



# VERIFICATION REPORT FOR

## “150 MW SOLAR PROJECT IN KARNATAKA BY AVAADA SOLAR”



Document Prepared By: LGAI Technological Center, S.A. (Applus+ Certification)

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| <b>Client</b>              | WeAct Pty Ltd.                                                                                                                                                                                                                                                                                                                                                         |
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**Summary:**

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by WeAct Pty Ltd. to conduct the verification of the project “150 MW Solar Project in Karnataka by Avaada Solar”, VCS ID 1914, against VCS Standard Version 4.0.

The verification includes confirming the implementation of the monitoring plan of the registered VCS PD and MR (Project ID 1914) and the application of the monitoring methodology as per ACM0002, Version 19 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”.

The project activity involves generation of electricity by using the renewable energy source (solar) supplying to the Indian electricity grid. Thus the project aims to displace electricity produced by fossil fuel power plants harnessing solar energy. Therefore, the project reduces greenhouse gas emissions and thereby contributes to sustainable development.

A risk based approach has been followed to perform this verification. In the course of verification, 05 Corrective Action request (CARs), 00 Forward Action Request (FAR) and 01 Clarification request (CLs) were raised and successfully closed.

The review of the project design documentation, monitoring report and additional documents related to baseline and monitoring methodology; the subsequent background investigation, telephonic interviews and stakeholders have provided Applus+ Certification with sufficient evidence to validate the fulfillment of the stated criteria.

Applus+ Certification confirms that the project is implemented in accordance with the registered VCS PD. 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 “150 MW Solar Project in Karnataka by Avaada Solar” in India during the period 01/06/2019 - 30/06/2020 (including both dates) amount to 322,198 tons of CO<sub>2e</sub>.

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# 1 INTRODUCTION

## 1.1 Objective

Applus+ Certification has been contracted by WeAct Pty Ltd. (authorised representative of project proponent), to undertake the verification of the renewable energy project titled “150 MW Solar Project in Karnataka by Avaada Solar”(VCS ID-1914) The verifiers have reviewed the GHG data collected to date for the monitoring period from 01/06/2019 to 30/06/2020 (both dates 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 the verification was the independent and objective review and ex-post determination of the monitored reductions in GHG emissions from “150 MW Solar Project in Karnataka by Avaada Solar” The verification of this project was based on the registered project description/01/ & monitoring report /04/ and supporting documents submitted by the project proponent to the verification team. The documents were reviewed against the following guidance and protocols:

- VCS Standard: VCS standard Version 4.0, dated 19/09/2019

- Approved baseline and monitoring methodology ACM0002, Version 19, “Grid-connected electricity generation from renewable sources”.

- Joint Validation and Verification report, version 03 dated 25/11/2019

- VCS Program Guide, Version 4.0, dated 19/09/2019

- ISO 14064-3: Specification with guidance for the validation and verification of greenhouse gas assertions, 2006

- CDM VVS and PS for project activities version 02.0

The verification is not meant to provide any consulting towards the client. However, stated request for clarifications and/or corrective actions may provide input for improvement of the project design.

### 1.3 Level of Assurance

The level of assurance of the verification report falls under reasonable assurance engagements as selected by the Client. The verification team verified the complete monitoring data for all the parameters of the monitoring plan and confirms that the reported emission reductions are free from any type of material errors.

### 1.4 Summary Description of the Project

The project activity involves electricity generation by solar electric convertors and supplying the generated electricity to the IndianGrid through Karnataka state grid via different ESKOM's of Karnataka as per the PPA with Gulbarga Electricity Supply Company (GESCOM), Mangalore Electricity Supply Company (MESCOM) and Chamundeshwari Electricity Supply Corporation Ltd. (CESC Mysore), for 50 MW of capacity for each. The project being a renewable energy generation activity, it leads to removal of fossil fuel dominated electricity generation. The project activity results in reductions of greenhouse gas (GHG) emissions that are real, measurable, and verifiable and also plays beneficial role in the mitigation of climate change.

The project activity includes a total capacity of 150 MW<sub>ac</sub> (in 3 phases each of 50 MW<sub>ac</sub>) of solar plant in the state of Karnataka. The project activity displaces anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 3,19,470 tCO<sub>2</sub>e per year (avg. value ex-ante), thereby displacing 3,41,009 MWh/year (annualized avg. ex-ante value) amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/fossil fuel based power plant.

The solar power does not involve any fossil fuel consumption and hence the project does not lead to any greenhouse gas emissions. Thus, electricity would be generated through sustainable means without causing any negative impact on the environment.

The 150 MW<sub>AC</sub> solar PV Plant site is located at the Pavagada Solar Park, in Pavagada Taluk, Tumkur district, in the Indian state of Karnataka. The project site is around 130 kms away from Bellary which is the nearest railway station. Nearest airport is at Bengaluru Airport, 155kms.

The geo-coordinates of the location are as follows:

Latitude : 14° 18' 35.07" N

Longitude : 77° 24' 21.38" E

Location of the project was verified through Google Map (<https://www.gps-coordinates.net/>) and found consistent with the data provided in the registered PD /01/.

The project activity has been commissioned in 3 phases; 1<sup>st</sup> phase of 50 MW commissioned on 20-Dec-2018, 2<sup>nd</sup> phase of 50 MW on 06-Feb-2019 and 3<sup>rd</sup> phase of 50 MW on 27-Feb-2019. The Project is in continuous operation since commissioning. The energy generated from the 150 MWAC solar PV plant will be evacuated at 33kV to the 220/33 kV Pooling Sub-station, which would be further evacuated to 400 / 220 kV GSS located about 1.5 km from the Pooling Sub Station. This information was verified through photographs indicating name plate details and found to be in line with the details provided in the registered PD /01/. The emission reductions from the project activity during the period 01/06/2019 – 30/06/2020 (including both dates) amount to 322,198 tonnes of CO<sub>2</sub>e.

## 2 VERIFICATION PROCESS

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

### 2.1 Method and Criteria

Verification was conducted using Applus+ Certification procedures in line with the requirements specified in the VCS standard Version 4.0 Requirements, CDM M&P, the latest version of the CDM Validation and Verification Standard, and relevant decisions of the COP/MOP and the CDM EB and applying standard auditing techniques. The project activity does not fall under category “grouped projects”, hence any sampling methods are not to be employed by the validation/verification body for the verification of GHG emission reductions or removals generated by the project.

It is to be assessed and determined whether the proposed implementation and operation of the project activity, and the steps taken to report emission reductions comply with the criteria and relevant guidance provided by the VCS Board. The verification process consists of the following three phases;

- A desk review of the VCS PD and VCS MR

- Telephonic interviews with project stakeholders

- The resolution of outstanding issues and issuance of final report and opinion.

