pvt Ltd in Beed district of Maharashtra.

During the site visit the assessment team has observed that the sub-project is connected to 132/33 kV Telgaon Substation maintained by the state utility (MSEDCL). There is set of dedicated meters (main, check and standby meter) is installed at the Telgaon substation for monitoring of net electricity supplied to the grid ($EG_{PJ,y}$) through the project.

The meters are under control of state utility (MSEDCL), sealed in presence of both the state utility official & representative of PP. Monthly Joint Meter Reading is being taken jointly by the officials of state utility and project participant's representative (O&M contractor) on monthly basis and accordingly monthly JMRs is being prepared. The energy meters used for the monitoring are of accuracy class 0.2s and calibrated by the state utility once in 5 years. The assessment team has verified the calibration certificates/06/ and it is observed that the delay in calibration of meters occurred during the current monitoring period (please refer section 4.5 of this report for complete details).

Monthly "JMR" for the project developer is issued by the state utility that indicate the net electricity supplied to the grid by the project activity. The measurement results are cross checked with records of invoices, and it is in line with applied methodology. Thus, this parameter is considered in emission reduction calculations.

The assessment team has physically checked project site (including monitoring equipment's), and it is observed that, the project activity is connected to the grid through an appropriate power evacuation system. Appropriate metering system and calculation procedures are transparently described in the monitoring plan to enable accurate determination of emission reductions achieved by the project activity.

Monitoring procedure (Location- Karnataka):

There are two sub-projects implemented in Koppal district of Karnataka state. The sub-project of capacity 30 MW is implemented by Talettutayi Solar Projects One Pvt Ltd and other one of capacity 20MW by Talettutayi Solar Projects Two Pvt Ltd.

During the site visit the assessment team has observed that the sub-project (30 MW) is connected to 110/33/11 KV MUSS Yelburga substation and 20 MW is connected to 110/33/11 KV Kerehalli substation. Both the substations are owned & maintained by the state utility (KPTCL). There is one separate set of dedicated meters (main and check meter) installed at each substation for monitoring of net electricity supplied to the grid ($EG_{PJ,y}$) through the individual project plant. All the energy meters used for the monitoring are of accuracy class 0.2s and to be sealed & calibrated by the state utility once in 5 years. The assessment team has verified the calibration certificates/06/ and confirmed that the meters are calibrated in accordance with the frequency as outlined in the registered monitoring plan/01/.

Monthly Joint Meter Reading is being taken jointly by the officials of state utility and project participant's representative (O&M contractor) on monthly basis and accordingly monthly JMRs (Form-B) is being prepared.

Monthly JMR (Form-B) issued by the state utility provide the values of the electricity exported to the grid, electricity imported from grid, net electricity exported to the grid and the transmission losses incurred while transmitting the electricity form project site to receiving substation.

Net electricity supplied to the grid by the individual project ($EG_{PJ,y}$) is calculated and based on the measured values of export and import on the energy meter and transmission losses as following:

$EG_{PJ,y} = EG_{export} - (115\% * EG_{import}) - T_L$

Where,

EG_{export}= Electrcity exported by the project

EG_{Import}= Electrcity imported by the project

T_L= Transmission losses.

The assessment team has physically checked project site (including monitoring equipment's), and it is observed that, the project activity is connected to the grid through an appropriate power evacuation system. Appropriate metering system and calculation procedures are transparently described in the monitoring plan to enable accurate determination of emission reductions achieved by the project activity.

Monitoring of SDGs:

During the current monitoring period, following SDGs are monitored:

Goal 7. Ensure access to affordable, reliable, sustainable, and modern energy for all

SDG Target: 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

SDG Indicator: 7.2.1 Renewable energy share in the total final energy consumption

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

Means of verification	
	Criteria/Requirements: Measuring /Reading /Recording frequency VVB assessment: The parameter is calculated as difference of electricity exported and imported from grid. This parameter is recorded monthly basis in line with the approved monitoring plan.
	Criteria/Requirements: Data source VVB assessment: This parameter is recorded on monthly basis in the JMRs issued by state utility.
	Criteria/Requirements: How were the values in the monitoring report verified? VVB assessment: The data transfer process for the said parameter is as follows: The Joint meter reading at all the metering points at DISCOM substation is taken by the representatives of DISCOM (UPPCL) in the presence of PPs representative in the form of JMRs. Cumulative value of $EG_{PJ,y}$ for entire monitoring period is reported in the monitoring report, however monthly values are reported in the ER calculation sheet. The monthly values were verified from the JMRs issued by state utility/08/ and found to be consistent. Value of this parameter for the current monitoring period is 130,978 MWh.
	Criteria/Requirements: If applicable, has the reported data been cross-checked with other available data? VVB assessment: Monthly reported values of $EG_{PJ,y}$ for the current monitoring period were further cross-checked with the monthly invoices raised by the PP /07/ to state utility and found to be consistent.