### 2.2 Document Review

The verification is performed primarily as a document review of the registered VCS PD/01/, previous MR and Verification report and associated documents as stated in detail in appendix 1 of this document. The assessment is performed by a verification team referring the Applus+ Certification internal procedures in line with latest VCS requirements. The cross checks between information provided in the Monitoring report, 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

Due to the current situation with the global COVID-19 pandemic scenario and country wide lock down in India, an on-site inspection has not been performed by the assessment team. However, the representatives of the PP and O&M contractors were interviewed telephonically on 27/07/2020 i.e. personnel responsible for monitoring of the project activity, data collection and management, and QA/QC procedure. The details of the people interviewed are mentioned in the table below:

| S N | Name                | Organization                           |
|-----|---------------------|----------------------------------------|
| 1   | Mr.RajeshDwivedi    | O & M head for Avaada Group            |
| 2   | Mr. Raghu Tejasvee  | Project Site In-charge-Avaada Group    |
| 3   | Mr. Deepjyoti Borah | WeAct Pty Ltd.                         |
| 4   | Mr. Keerthi Kumar   | Engineer -Avaada Group                 |
| 5   | Mr. Ayyappa         | Security Person (Local Village Person) |
| 6   | Mr.Varendra         | Security Person (Local Village Person) |

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 telephonic interview coupled with the documentation.

## 2.4 Site Inspections

As discussed in the above section, physical site inspection is not done for the current verification. However to achieve a reasonable level of assurance, the assessment team has followed the alternative means to substantiate the verification criteria as described in the below table:

| Assessment Criteria             | Means of verification/source documents                          | Assessment opinion                                                                                            |
|---------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Description of project activity | i. Commissioning certificates /11/<br>ii. PPA signed with state | The information's with reference to project capacity, technology, plant equipments and commissioning dates as |

| Assessment Criteria                                                                                       | Means of verification/source documents                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Assessment opinion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                           | utility (ESKOM) /12/<br>iii. Latest VCS verification report /2/.<br>iv. Telephonic interview on 27/07/2020                                                                                                                                                                                                                                                                                                                                                                                        | provided in section 1.1 of MR are found consistent with the documents.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Compliance of the project implementation with the registered project design document</b>               | i. Monthly B-Form and Energy breakup reports issued by ESKOM's /08/<br>ii. Monthly energy accounting statements "REA" released by SRPC<br>iii. Geographical co-ordinates (Location of solar plant) verified through Google Map<br>iv. Latest VCS verification report /2/.<br>v. PPA signed with state utility (ESKOM) /12/<br>vi. Telephonic interview on 27/07/2020<br>vii. Photograph of all the Solar Plant, energy meters installed at site and screen shots of online monitoring system /18/ | B-Forms and energy breakup reports issued by ESKOM's and SRPC indicate the following information: <ul style="list-style-type: none"> <li>Commissioning date</li> <li>Feeder identification to which the solar plants are connected</li> <li>Serial number of energy meters</li> <li>Capacity of project</li> <li>Name of project participant</li> <li>Net active Energy exported</li> </ul> Location of each solar plant is verified through Google Map. Daily generation records are verified to check the operational status of project activity. Grid connectivity of the project is confirmed through the PPA. All the information's regarding the project implementation as discuss above are further verified through VCS verification report along with latest and found consistent. |
| <b>Compliance of the registered monitoring plan with applied methodologies and standardized baselines</b> | i. Telephonic interview on 27/07/2020<br>ii. PPA signed with state utility (ESKOM) /12/                                                                                                                                                                                                                                                                                                                                                                                                           | The organizational structure, responsibilities and competencies of the personnel confirmed through telephonic interview. Frequency of monitoring of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Assessment Criteria                                                                     | Means of verification/source documents                                                                                                                                                                                                                                                                                                                                                                       | Assessment opinion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                         | <ul style="list-style-type: none"> <li>iii. Monthly B-Form and energy breakup reports issued by ESKOM /08/</li> <li>iv. Monthly energy accounting statements "REA" released by SRPC</li> <li>v. Invoices raised by project developer to state utility/07/</li> <li>vi. Photograph of all the Solar Plant, energy meters installed at site and screen shots of online monitoring system /18/</li> </ul>       | <p>parameters listed under approved monitoring plan is verified through B-Forms /Invoices.</p> <p>The methods used for measuring, recording, storing, aggregating, and reporting the data on monitored parameters are verified through PPA and interactions with site personnel.</p> <p>Procedure for data uncertainty, emergency preparedness, roles and responsibility, operational and management structure are mentioned in the MR is confirmed through policy documents and found satisfactory.</p>                                      |
| <b>Compliance with the calibration frequency requirements for measuring instruments</b> | <ul style="list-style-type: none"> <li>i. Calibration certificates of instruments/06/</li> <li>ii. Monthly JMRs and energy breakup reports issued by ESKOM /08/</li> <li>iii. Monthly energy accounting statements "REA" released by SRPC</li> <li>iv. PPA signed with state utility (ESKOM) /12/</li> <li>v. Central Electricity Authority(Installation and Operation of Meters) Regulations/15/</li> </ul> | <p>Calibration frequency and energy meter specifications (Sr.No, make accuracy class) is verified through calibration certificates and further verified through monthly B-FROMs and found consistent.</p> <p>There was change of energy meters during the current monitoring period. The information was reported in the MR, VVB has verified the same against the meter replacement reports.</p> <p>Responsibility of calibration and maintenance of energy meters is solely under control of ESKOM's; this is verified through the PPA.</p> |
| <b>Assessment of data and calculation of emission</b>                                   | <ul style="list-style-type: none"> <li>i. Monthly B-Forms and energy breakup reports issued by</li> </ul>                                                                                                                                                                                                                                                                                                    | <p>Monthly values of monitoring parameters used in ER calculation are verified</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Assessment Criteria        | Means of verification/source documents                                                                                                                                                                                                                                                         | Assessment opinion                                                                                                                                                                                                                                                                                                              |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| reductions or net removals | <p>ESKOM's /08/</p> <p>ii. Monthly energy accounting statements "REA" released by SRPC</p> <p>iii. Invoices raised by project developer to state utility/07/</p> <p>iv. CEA CO<sub>2</sub> Baseline Database for the Indian Power Sector /10/</p> <p>v. Latest VCS verification report /2/</p> | <p>through B-Forms and REA statements released by SRPC and cross verified with the invoices.</p> <p>Methods, formulae and emission factor for calculating baseline emissions have been followed and they are found to be in accordance with the applied methodology and also to be in the approved VCS verification report.</p> |

It is noteworthy that no sampling plan for verification is applied as 100% data is verified for the current monitoring period. Most of the reference document referred by the assessment team (above table) are either issued /endorsed by state utility (ESKOM), an external government agency, hence is deemed authentic.