	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, all the stakeholders, namely, the Grid Authority (DISCOM), and the O&M Contractor, implemented the adequate QA/QC procedures.
Findings	No issues identified and hence finding was not raised for this section	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

Goal 8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all

SDG Target: 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

SDG Indicator: 8.8.1 Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status

Relevant Parameter: Number of occupational health and safety trainings

Means of verification	**Criteria/Requirements**	**VVB assessment**
	Measuring /Reading /Recording frequency	Project participant conducts various activities on regular basis for improving the skills and thereby ensuring safety of its employees. Various indicators of secure working environments viz. health care facilities, skill build-up through workshops and trainings, putting safeguard in place and living standard of the plant staff are monitored as and when such activities are organised/21,22,23/.
	Data source	The records for the training regarding the occupational health, safety of employees and working environment i.e. training attendance, photographs etc.

<table>
<tr><td></td><td>How were the values in the monitoring report verified?</td><td>The following training programs/21/ to enhance the safety awareness, operational skills and occupational health management have been organized during the current monitoring period.
<table><tr><td>Training Objective</td><td>Date</td></tr><tr><td>Importance of PPEs during Work</td><td>05/01/2022</td></tr><tr><td>Fire Fighting</td><td>06/01/2022</td></tr><tr><td>First Aid</td><td>07/01/2022</td></tr><tr><td>Omicron</td><td>23/01/2022</td></tr><tr><td>Fire Mock Drill</td><td>24/01/2022</td></tr><tr><td>Fire Mock Drill</td><td>24/01/2022</td></tr><tr><td>Safety at Site & Importance of PPEs</td><td>15/02/2022</td></tr></table></td></tr>
<tr><td></td><td>If applicable, has the reported data been cross-checked with other available data?</td><td>Yes, the reported data has been cross checked with the quantitative information about the secure working environments which includes the records of HR, training, health care facilities etc. are maintained /22,23,24/.</td></tr>
<tr><td></td><td>Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?</td><td>Counting of the number of trainings and respective attendees is done by a training attendance sheet which states the programme name, venue, faculty, date and timing, attendee details (name, designation, and department). Each training attendance sheet has a unique form number.</td></tr>
<tr><td>Findings</td><td colspan="2">No finding was raised.</td></tr>
<tr><td>Conclusion</td><td colspan="2">The parameter has been monitored appropriately, in accordance with the sustainability monitoring plan (as per measurement methods and procedures to be applied). The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.</td></tr>
</table>

Goal 13. Take urgent action to combat climate change and its impacts

SDG Target: 13.2 Integrate climate change measures into national policies, strategies, and planning

SDG Indicator: 13.2.2 Total greenhouse gas emissions per year

Relevant Parameter: Emission reductions achieved (tCO_2)

<table>
<tr><td>Means of verification</td><td>
<table>
<tr><th>Criteria/Requirements</th><th>VVB assessment</th></tr>
<tr><td>Measuring /Reading /Recording frequency</td><td>Emission reductions achieved due to implementation of the Solar power plant is monitored once during each monitoring period.</td></tr>
<tr><td>Data source</td><td>Monthly JMRs & ER calculation sheet.</td></tr>
<tr><td>How were the values in the monitoring report verified?</td><td>The value is calculated in line with the procedure as described in registered PD.
Value of this parameter for the current monitoring period is 126,432 tCO_2.</td></tr>
<tr><td>If applicable, has the reported data been cross-checked with other available data?</td><td>Not applicable</td></tr>
<tr><td>Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?</td><td>No separate QA/QC procedures is required.</td></tr>
</table>
</td></tr>
<tr><td>Findings</td><td>No issues identified and hence finding was not raised for this section</td></tr>
<tr><td>Conclusion</td><td>The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.</td></tr>
</table>

Conclusion:

The assessment team has verified the final VCS MR/04/ and confirmed that the procedure for data uncertainty, emergency preparedness, roles and responsibility, operational and management structure are mentioned in the MR, in line with the same as described in the registered joint VCS PD&MR/01/. The monitoring plan completely describes all measures to be implemented for monitoring all parameters required. The monitoring plan described the positioning of the equipment. Calibration frequency for Energy meters is once in 5 years. Also, CEA Notification/15/ No. 502/70/CEA/DP&D dated 17/03/2006 which is considered as national standard mentions that “All interface meters shall be tested at least once in five years.” Hence calibration frequency once in 5 years considered for the project activity is found to be appropriate.

The information relating to the project implementation, provided in the Monitoring Report /04/ is consistent with that stated in the registered PD /01/. The data and variables provided in the monitoring report are the same as stated in the registered PD/01/. Total emission reductions achieved under this monitoring period 01/09/2021 to 31/03/2022 (including both days) is 126,432 tCO_2e.

The required monitoring systems have been installed and are operational/20/. The meters comply with appropriate quality standards applicable for the used technology/15/. The accuracy class of the meters installed for the project activity was verified against the registered joint VCSPD&MR/01/; VCS MR/04/, joint VCS validation & verification report /02/ and cross-checked against the PPAs/12/ signed for the project activity, found to be in order. There was no major breakdown or shutdowns during the monitoring period which might affect the applicability of methodology or might cause material errors in emission reductions. Assessment team concludes the following:

a) There are no material discrepancies between project implementation and the project description provided in the registered PD/01/.

b) The monitoring plan is implemented completely and monitoring system (i.e., process and schedule for obtaining, recording, compiling, and analyzing the monitored data and parameters) is appropriate.

c) There are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology/09/.

d) The GHG emission reductions or removals generated by the project have not included in an emissions trading program or any other mechanism that includes GHG allowance trading/14/.

e) The project has not received or sought any other form of environmental credit or has become eligible to do so since validation or previous verification/14/.

f) The project has been registered under VCS only.

g) The project activity is complying with indicators for sustainable development in the interim approval guidelines published by Ministry of Environment, Forests and Climate Change, Government of India, as discussed under section 1.11 of MR.

In view of the information's as verified above the assessment team can conclude that the project has been implemented as described in the project description.

4.2 Safeguards

4.2.1 No Net Harm

There is no negative impact to any socio-economic conditions of the region due to the project activity. As per the notifications issued by Ministry of Environment, Forest and Climate Change dated 13/05/2011; Environmental Impact Assessment (EIA) for the solar projects is not required to be done (Ref: http://moef.gov.in/wp-content/uploads/2017/09/OM-SolarPV.pdf).
This project activity will not involve any negative environmental or socio-economic impacts, as the project activity involves generation of power using solar energy which is a clean source of energy. Hence no mitigation measures are required.

4.2.2 Local Stakeholder Consultation

The PP conducted a consultation meeting with the local stakeholders separately at project locations and details is provided under the below table:

Project Location	Date of meeting	Mode of invitation	Meeting Venue
District: Mahabubnagar State: Telangana	04/05/2015	Public notice and Personal Invitation letter	Project site
District: Beed State: Maharashtra	17/09/2016	Public notice and Personal Invitation letter	Project site
District: Koppal State: Karnataka	21/01/2017	Public notice and Personal Invitation letter	Project site

The stakeholders comprised of villagers from nearby villages, employees of project developers and those of contractors working at the site. The stakeholders were invited through public notice and personal invitation letters. The stakeholders identified by the project participant were local villagers who are the major population of the area, local communities, and project employees, including the contractors. The assessment team verified the list of participants who attended the stakeholder meeting and confirms the stakeholders identified were relevant. The assessment team also verified the minutes of meeting to note that no negative comments were received.
The project activity undergoing fourth verification and local stakeholder consultation was appropriately conducted prior to validation to inform the design of the project and maximize participation from stakeholders during the validation.

The project proponent has implemented mechanism for ongoing communication with local stakeholders to allow stakeholders to raise concerns about potential negative impacts during implementation and operation of the project activity. The project proponent has placed a grievance register and a grievance box at respective site office/19/, where the local villagers can register their concerns.

The assessment team has interviewed the local villagers and checked the grievance register maintained at respective site office/19/ and confirmed that no formal complaints were received during the current monitoring period.

4.3 AFOLU-Specific Safeguards

For non-AFOLU projects, this section is not required.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The calculation of the emission reductions is found to be correct. The details of the reported and the verified values for all parameters are listed in section 4.5 of this report.

The parameter $EG_{PJ,y}$ is directly sourced from monthly JMRs issued by state utility. The PP has provided the complete set of data for all the monitored parameters in the ER spreadsheet/05/. This data has been verified as described in section 4.5 below. The formulae & method used to calculate the baseline emissions, project emissions and leakage are appropriate and in line with the approved methodology ACM0002 version 18.1.

The PP has calculated the grid emission factor as per the combined margin approach described in the 'Tool to calculate the emission factor for an electricity system', version 06.0. The grid emission factor has been calculated as the weighted average of OM & BM; and has been fixed ex-ante for the entire crediting period.