Furthermore the project activity already verified under VCS previously and currently undergoing 2<sup>nd</sup> verification, hence based on the information's available through approved documents (VCS verifications), it can be confirmed that project is implemented and being operated as described in the registered PD.

The assessment team has verified sufficient appropriate audit evidences, to reduce audit risk to an acceptably low level as requisite to achieve reasonable level of assurance for the current verification.

## 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 telephonic interview of site personnel. 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, 05 Corrective Action request (CARs), 00 Forward Action Request (FAR) 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 4. 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 second verification under VCS; there were no FARs raised during the validation or previous verification. Also during the current verification no FAR is raised.

#### 2.6 Eligibility for Validation Activities

Not applicable.

## 3 VALIDATION FINDINGS

### 3.1 Participation under Other GHG Programs

The project has not been developed under any other GHG mechanism or Programs.

A declaration is being submitted to DOE confirming the same.

### 3.2 Methodology Deviations

There is no methodology deviation identified during the current monitoring period

### 3.3 Project Description Deviations

VVB has verified that there is no change in project design related to install capacity, technology, specification, etc. However, during the current monitoring period there is change in monthly energy accounting and bill generation practice as mandated by “Southern Regional Power Committee (SRPC)” under Central Electricity Authority, Ministry Of Power India. As a part of earlier practice, the standard practice of monthly joint meter reading was adopted and monthly net electricity units were reflected in the form of a B-Form. Whereas, from Jan 2020, the SRPC has affected an online practice of monthly energy accounting, termed as “Regional Energy Account” (REA). In this new practice, the project wise monthly net energy units are calculated by authority and uploaded under ‘Regional Energy Account’ for that month on the SRPC web site ([www.srpc.kar.nic.in](http://www.srpc.kar.nic.in)) to enable downloading of the monthly net energy units by respective constituents. This change in practice has removed the monthly B-Forms from the month of Jan 2020 (i.e. effectively from 20 Jan 2020). Also, the REA accounting statement provides calculated value of net energy to be billed by PP; hence no separate export, import & transmission losses values are reflected. The net energy units are directly considered by PP for issuing the invoice.

This deviation has been reported under the section 3.2 of the MR; VVB has further verified this deviation from the REA documents and SRPC website. VVB is of the opinion that this change in procedure of monthly statement generation does not have any impact on any parameter of the project. Also, there is no impact on emission reductions and applicability of the methodology as project is continued to evacuate power under same arrangement, as per existing PPA arrangements.

### 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 plant. The total installed capacity of the project is 150 MWac. The project is developed by Avaada Solar Energy Pvt. Ltd. The project activity has been commissioned in 3 phase in the Pavgada Solar Park in Karnataka. The 1<sup>st</sup> phase of 50 MW was commissioned on 20-Dec-2018, 2<sup>nd</sup> phase of 50 MW on 06-Feb-2019 and the 3<sup>rd</sup> phase of 50 MW on 27-Feb-2019. The energy generated from the 150 MWAC solar PV plant will be evacuated at 33kV to the 220/33 kV Pooling Sub-station, which would be further evacuated to 400 / 220 kV GSS located about 1.5 km from the Pooling Sub Station.

#### Solar Power Project Technology Details:

The technology employed, converts solar energy to electrical energy. In solar power generation, energy of solar is converted into mechanical energy and subsequently into electrical energy. The technology is an environment friendly technology since there are no GHG emissions associated with the electricity generation. There is no transfer of technology involved in the project activity.

#### Technical Details:

|                                      |                                    |
|--------------------------------------|------------------------------------|
| Module Model                         | Renesola & SUNTECH: JC330/325/320M |
| Maximum Power (Pmax)                 | 330/325/320 Wp                     |
| Module technology                    | Poly Crystalline                   |
| Orientation                          | 12 Deg                             |
| <b>Invertor: SUNGROW</b>             |                                    |
| Model                                | PVS980-58-2091 kVA                 |
| No. of Inverters                     | 72                                 |
| Technical Lifetime of the SPV plant: | 25 years                           |

The project activity is in continuous operation since commissioning and there is no such incident reported during the current monitoring period which may impact the operation & capacity design of the project activity. Therefore, no events have happened that may impact the GHG emission reductions or removals and monitoring in this monitoring Period. However, there was some change in billing procedure and change of energy meters during the current

monitoring period which was as per the requirement of the state utility applicable for all power producers across the state. PP doesn't have any control on such events or not under the direct purview of PP. However, such changes in the process did not have any impact on the project operation, design and emission reductions.

The power generated through the proposed project activity being supplied to Indian grid (now part of Indian grid) through a contractual arrangement (PPA). The technical specification of the project activity solar power plant has been checked through the photographs of the solar plants installed at site, commissioning certificates and are found to be consistent with the mentioned under section 3.1 of MR. The current status of the project activity is verified through the screen shots of SCADA system/18/, indicating the real-time generation data and hence it is confirmed that the project is fully functioning.

The project boundary includes the solar project, sub-stations, grid and all power plants connected to grid. The project activity evacuates power to the Indian grid. Therefore, the entire Indian grid and all connected power plants have been considered in the project boundary for the project activity.

The project developer "ASEPL" is having a dedicated metering arrangement on his 33kV/220V line at KSPDCL SS-1 and SS-2 which is further connected to Pavagada (PGCIL grid substation) in Tumkur district as shown in the project boundary diagram provided in section 4.3 of the MR. The meters are approved, tested & sealed by the State Utility. The meters are solely in the custody of State Utility. The frequency of calibration is once in 5 years as prescribed in the registered PD. All the meters are of 0.2s accuracy class.

The aggregated net monthly electricity supplied/exported by the project activity (150MW Capacity) is monitored, measured & metered continuously at the 33kV/220V KSPDCL substation 1 & substation 2 which forms the basis for the monthly energy units(i.e. B-Forms till Jan 2020 & REA from Jan 2020 onward). B-Form and REA reports can be cross checked with the monthly invoices of sale.

In the absence or delay in the meter calibration appropriate guidelines will be applied appropriately to confirm the conservativeness of metering & monitored values.

The metering arrangement, accuracy class of meters, calibration frequency and apportioning approach is under control of state electricity board and project developer Avaada Solar (i.e. PP) does not have any control on it. PP is getting value of net electricity supplied to grid and the same is considered the monitoring parameter.

Monthly values of  $EG_{PJ,y}$  is obtained directly from the monthly B-FROMs and energy breakup reports issued by state utility (ESKOM)/08/. The invoicing is being done against electricity supplied by the project plant to the grid. 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. As verified through the calibration certificates and recent photographs of energy meters that there are one set of energy meters (main and

check) installed at each feeder and are under control of state utility (ESKOM), sealed in presence of both the state utility official & representative of PP.

Joint Meter Reading is being taken jointly by the officials of state utility and project participant's representative on monthly basis and accordingly monthly B-Forms/ energy breakup reports is being prepared. This B-Form practice was applicable till 19 Jan 2020. Whereas, from 20 Jan 2020 the monthly energy accounting has been conducted via online practice of monthly energy accounting, termed as "Regional Energy Account" (REA) implemented and controlled by Southern Regional Power Committee ([www.srpc.kar.nic.in](http://www.srpc.kar.nic.in)).

The VVB team has confirmed that monitoring methodology applies consistently the choice of the option selected for monitoring of baseline emissions. The change in monthly energy accounting & billing practice has been adequately reported under the section 3.2 of the MR. The monitoring plan provide procedures for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period. This is checked through discussion with consultant and the project participant during the telephonic interview.

The VCS MR/04/ has been reviewed to check that the procedure for data uncertainty, emergency preparedness, roles and responsibility, operational and management structure are mentioned in the MR. The monitoring plan completely describes all measures to be implemented for monitoring all parameters required. The monitoring plan described the positioning of the equipment. The information relating to the project implementation, provided in the Monitoring Report /04/ is consistent with that stated in the registered PD /01/, with the specific deviation properly documented under the MR.

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 01/06/2019 to 30/06/2020 (including both dates) is 322,198 tCO<sub>2</sub>e.

Assessment team concludes the following:

- a) There is 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 analysing the monitored data and parameters) is appropriate. The change in monthly energy accounting & billing practice is acceptable as such change is not under the purview and control of PP. Additionally, such change does not have any material impact on the project and level of assurance is reliable based on supporting documents.
- c) Thus, 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/18/.
- 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 is registered under VCS program

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

## 4.2 Safeguards

### 4.2.1 No Net Harm

Being renewable Solar PV power generation project there is no negative environmental and socio-economic impacts in fact project activity contributes positively by providing environment friendly power generation leading to sustainable development of the region. Also, the generation of employment supports upliftment of socio-economic status of region.

These information related to social and sustainable development have been verified from the supporting documents/19,20/ submitted by PP.

Additionally, as per 'Central Pollution Control Board (Ministry of Environment & Forests, Govt. of India)', final document on revised classification of Industrial Sectors under Red, Orange, Green and White Categories (29/02/2016), it has been declared that solar project activity falls under the "White category". White Category projects/industries do not require any Environmental Clearance such as 'Consent to Operate' from PCB as such project does not lead to any negative environmental impacts. Additionally, as per Indian Regulation (as described under the EIA section of the registered PD) Environmental and Social Impact Assessment is not required for Solar Projects.

#### 4.2.2 Local Stakeholder Consultation

No comment received during ongoing communication with local stakeholders. VVB team has verified that there is a Grievance register to record any feedback or comment. The grievance mechanism is well communicated to the stakeholders and it's accessible at project site at any point of time.

The VVB team has further verified that the Local Stakeholder Consultation Process was already conducted in-line with requirement during the project registration with VCS.

#### 4.3 AFOLU-Specific Safeguards

Not applicable.

#### 4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The project monitoring has been carried in accordance with the registered VCS PD/01/ and the monitoring report/04/. The monitoring plan laid in the registered PD/01/ is being followed at the site/18/. The assessment team has verified the information flow (from data generation, aggregation, to recording, calculation and reporting for these parameters including the values) in the MR/04/.

The emission reductions are purely based on the net electricity generated and exported from plant to grid. PP has provided all the sufficient data for current monitoring period. The values of the parameter  $EG_{PJ,y}$  used in deriving the GHG emission reduction could be very well correlated between the data sets and ER spreadsheet/05/ provided by PP. The Net electricity supplied to the grid by the project activity has been calculated by SRPC and published in their official website as Regional Energy Account (REA). The monthly net energy units from REA are used for monthly billing purposes. Also, prior to the REA practice, there were monthly B-forms which were released by state authority and monthly billing was done based on the B-forms.

**The VVB has verified as follows:**

A. The calculation method used for net energy calculation in REA by SRPC is as follows:

Net Energy to be billed = (Net Energy - 15%Import - Tr. Loss) in KWh

Here, the Export value, Import and Transmission losses etc. are not separately reported in the monthly statement; SRPC conducts this monthly calculation and releases the net value with prescription of this particular accounting formula. Therefore, the value of "Net Energy billed" can be directly taken from the monthly REA statement. PP has adopted the same practice, effective from 20 Jan 2020. The monthly net generation values are properly reported under the ER sheet and specific description is also included for easy reference. Hence, the ER calculation is accurate, conservative and in line with the supporting documents.

B. Whereas, at the time of B-Form practice (i.e. till 19 January 2020), the Net electricity supplied to the grid by the project activity was calculated as a difference of electricity exported to the grid, electricity imported from the grid obtained from (B-Form) joint meter reading certificates/credit notes issued as per below equation:

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

However, this calculation is done by Karnataka State DISCOM and monthly billing is executed by PP as per the provision of state DISCOM. VVB has verified that in the monthly invoices (raised against the monthly B-forms, the Net Energy is the difference of Export value of the Main Meter and 115% of Import value of the main meter. Therefore PP has considered the same calculation practice in the ER calculation. This is a conservative approach as compared to direct "Export - Import" value. Hence, VVB has accepted the same, which is consistent with the billing practice.

Verification team has verified the monthly values of parameter ( $EG_{PJ,y}$ ) as reported in the ER sheet with the source document (Joint Meter Readings & REA statements), w.r.t. the above prescribed practices; and no discrepancy is observed, hence it can be confirmed that no manual transposition errors between data sets have been occurred. The verification of each monitoring parameter has been discussed later in section 4.5.

The calculation method and formulae used in calculating baseline emission is in compliance to the methodology used i.e. ACM0002 version 19 /09/. Since project activity is a solar power project, leakage emission and project emission has been considered as zero.