The OM and BM have been obtained from a publicly available source i.e., "CO2 Baseline Database for Indian Power sector", version 12/10/ published by Central Electricity Authority, Ministry of Power, and Government of India. The OM has been determined as the average of the previous 3 years values obtained from the CEA database/10/. The value of BM has been identified directly from the CEA database. The combined margin emission factor was arrived at by applying weights of 75% for OM and 25% for BM, as specified in the tool. The OM and BM have been calculated to be 0.9843 tCO2/MWh and 0.9083 tCO2/MWh respectively. Applying the weights, the grid emission factor has been calculated to be 0.9653 tCO2/MWh.

As per CER excel spreadsheet/05/ submitted by the PP, the net emission reductions for the current monitoring period were verified as 126,432 tCO2e for the current monitoring period.

The assessment team able to confirm that the GHG emission reductions and removals have been quantified correctly in accordance with the project description and applied methodology.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

All the data recorded is following the registered Joint VCS PD & MR/01/. The assessment team has checked the monthly JMRs for electricity generated and supplied by project activity/08/ for the current monitoring period to verify the values of monitoring parameter reported in ER calculation sheet and found to be consistent. Since the monthly JMRs prepared and issued by state utility, they are found to be reliable and authentic.

The monitoring of the project activity is found to be in accordance with the monitoring methodology described in ACM0002, Version 18.1 /09/. The monitoring mechanism is effective and reliable. During the site visit, personnel involved at various levels of the operation of the project activity have been interviewed to confirm that the plant personnel are conscious of the importance of the monitoring activities. The verification of the plant records during the site visit are also substantiating consistency in recording and reporting of monitored data.

The assessment team has checked the online monitoring system (SCADA) & confirms that the monitoring systems have been installed and are operational. The meters comply with appropriate quality standards applicable for the used technology. The accuracy class of the meters installed for the project activity was verified through the registered VCS PD & MR/01/, MR /04/, and calibration certificates, and cross-checked against the PPAs/12/ signed for the project activity, found to be consistent with the same as indicated at the meters.

The supporting records of JMRs/08/ issued by the respective state utility and invoices raised for the entire monitoring period were checked and found to be sufficient to enable verification of emission reductions.

The following parameter has been verified for current monitoring period:

<table>
<tr><td>Parameter</td><td colspan="2">Quantity of net electricity generation supplied by the project plant/unit to the grid in year y, $EG_{PJ,y}$ (MWh)</td></tr>
<tr><td>Means of verification</td><td colspan="2"><table>
<tr><th>Criteria/Requirements</th><th>Assessment/Observation</th></tr>
<tr><td>Measuring /Reading /Recording frequency</td><td>The parameter is continuously monitored and recorded on monthly basis.</td></tr>
<tr><td>Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)</td><td>Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered VCS PD & MR/01/ and monitoring methodology/09/.</td></tr>
<tr><td>Monitoring equipment</td><td>Energy meters of accuracy class 0.2s are used /06/.</td></tr>
</table></td></tr>
</table>

		(Calibration details of meter is provided separately in this section, under the heading "Calibration of meters")
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	Yes, accuracy class of meter is in line with registered monitoring plan/01/ and as per PPA /12/.
	Calibration frequency /interval:	Calibration frequency of the meters is once in 5 years.
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Yes. The calibration frequency is in line with the monitoring plan as outlined in the registered Joint VCS PD & MR/01/ (P.37).
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes, the calibration is conducted by NABL Accredited entity/06/.

Location	Calibration Entity
Telangana	Ganga Calibration Services (NABL: C-2127)
Maharashtra	Maharashtra State Electricity Distribution company Limited (MSEDCL)
Karnataka	Gulbarga Electricity Supply Company Limited (GESCOM)

	Is(are) calibration(s) valid for the whole reporting period?	Calibration of the energy meters installed at respective sites are valid during the current monitoring period.
	Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	Yes. The calibration is carried out appropriately.
	How were the values in the monitoring report verified?	Monthly values for entire monitoring period are reported in the monitoring report/04/ and in the ER calculation sheet/05/. The monthly values were verified from the "JMRs" issued by the respective state utility for all three sites and found to be consistent. Value of this parameter for the current monitoring period was verified as 130,978 MWh.
	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values were further cross checked with the monthly invoices raised by the PP /07/ to state utility and found to be consistent.
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes, all the stakeholders, namely, the Grid Authority (DISCOMs), the PP and the O&M Contractor for all four sites, implemented the adequate QA/QC procedures. The data transfer process for the said parameter is as follows: The Joint meter reading at common metering points is taken by the representatives of DISCOMs in the presence of PPs officials in the form of JMRs. Monthly "JMRs" issued state utility provide the value of $EG_{PJ,\ y}$ that is directly used for emission reduction calculations.
	In case project participants have temporarily not monitored the parameter, has either i) a deviation been approved by the CDM EB or ii) has the parameter been estimated as	No such issues.

	stipulated by Appendix 1 to the CDM Project Standard?	
Findings	CL #1, CAR #1 and CAR #2 was raised and resolved	
Conclusion	The parameter has been monitored appropriately, in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan.	

Parameters fixed ex ante:

$EF_{grid,OM,y}$(tCo2e/MWh): it is the operating margin emission factor of Indian grid fixed for the entire crediting period and the value is considered as 0.9843 tCO2e/MWh, that is consistent with the registered VCS PD and MR.

$EF_{grid,BM,y}$ (tCO2e/MWh): it is built margin emission factor of Indian grid fixed for the entire crediting period and the value is considered as 0.9083 tCO2e/MWh, that is consistent with the registered VCS PD and MR.

$EF_{grid,CM,y}$ (tCO2e/MWh): it is the combined margin emission factor of Indian grid fixed for the entire crediting period and the value is considered as 0.9653 tCO2e/MWh, that is consistent with the registered VCS PD and MR.

Calibration of meters:

During the verification assessment of the project activity, accuracy of all the meters have been checked and found appropriate. The installation and working conditions of the meters were checked through physical inspection of meters, review of calibration certificates and were found to be satisfactory. Details of meters are provided in below table:

Location: **Mahabubnagar, Telangana (2 sub-projects of 10 MW each**)

Sub-station	Project developer	Meter Serial No	Calibration Date	Calibration due date
132/33 kV Substation, Gadwal.	Talettutayi Solar Projects Pvt Ltd	Main meter: APX00685	03/12/2020	03/12/2025
		Check meter: APX00686	03/12/2020	03/12/2025
		Standby meter: APX APX00687	03/12/2020	03/12/2025
	Talettutayi Solar Projects Six Pvt Ltd	Main meter: APX00682	03/12/2020	03/12/2025
		Check meter: APX00684	03/12/2020	03/12/2025
		Standby meter: APX00704	03/12/2020	03/12/2025

Location: Beed, Maharashtra (50 MW Solar power project)

Sub-station	Project developer	Meter Serial No	Calibration Date	Calibration due date
132kV Telgaon Sub-Station	Talettutayi Solar Projects Four Pvt Ltd	Main meter: 02832405	22/12/2020	22/12/2025
		Check meter: 02832406	22/12/2020	22/12/2025
		Standby meter: 02832404	22/12/2020	22/12/2025

Location: Koppal, Karnataka (30 MW and 20 MW Solar power project)

Sub-station	Project developer	Meter Serial No	Calibration Date	Calibration due date
110/33/11 KV MUSS Yelburga substation	Talettutayi Solar Projects One Pvt Ltd	Main meter: 20007786	19/07/2021	19/07/2026
		Check meter: 20007853	19/07/2021	19/07/2026
110/33/11 KV Kerehalli substation	Talettutayi Solar Projects Two Pvt Ltd	Main meter: 20009519	16/02/2022	16/02/2027
		Check meter: 20009520	16/02/2022	16/02/2027

It is evident from the above table that calibration of all the existing meters was valid during the current monitoring period. The CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006 and its amendments notified on 26/06/2010 No. 502/6/2009/DP&D/D-I /15/ which is considered as national standard, mentions that for voltage of 650 V up to 33 kV, 0.5s accuracy class or above is recommended. Hence, the accuracy classes of 0.2s for the energy meters installed at the project activity site are found to be appropriate.

The details of monitoring equipment are involved in the project activity and their calibration details/07/ are mentioned under Appendix-1 of the VCS MR/04/. The CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006/15/ which is considered as national standard mentions that "All interface meters shall be tested at least once in five years." Hence, the stipulated calibration frequency once in 5 years is appropriate.

GHG Calculations:

The emission reduction as per the applied methodology equals the baseline emissions (project emissions and leakage emissions for such project activities is considered zero). The formula provided for the calculation of baseline emissions is:

$BEy = EG_{PJ, y} * EF_{grid, CM, y}$

Where:

BE_y: Baseline emissions in year y (tCO2e/yr)

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

$EF_{grid, CM, y}$: Combined Margin (CM) Emission Factor of Indian grid (tCO2e/MWh)

Thus, $BE_y = EG_{PJ, y} * EF_{grid, CM, y}$

Thus, BE_y = 130,978 MWh X 0.9653 tCO2/MWh

= 126,432 tCO_2

The verification team confirms that appropriate methods and formulae for calculating baseline emissions have been followed. The assumptions, emission factors and default values that were applied in the calculations are justified. The actual emission reduction achieved during the current monitoring period are 11.14 % lesser than the estimated amount of emission reductions at the time of validation, which is due to the low PLF achieved by the project activity during the monitoring period.

All the data were made available and have monitored as per required monitoring frequency. The means of verification for the values of parameters, used for baseline emission calculation, is described above.