## 4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

Monitoring plan, has been verified to confirm that the actual monitoring complies with the monitoring plan, monitoring data has been thoroughly assessed and that the calibration requirements are met.

| Parameter             | Quantity of net electricity generation supplied by the project plant/unit to the grid in year y ( $EG_{PJ,y}$ MWh) |                                                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Means of verification | Criteria/Requirements                                                                                              | Assessment/Observation                                                                                               |
|                       | Measuring /Reading /Recording frequency                                                                            | The parameter is continuously monitored, hourly measured and monthly recorded.                                       |
|                       | Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No) | Yes. The reporting frequency is in line with the monitoring plan as outlined in the registered PD/01/ and monitoring |

|  |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                               |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |                                                                                                                                                                                                                                                                                             | methodology/11/.                                                                                                                                                                                                                                                                                              |
|  | Monitoring equipment                                                                                                                                                                                                                                                                        | Bidirectional electronic meters of accuracy class 0.2s are used.                                                                                                                                                                                                                                              |
|  | 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? | The accuracy of the monitoring equipment used to measure the values is 0.2s, which is as per the registered PD/01/ which is as per the norm defined in the PPA/15/.                                                                                                                                           |
|  | Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?                                                                                                                                                                   | Yes. The accuracy of monitoring equipment is valid for the entire range.                                                                                                                                                                                                                                      |
|  | 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 PD/01/.<br><br>VVB has verified that there was change of energy meters during the current monitoring period. The information was reported in the MR, further verified against the meter replacement reports. |
|  | Is the calibration of measuring equipment carried out by an accredited person or institution?                                                                                                                                                                                               | Yes the calibration is conducted by ESKOM or directly under the provision of PGCIL. The calibration is conducted through NABL Accredited agencies under the direct control of the authority /06/.                                                                                                             |
|  | Is(are) calibration(s) valid for the whole reporting period?                                                                                                                                                                                                                                | Yes, the calibrations of meters are valid for the whole monitoring period.                                                                                                                                                                                                                                    |

|  |                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | How were the values in the monitoring report verified?                                                                                    | <p>Monthly value of the parameters for entire monitoring period is reported in the monitoring report and ER calculation sheet. The monthly values were verified from the B-Forms issued by state utility and monthly REA statements released by SRPC and corresponding invoices; and the same is found to be consistent.</p> <p>Value of this parameter for the current monitoring period was verified as <b>343,921.77MWh</b></p>                                                                                                                                                                                                                                                                                                        |
|  | 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? | <p>Yes, the adequate QA/QC procedures were implemented by all the stakeholders, namely, the Grid Authority (ESKOM), the PP. The data transfer process for the said parameter is as follows:</p> <p>The Joint meter reading at all the metering points at DISCOM substation is taken by the representatives of ESKOM in the presence of Avaada Solar Energy Private Limited (ASEPL) officials, in the form of B-Forms.</p> <p>Whereas, monthly REA statements are available online via SRPC official website.</p> <p>Based on the data recorded in the B-Forms &amp; REA, electricity supplied to the grid by the project activity is calculated by ESKOM &amp; SRPC respectively, using the apportioning procedure and energy breakup</p> |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                      |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | sheets for each project developer is prepared. However, B-Form practice has been completely removed from 20 Jan 2020; at present REA accounting practice is the prevailing practice. |
|            | 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 stipulated by Appendix 1 to the CDM Project Standard?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No such issues.                                                                                                                                                                      |
| Findings   | CL #1 and CAR#3 were 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 change in monthly energy accounting and billing practice has been introduced by state authority which is not under the purview and control of PP or any project developer. However, such changes do not have any material impact on the project and results of ER. The information are found to be properly reported under the monitoring report with proper description and justification of deviation etc. Thus, VVB concluded that the monitoring results were recorded consistently as per the approved frequency in the monitoring plan, reporting is adequate and reliable. |                                                                                                                                                                                      |

Parameters fixed ex ante:

EF<sub>grid, OM, y</sub>; tCO<sub>2</sub>e/MWh: it is the operating margin emission factor of Indian grid fixed at the time of project registration the mentioned value of 0.9610tCO<sub>2</sub>e/MWh is consistent with the registered PD/01/.

EF<sub>grid, BM, y</sub>; tCO<sub>2</sub>e/MWh: it is build margin emission factor of Indian grid fixed at the time of project registration the mentioned value of 0.8644tCO<sub>2</sub>e/MWh is consistent with the registered PD/01/.

EF<sub>grid, CM, y</sub>; tCO<sub>2</sub>e/MWh: it is the combined margin emission factor of Indian grid fixed at the time of project registration the mentioned value of 0.93684 tCO<sub>2</sub>e/MWh is consistent with the registered PD/01/.

Calibration of meters:

During the verification assessment of the project activity, accuracy of all the metering have been checked and found appropriate. The installation and working conditions of the meters checkedthrough latest photographs, calibration certificates and were found to be satisfactory.

Details of meters are provided in below table:

| Block 4                                | Main Meter | Check Meter | Stand by Meter |
|----------------------------------------|------------|-------------|----------------|
| <b>RR No: KSPDCL-SS1-A25 (Line 10)</b> |            |             |                |
| S. No                                  | 18153016   | 18148125    | 18009355       |
| Make                                   | L&T        | L&T         | L&T            |
| Accuracy Class                         | 0.2S       | 0.2S        | 0.2s           |
| Calibration Date/Installation Date     | 20/12/2018 | 20/12/2018  | 20/12/2018     |
| <b>RR No: KSPDCL-SS1-A26 (Line 09)</b> | Main Meter | Check Meter | Stand by Meter |
| S.No                                   | 18153006   | 18152933    | 18009400       |
| Make                                   | L&T        | L&T         | L&T            |
| Accuracy Class                         | 0.2S       | 0.2S        | 0.2s           |
| Calibration Date /Installation Date    | 20/12/2018 | 20/12/2018  | 20/12/2018     |
| <b>Block 7:</b>                        | Main Meter | Check Meter | Stand by Meter |
| <b>RR No: KSPDCL-SS2-A33 (Line 09)</b> |            |             |                |
| S. No                                  | 18152962   | 18153010    | 18009343       |
| Make                                   | L&T        | L&T         | L&T            |
| Accuracy Class                         | 0.2S       | 0.2S        | 0.2S           |
| Calibration Date/Installation Date     | 06/02/2019 | 06/02/2019  | 06/02/2019     |
| <b>RR No: KSPDCL-SS2-A34 (Line 10)</b> | Main Meter | Check Meter | Stand by Meter |
| S. No                                  | 18153024   | 18153023    | 18009343       |
| Make                                   | L&T        | L&T         | L&T            |
| Accuracy Class                         | 0.2S       | 0.2S        | 0.2S           |
| Calibration Date/Installation Date     | 06/02/2019 | 06/02/2019  | 06/02/2019     |
|                                        |            |             |                |
| <b>Block 8:</b>                        | Main Meter | Check Meter | Stand by Meter |
| <b>RR No: KSPDCL-SS2-A47 (Line 8)</b>  |            |             |                |
| S.No                                   | 18153022   | 18152958    | 18009426       |
| Make                                   | L&T        | L&T         | L&T            |
| Accuracy Class                         | 0.2S       | 0.2S        | 0.2S           |
| Calibration Date/Installation Date     | 27/02/2019 | 27/02/2019  | 27/02/2019     |

|                                       |                   |                    |                       |
|---------------------------------------|-------------------|--------------------|-----------------------|
| <b>RR No: KSPDCL-SS2-A48 (Line 7)</b> | <b>Main Meter</b> | <b>Check Meter</b> | <b>Stand by Meter</b> |
| S.No                                  | 18152966          | 18068257           | 18009375              |
| Make                                  | L&T               | L&T                | L&T                   |
| Accuracy Class                        | 0.2S              | 0.2S               | 0.2S                  |
| Calibration Date/Installation Date    | 27/02/2019        | 03/06/2019         | 27/02/2019            |