4.6 Non-Permanence Risk Analysis

Not applicable for the project activity.

5 VERIFICATION CONCLUSION

Applus+ Certification contracted by SolarArise India Projects Private Limited, to perform the independent verification of the emission reductions for the VCS project activity "Bundled Solar Power Project by SolarArise India Projects Pvt. Ltd." (VCS ID- 1762) in India for the monitoring period 01/09/2021 to 31/03/2022 as reported in the Monitoring Report Version 2.0 dated 18/07/2022. The SolarArise India Projects Private Limited is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity.

It is our responsibility to express an independent verification statement on the reported GHG emission reductions from the project activity. Applus+ Certification commenced the verification based on the baseline and monitoring methodology ACM0002 version 18.1, the monitoring plan contained in the registered VCS PD Version 02, dated 09/06/2018 and monitoring Report Version 2.0 dated 18/07/2022 as per the process described under Section 2 of this report.

Applus+ Certification 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.

Applus+ Certification planned and performed the verification by obtaining evidence and other information and explanations that Applus+ Certification considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emissions reductions reported for the project activity for the period 01/09/2021 to 31/03/2022 (both days included) are fairly stated in the monitoring Report Version 2.0 dated 18/07/2022. The GHG emission reductions were calculated correctly because of the approved baseline and monitoring methodology ACM0002, Version 18.1, and the VCS standard version 4.3.

Verification period: From 01/09/2021 to 31/03/2022 (including both days)

Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
2021 (From 01/09/2021 to 31/12/2021)	65,840	0	0	65,840
2022 (From 01/01/2022 to 31/03/2022)	60,592	0	0	60,592
Total	126,432	0	0	126,432

APPENDIX 1: DOCUMENT REFERENCES

S. No	Title of Document	Version	Date
1.	Registered Joint VCS PD & MR	2.0	09/06/2018
2.	Joint VCS validation & verification report	01	18/06/2018
3.	VCS Monitoring Report	01	25/05/2022
4.	VCS Monitoring Report (Final)	02	18/07/2022
5.	ER spread sheet (corresponding to the final monitoring report)	02	18/07/2022
6	Certificates of Calibration for all the meters belongs to project activity	-	-
7.	Invoice issued by PP to respective state DISCOMs for all 3 sites	For the period 01/09/2021 to 31/03/2022	-
8.	Monthly Joint Energy Meter Reading issued for all 3 sites	For the period 01/09/2021 to 31/03/2022	-
9.	"Consolidated baseline methodology for grid-connected electricity generation from renewable sources", ACM0002,	18.1	-
10.	CEA Database	version 12	May 2017
11.	Commissioning certificate 10 MW solar plant by Talettutayi Solar Projects Pvt Ltd, in Telangana	-	23/06/2016
	Commissioning certificate 10 MW solar plant by Talettutayi Solar Projects Six Pvt Ltd, in Telangana		23/06/2016
	Commissioning certificate 50 MW solar plant by Talettutayi Solar Projects Four Pvt Ltd, in Maharashtra		10/08/2017
	Commissioning certificate 30 MW solar plant by Talettutayi Solar Projects One Pvt Ltd, in Karnataka		05/01/2018
	Commissioning certificate 20 MW solar plant by Talettutayi Solar Projects Two Pvt Ltd, in Karnataka		07/08/2019
12.	Power purchase agreement for 10 MW solar plant by Talettutayi Solar Projects Pvt Ltd, in Telangana	-	Dated 18/03/2015
	Power purchase agreement for 10 MW solar plant by Talettutayi Solar Projects Six Pvt Ltd, in Telangana	-	Dated 19/03/2015
	Power purchase agreement for 50 MW solar	-	Dated 11/04/2016

S. No	Title of Document	Version	Date
	plant by Talettutayi Solar Projects Four Pvt Ltd, in Maharashtra		
	Power purchase agreement for 30 MW solar plant by Talettutayi Solar Projects One Pvt Ltd, in Karnataka	-	Dated 02/08/2016
	Power purchase agreement for 20 MW solar plant by Talettutayi Solar Projects Two Pvt Ltd, in Karnataka		Dated 07/03/2018
13.	VCS webpage for the project, VCS ID 1772. https://registry.verra.org/app/projectDetail/VCS/1762	-	-
14.	Letter of declaration dated from PP regarding not having created or sought any other form of environmental credit for the same period	-	14/06/2022
15.	Central Electricity Authority (Installation and Operation of Meters) Regulations Notified on 17/03/2006 No. 502/70/CEA/DP&D Amendments Notified on 26/06/2010 No. 502/6/2009/DP&D/D-I	-	-
16.	VCS Standard	Version 04.3	22/06/2022
17.	VCS Program Guide	Version 04.1	20/01/2022
18	Technical specifications of Solar Panels, transformers and invertors installed at all three sites	-	-
19	Grievance register/suggestion box placed at respective site office	-	-
20	On-site visit conducted for project activity	-	20/06/2022 (Telangana) 22/06/2022 (Maharashtra) 08/07/2022 (Karnataka)
21.	Training records (Attendance and photographs)	For the period 01/09/2021 to 31/03/2022	-
22.	Records of Safety system and procedures implemented on site	-	-
23.	Records of health care and first aid facilities for employees available on/off site	-	-
24.	Policy, procedure, and records for occupational safety	-	-

APPENDIX 2: ABBREVIATIONS

Abbreviations	Full texts
ABT	Availability Based Tariff
BEF	Baseline Emission Factor
BESCOM	Bangalore Electricity Supply Company
BM	Build Margin
CAR	Corrective Action Request
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CL	Clarification Request
CMS	Central Monitoring System
CMP	Conference of Parties Serving as Meeting of Parties
CO2	Carbon dioxide
DISCOM	Distribution Company
EB	Executive Board
FAR	Forward Action Request
GHG	Green House Gas
ISO	International Standards Organization
JMR	Joint Meter Reading
kW	Kilowatt
kWh	Kilowatt hour
MFR	Multi-Function Relay
MR	Monitoring Report
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MWh	Megawatt-hour
NEWNE	Northern Eastern Western Northern-Eastern
PD	Project Description
PLF	Plant Load Factor
PP	Project Proponent
QA/QC	Quality Assurance and Quality Control
SECI	Solar Energy Corporation of India Limited
TSSPDCL	The Southern Power Distribution Company of Telangana
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard

VCSA	Voluntary Carbon Standard Association
VCS PD	VCS Project Description
VCUs	Voluntary Carbon Units

APPENDIX 3: FINDINGS OVERVIEW

Table 1. Remaining FAR from validation and/or previous verification

FAR ID	NA	**Section no.**	XX	**Date :**DD/MM/YYYY
Description of FAR				
Not applicable				
Project participant response				**Date :**DD/MM/YYYY
NA				
Documentation provided by project participant				
NA				
DOE assessment				**Date:** DD/MM/YYYY

Table 2. CL from this verification

CL ID	01	**Section no.**	2.2	**Date :** 03/06/2022
Description of CL				
Value of total ERs achieved during the monitoring period as mentioned in the MR is not consistent with the ER calculation sheet. Section 2.1 MR: It is mentioned that project involves installation of WTGs, kindly clarify about the technology used in the project. Value of the net electricity supplied to the grid for current monitoring period as reported in the MR is not consistent with the ER calculation sheet.				
Project participant response				**Date :** 18/07/2022
The Total ERs during MP is now made consistent in line with ER Sheet. Due to copy paste error wrongly statement has been reported & same has been revised in the MR. The value of net electricity supplied to grid is now made consistent in line with ER sheet.				
Documentation provided by project participant				
Revised MR				
DOE assessment				**Date:** 20/07/2022
The PP has corrected the value total ERs achieved during the monitoring period in the MR and found consistent with the ER calculation sheet. The PP has corrected the copy paste error under section 2.1 of the MR, found to be appropriate. Value of the net electricity supplied to the grid for current monitoring period is corrected in the MR and found consistent with the ER calculation sheet. CL #1 is closed.				

Table 3. CAR from this verification

CAR ID	01	**Section no.**	3.3	**Date :** 03/06/2022
Description of CAR				
Please submit the declaration confirming that the GHG Emission reductions or removals generated by the project activity will not be used for compliance with an emission trading program or to meet binding limits on GHG Emissions.				
Project participant response				**Date :** 18/07/2022

The Declaration confirming that the GHG Emission reductions or removals generated by the project activity will not be used for compliance with an emission trading program or to meet binding limits on GHG Emissions is hereby submitting along with this submission.
Documentation provided by project participant
No double counting declaration
DOE assessment **Date:** 20/07/2022
The project proponent has submitted the declaration confirming that the GHG Emission reductions or removals generated by the project activity will not be used for compliance with an emission trading program or to meet binding limits on GHG Emissions, found to be appropriate, hence accepted. CAR #1 is closed.