Above listed meters were operational till 20 Dec 2019. On 20<sup>th</sup> Dec meter replacement was taken place by the state utility and new meters are in operation since 20 Dec 2019. The details of new meters are provided below:

|                                        |                   |                    |                       |
|----------------------------------------|-------------------|--------------------|-----------------------|
| <b>Block 4</b>                         | <b>Main Meter</b> | <b>Check Meter</b> | <b>Stand by Meter</b> |
| <b>RR No: KSPDCL-SS1-A25 (Line 10)</b> |                   |                    |                       |
| S. No                                  | LT-0827-A         | LT-0843-A          | LT-0821-A             |
| Make                                   | L&T               | L&T                | L&T                   |
| Accuracy Class                         | 0.2S              | 0.2S               | 0.2s                  |
| Calibration Date/Installation Date     | 20/12/2019        | 20/12/2019         | 24/12/2019            |
| <b>RR No: KSPDCL-SS1-A26 (Line 09)</b> |                   |                    |                       |
| S. No                                  | LT-0788-A         | LT-0798-A          | LT-0836-A             |
| Make                                   | L&T               | L&T                | L&T                   |
| Accuracy Class                         | 0.2S              | 0.2S               | 0.2s                  |
| Calibration Date /Installation Date    | 20/12/2019        | 20/12/2019         | 24/12/2019            |
| <b>Block 7:</b>                        |                   |                    |                       |
| <b>RR No: KSPDCL-SS2-A33 (Line 09)</b> |                   |                    |                       |
| S. No                                  | LT-0804-A         | LT-0803-A          | LT-0842-A             |
| Make                                   | L&T               | L&T                | L&T                   |
| Accuracy Class                         | 0.2S              | 0.2S               | 0.2S                  |
| Calibration Date/Installation Date     | 20/12/2019        | 20/12/2019         | 24/12/2019            |
| <b>RR No: KSPDCL-SS2-A34 (Line 10)</b> |                   |                    |                       |
| S. No                                  | LT-0801-A         | LT-0807-A          | LT-0825-A             |
| Make                                   | L&T               | L&T                | L&T                   |
| Accuracy Class                         | 0.2S              | 0.2S               | 0.2S                  |
| Calibration Date/Installation Date     | 20/12/2019        | 20/12/2019         | 24/12/2019            |
| <b>Block 8:</b>                        |                   |                    |                       |
| <b>RR No: KSPDCL-SS2-A47 (Line 8)</b>  |                   |                    |                       |
| S. No                                  | LT-0814-A         | LT-0831-A          | LT-0810-A             |
| Make                                   | L&T               | L&T                | L&T                   |
| Accuracy Class                         | 0.2S              | 0.2S               | 0.2S                  |
| Calibration Date/Installation Date     | 20/12/2019        | 20/12/2019         | 24/12/2019            |
| <b>RR No: KSPDCL-SS2-A48 (Line 7)</b>  |                   |                    |                       |
| S. No                                  | LT-0797-A         | LT-0799-A          | LT-0811-A             |
| Make                                   | L&T               | L&T                | L&T                   |
| Accuracy Class                         | 0.2S              | 0.2S               | 0.2S                  |
| Calibration Date/Installation Date     | 20/12/2019        | 20/12/2019         | 24/12/2019            |

**Energy accounting:** as per the provision of PGCIL, during the meter change period the B-form reflects the net Energy Billed as "Net Energy - 15%import - Tr Loss" in kWh. There is no separate import value shown in the B-form. Therefore, during the period "Export" value itself is the net energy billed for the month. This change of practice has been accounted in the ER sheet and properly demonstrated. The change in practice can be further referred in the B-form for Dec 2019 and in the records for supplementary credits bills.

Additionally, from January 2020, the SRPC (Southern Regional Power Committee) has affected an online practice of monthly energy accounting, termed as "Regional Energy Account" (REA). In this new practice, the project wise monthly net energy units are calculated by authority and uploaded under

'Regional Energy Account' for that month on the SRPC web site ([www.srpc.kar.nic.in](http://www.srpc.kar.nic.in)) to enable downloading of the monthly net energy units by respective constituents. Therefore, no separate monthly B-Forms are applicable from the month of Jan 2020 (i.e. effectively from 20 Jan 2020). Also, the REA accounting statement provides calculated value of net energy to be billed by PP; hence no separate export, import & transmission losses values are reflected. The net energy units are directly considered by PP for issuing the invoice.

Meters used to measure the parameters are of accuracy class 0.2s, as verified through calibration certificates/06/ and the photographs indicating the accuracy, make etc. 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/06/ are mentioned in the table under Appendix-1 of the VCS MR/04/.The electricity generation from project activity is metered at 33KV/220 V KSPDCL substation 1 & substation 2. All the plants (including the project activity solar plant and other solar project developer's solar plants) are connected to their dedicated individual feeder at this substation. Feeder wise metering arrangements are available to each of the developers to quantify the electricity delivered to the substation by individual project developer.

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.

The assessment team has verified the monthly B-Form/energy breakup reports issued by state utility and confirmed that only the data recorded through main meters is used to calculate net electricity supplied to the grid and consequently for ER calculations. As verified through the calibration certificates, there is no delay in calibration of main meters identified during the current monitoring period, hence it can be concluded that meters were working satisfactorily during the current monitoring period. The registered VCS PD/01/ & MR /04/ and meter photographs confirm that the metering equipment are sealed and maintained by the state utility.

In view of the above discussion the assessment team able to confirm that evidence used to determine the GHG reductions and removals are sufficient and appropriate with respect to quality and quantity.

### 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:

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

Where:

$EF_{grid, CM, y}$  : Combined margin CO<sub>2</sub> emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO<sub>2</sub>/MWh) (i.e., 0.93684 tCO<sub>2</sub>/MWh).

$EG_{PJ, y}$  : 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)

$BE_y$  : Baseline emissions in year y (tCO<sub>2e</sub>/yr).

$$\begin{aligned} \text{Thus, } BE_y &= 343,921.77 \text{ MWh} * 0.93684 \text{ tCO}_2/\text{MWh} \\ &= 322,198 \text{ tCO}_2 (\text{rounded down value has been considered by PP}) \end{aligned}$$

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 7.04% lower than the estimated amount of emission reductions at the time of validation, this is because of lower generation achieved for a few months during the monitoring period. However, such lower generation are due to less availability of solar radiation which is not in control of PP.