CAR ID	02	**Section no.**	4.2	**Date :** 03/06/2022
Description of CAR				
The energy meters installed for 50 MW solar project by Talettutayi Solar Projects Four Pvt Ltd (132kV Telgaon Sub-Station) were calibrated on 08/12/2021, however the monitoring period starts from 01/09/2021. Please clarify how it is ensured that the meters were working satisfactorily during the entire monitoring period. Please clarify why the calibration dates of the old meters installed for 30 MW solar project by Talettutayi Solar Projects One Pvt Ltd (110/33/11 KV MUSS Yelburga substation) are not mentioned. As per the calibration details provided in the MR, it is noticed that the meters installed at 110/33/11 KV Kerehalli substation for 20 MW solar project by Talettutayi Solar Projects Two Pvt Ltd, were replaced with new meters on 10/02/2021 but calibrated on 04/02/2022.In view of this information please clarify the following issues: i. Why the calibration delay is not considered and addressed as per the guidelines. ii. The reason for replacement of meters and relevant documents is not provided. iii. If the calibration is not conducted in line with approved frequency, then why this instance is not considered as project deviation in this monitoring period.				
Project participant response				**Date :** 18/07/2022
50MW Maharashtra The calibration date for the 50 MW solar project by Talettutayi Solar Projects Four Pvt Ltd has been revised & supporting evidence for the same has been submitted. *30MW Karnataka:* The calibration date for the 30 MW solar project by Talettutayi Solar Projects One Pvt Ltd has been provided. *20MW Karnataka:* 1. The meters installed at 110/33/11 KV Kerehalli substation for 20 MW solar project by Talettutayi Solar Projects Two Pvt Ltd, were replaced with new meters prior to the current monitoring period on 10/02/2021 and calibrated on 16/02/2021. We wrongly mentioned it as 04/02/2021. 2. There is no replacement of meters occurred during the current monitoring period.				
Documentation provided by project participant				
Revised MR Calibration certificate for 50MW Maharashtra Project.				
DOE assessment				**Date:** 20/07/2022

1 The energy meters installed for the 50 MW (location -Maharashtra) solar project by Talettutayi Solar Projects Four Pvt Ltd were calibrated on 03/12/2020 (due date of calibration 03/12/2025), the PP has corrected the calibration date in the MR, found to be consistent with the calibration certificates. 2 The PP has mentioned the calibration date for the 30 MW solar project by Talettutayi Solar Projects One Pvt Ltd in the MR, found to be consistent with the calibration certificate. 3 There is no replacement of meters during the current monitoring period. The PP has corrected the calibration dates for the meters installed at 110/33/11 KV Kerehalli substation for 20 MW solar project, found to be correct and consistent with the calibration certificates. CAR #2 is closed.

Table 4. FAR from this verification

FAR ID	XX	Section No.	XX	Date :
Description of FAR				
NA				
Project participant response				Date : DD/MM/YYYY
NA				
Documentation provided by project participant				
NA				
DOE assessment				Date: DD/MM/YYYY
NA				

APPENDIX 4: COMPETENCY STATEMENTS

According to the sectoral scope / technical area and experience in the sectoral or national business environment, Applus+ Certification has composed a project assessment team in accordance with the appointment rules in the internal Quality Management System of Applus+ Certification.

The composition of audit team shall be approved by the Applus+ Certification ensuring that the required skills are covered by the team. The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A) / Auditor in Training (AiT).
- Technical Expert (TE).
- Technical Reviewer (TR).

The sectoral scope / technical area knowledge linked to the applied methodology/ies shall be covered by the assessment team.

Name	Qualification	Coverage of scope	Coverage of technical Area	Financial aspect	Host country Experience	Attendance to the On-Site Assessment
Ravi Kant Soni	Lead Auditor (LA)	Yes (1)	Yes (1.2)	N/A	Yes	N/A

Ravi Kant Soni	Technical Expert (TE)	Yes (1)	Yes (1.2)	N/A	Yes	N/A
Simon Shen	Technical Reviewer (TR)	Yes (1)	Yes (1.2)	N/A	N/A	N/A

Ravi Kant Soni is a certified lead auditor for Lead Auditor ISO 14001:2004&Lead Auditor ISO 14064:2006 GHG Inventory and verification. He has more than 10 years of work experience across Climate Change, Environmental Management & Monitoring, Health & Safety Management, and Statutory Compliance. He was involved in more than 100 CDM validation and verifications activities and Gold Standard, VER projects as a team leader/technical reviewer / validator / verifier covering the sectoral scope 1 technical area 1.2. He has done Mater in Technology (Energy Management) from a premier institute, School of Energy & Environmental Studies, DAVV, Indore (M.P.), India and Bachelor of Engineering (Mechanical Engineering) from M.I.T.S Gwalior Jiwaji University Gwalior, India.

Simon Shen (master's degree in Thermal Energy Engineering, bachelor's degree in environmental engineering) is a Lead Auditor appointed by Applus+ Certification for the GHG project assessment. He is based in Shanghai. He has several years of work experience in environmental protection field. Before he joined Applus+ Certification, he had been worked for TÜV SÜD as a GHG Validator/Verifier and ISO 9001/14001 Lead Auditor for 5.5 years.