It is to be noted that PLF is completely governed by the availability of solar radiation, which is natural phenomenon and same is beyond the control of PP, hence the assessment team has concluded the decrease in emission reduction of the project activity is justified and acceptable. 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

LGAI Technological Center, S.A. (also referred to as Applus+ Certification), contracted by WeAct Pty. Ltd. has performed the independent verification of the emission reductions for the VCS project activity (VCS ID- 1914) “150 MW Solar Project in Karnataka by Avaada Solar” in India for the monitoring period 01/06/2019 – 30/06/2020 as reported in the Monitoring Report Version 02 dated 01/08/2020. WeAct Pty. Ltd., 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 on the basis of the baseline and monitoring methodology ACM0002 version 19, the monitoring plan contained in the registered VCS Joint PD and MR Version 03, dated 25/11/2019 and VCS guidelines version 4.0, Monitoring Report Version 02 dated 01/08/2020 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 01/06/2019 – 30/06/2020 are fairly stated in the Monitoring Report Version 02 dated 01/08/2020. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology ACM0002 version 19, and the VCS standard.

Verification period: From 01/06/2019 – 30/06/2020 (including both dates)

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

| Year                                        | Baseline emissions or removals (tCO <sub>2</sub> e) | Project emissions or removals (tCO <sub>2</sub> e) | Leakage emissions (tCO <sub>2</sub> e) | Net GHG emission reductions or removals (tCO <sub>2</sub> e) |
|---------------------------------------------|-----------------------------------------------------|----------------------------------------------------|----------------------------------------|--------------------------------------------------------------|
| <b>2019</b><br>(01-Jun-2019 to 31-Dec-2019) | 157,723                                             | 0                                                  | 0                                      | 157,723                                                      |
| <b>2020</b><br>(01-Jan-2020 to 30-Jun-2020) | 164,475                                             | 0                                                  | 0                                      | 164,475                                                      |
| <b>Total</b>                                | 322,198                                             | 0                                                  | 0                                      | 322,198                                                      |

# APPENDIX 1: DOCUMENT REFERENCES

| S.No | Title of Document                                                                                                                                                                                                                   | Version                                                   | Date                           |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------|
| 1.   | Registered VCS Joint PD and MR                                                                                                                                                                                                      | 3.0                                                       | 25/11/2019                     |
| 2.   | VCS Validation and Verification Report, prepared by Earthood Services Private Limited (For first monitoring period from 20-Dec-2018 to 31-May -2019)                                                                                | 3.0                                                       | 28/11/2019                     |
| 3.   | VCS Monitoring Report                                                                                                                                                                                                               | 01                                                        | 08/07/2020                     |
| 4.   | VCS Monitoring Report (Final)                                                                                                                                                                                                       | 02                                                        | 01/08/2020                     |
| 5.   | ER spread sheet (corresponding to the final monitoring report)                                                                                                                                                                      | 01                                                        | 08/07/2020                     |
| 6    | Certificates of Calibration for all the meters belongs to project activity.<br>Meter change/replacement report applicable to the project activity.                                                                                  | Covering the entire period<br>01/06/2019 to<br>30/06/2020 | -                              |
| 7.   | Invoice issued by PP to state DISCOM                                                                                                                                                                                                | for the period<br>01/06/2019 to<br>30/06/2020             | -                              |
| 8.   | Monthly B-Form issued by ESKOM for the current verification period.                                                                                                                                                                 | Applicable for the period<br>01/06/2019 to<br>19/01/2020  | -                              |
|      | Monthly Regional Energy Account (REA) issued by SRPC                                                                                                                                                                                | Applicable for the period<br>20/01/2020<br>and onward     |                                |
| 9.   | "Consolidated baseline methodology for grid-connected electricity generation from renewable sources", ACM0002,                                                                                                                      | 19                                                        | -                              |
| 10.  | CEA Database                                                                                                                                                                                                                        | version 14                                                | Dec 2018                       |
| 11.  | Commissioning certificates for all the Solar Plant of the project activity issued by state electricity authority                                                                                                                    | -                                                         | -                              |
| 12.  | Power Purchase Agreements signed between Project Proponent and state electricity authority                                                                                                                                          | -                                                         | -                              |
| 13.  | VCS webpage for the project, VCS ID 1914;<br><a href="https://registry.terra.org/app/projectDetail/VCS/1914">https://registry.terra.org/app/projectDetail/VCS/1914</a>                                                              | -                                                         | Last accessed on<br>11/08/2020 |
| 14.  | Letter of declaration dated from PP regarding not having created or sought any other form of environmental credit for the same period                                                                                               | -                                                         | Dated<br>08/08/2019            |
| 15.  | Central Electricity Authority (Installation and Operation of Meters) Regulations<br>Notified on 17/03/2006 <a href="#">No. 502/70/CEA/DP&amp;D</a><br>Amendments Notified on 26/06/2010 <a href="#">No. 502/6/2009/DP&amp;D/D-I</a> | -                                                         | -                              |
| 16.  | VCS Standard                                                                                                                                                                                                                        | Version 4.0                                               | 19/09/2019                     |
| 17.  | VCS Program Guide                                                                                                                                                                                                                   | Version 4.0                                               | 19/09/2019                     |
| 18.  | Latest photographs of SCADA system, Solar Plant, transformers,                                                                                                                                                                      | -                                                         | -                              |

| S.No | Title of Document                                                                                                                       | Version | Date |
|------|-----------------------------------------------------------------------------------------------------------------------------------------|---------|------|
|      | grievance register and energy meters installed at site                                                                                  |         |      |
| 19   | Employment details, attendance sheets etc.                                                                                              | -       | -    |
| 20   | Documentary evidence related to Social & Sustainable Development activities conducted by Avaada group in and around the project region. | -       | -    |
| 21   | Proof of notification communication by SRPC related to change in monthly energy accounting via REA                                      |         |      |

## APPENDIX 2: COMPETENCY STATEMENT

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 Assessment (remote) |
|-------------|-------------------------|-------------------|----------------------------|------------------|-------------------------|---------------------------------------|
| VivekAhrwar | Lead Auditor (LA)       | Yes (1)           | Yes (1.2)                  | N/A              | Yes                     | Yes                                   |
| VivekAhrwar | Technical Expert (TE)   | Yes (1)           | Yes (1.2)                  | N/A              | Yes                     | Yes                                   |
| Simon Shen  | Technical Reviewer (TR) | Yes (1)           | Yes (1.2)                  | N/A              | N/A                     | N/A                                   |

The curricula vitae of the DOE's team members are provided below:

**Vivek Kumar Ahrwar** is a BEE-Certified Energy Auditor by Govt of India with over eight years of relevant experience in energy efficiency, energy audit, thermal and electrical energy generation technology from renewable source and energy conservation in energy intensive industries, designated consumers and commercial buildings, implementation of energy conservation building codes, research, process and green building projects. He is a certified lead auditor for ISO 14001 EMS and 14064. He has experience under various categories of projects stating from renewable to waste to supercritical projects and WCD. He has successfully audited more than 100 GHG (CDM/VCS/GS) projects in different states across the India. 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 Govt. Engineering college, Rewa, RGPV, India.

**Simon Shen** (master degree in thermal energy engineering, bachelor 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 3.5years.

## APPENDIX 3: ABBREVIATIONS

| Abbreviations   | Full texts                                            |
|-----------------|-------------------------------------------------------|
| ASEPL           | Avaada Solar Energy Private Limited                   |
| ABT             | Availability Based Tariff                             |
| BEF             | Baseline Emission Factor                              |
| 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   |
| CO <sub>2</sub> | Carbon dioxide                                        |
| DISCOM          | Distribution Company                                  |
| EB              | Executive Board                                       |
| EPC             | Engineering, Procurement and Construction             |
| ESKOM           | Electricity Supply Commission                         |
| FAR             | Forward Action Request                                |
| GHG             | Green House Gas                                       |
| ISO             | International Standards Organization                  |
| KSPDCL          | Karnataka Solar Power Development Corporation Limited |
| kW              | Kilowatt                                              |
| kWh             | Kilowatt hour                                         |
| MFR             | Multi-Function Relay                                  |
| MR              | Monitoring Report                                     |
| MW              | Megawatt                                              |
| MWh             | Megawatt-hour                                         |
| O&M             | Operation and Maintenance                             |
| PD              | Project Description                                   |
| PGCIL           | Power Grid Corporation of India Ltd.                  |
| PLF             | Plant Load Factor                                     |
| PP              | Project Proponent                                     |
| PPA             | Power Purchase Agreement                              |
| QA/QC           | Quality Assurance and Quality Control                 |
| TOD             | Time of the Day                                       |
| 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 4: FINDINGS OVERVIEW

**Table 1: Remaining FAR from validation and/or previous verification**

|                                                      |     |                    |     |                  |
|------------------------------------------------------|-----|--------------------|-----|------------------|
| <b>FAR ID</b>                                        | N/A | <b>Section no.</b> | N/A | <b>Date</b> :N/A |
| <b>Description of FAR</b>                            |     |                    |     |                  |
| N/A                                                  |     |                    |     |                  |
| <b>Project participant response</b>                  |     |                    |     | <b>Date</b> :    |
| N/A                                                  |     |                    |     |                  |
| <b>Documentation provided by project participant</b> |     |                    |     |                  |
| N/A                                                  |     |                    |     |                  |
| <b>DOE assessment</b>                                |     |                    |     | <b>Date:</b>     |
| N/A                                                  |     |                    |     |                  |

**Table 1. CL from this verification**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                    |            |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------|------------|-------------------------|
| <b>CL ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 01 | <b>Section no.</b> | 2.2& 2.3.2 | <b>Date:</b> 29/07/2020 |
| <b>Description of CL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |                    |            |                         |
| <p>Please submit the following documents:</p> <ol style="list-style-type: none"> <li>1. ER sheet</li> <li>2. Copy of grievance register for stakeholder comment as mentioned in section 2.2</li> <li>3. SRPC notification for change in billing practice</li> <li>4. Submit records of local employments</li> <li>5. Photos of the new meters displaying specifications</li> <li>6. Provide evidence of grievance mechanism</li> <li>7. Submit other records related to sustainability development etc.</li> <li>8. The project has not been applied under any other GHG programs, the PP need to submit a declaration confirming the same.</li> <li>9. The Project has no intend to generate any other form of GHG-related environmental credit for GHG emission reductions or removals claimed under the VCS Program, the PP need to submit a declaration confirming the same.</li> </ol> |    |                    |            |                         |
| <b>Project participant response</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |                    |            | <b>Date:</b> 05/08/2020 |
| <p>PP hereby confirms submission of the above listed documents.</p> <p>However, PP would like to confirm that the evidence of the grievance register (point 2) itself confirms the existence of grievance mechanism (point 6) above.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |                    |            |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |                    |            |                         |
| <ol style="list-style-type: none"> <li>1. ER sheet</li> <li>2. Copy of grievance register</li> <li>3. SRPC notification</li> <li>4. Records of local employments</li> <li>5. Photos of the new meters displaying specifications</li> <li>6. Records related to sustainable development related activities.</li> <li>7. The statement from PP confirming that the project has not been applied under any other GHG programs. It also confirms that the Project has no intend to generate any other form of GHG-related environmental credit for GHG emission reductions or removals claimed under the VCS Program.</li> </ol>                                                                                                                                                                                                                                                                |    |                    |            |                         |
| <b>DOE assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |                    |            | <b>Date:</b> 11/08/2020 |

Assessment team confirm that PP has submitted following documents:

- ER sheet
- Copy of grievance register
- SRPC notification
- Records of local employments
- Photos of the new meters displaying specifications
- Records related to sustainable development related activities.
- PP Declaration dated 08/08/2019

Hence accepted

CL#1 Closed

**Table 2. CAR from this verification**

| CAR ID                                                                                                                                                                                                                                                                                                       | 01 | Section no. | 1.1 | Date:29/07/2020         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------|-----|-------------------------|
| <b>Description of CAR</b>                                                                                                                                                                                                                                                                                    |    |             |     |                         |
| Please correct the following inconsistency with respect to as per the guidelines mentioned in VCS Monitoring Report Template version-4.0:                                                                                                                                                                    |    |             |     |                         |
| 1. MR page 01;.Font used is “Franklin Gothic Book” instead of “Arial” or “Century Gothic”, which is not Consistent with MR template requirement. Also same places, Font Size used are 9.5 instead of “12” or “24”. Please correct.                                                                           |    |             |     |                         |
| 2. In data and parameters at validation (EF grid, CM, y, EF <sub>grid, OM, y</sub> & EF <sub>grid, BM, y</sub> ) source of data section the month is not mentioned before 2018 as accordingly to CO2 baseline database (Version 14.0) published by CEA.                                                      |    |             |     |                         |
| <b>Project participant response</b>                                                                                                                                                                                                                                                                          |    |             |     | <b>Date: 05/08/2020</b> |
| 1) PP would like to clarify that the VERRA MR template page 2 reference texts given under the table in the title page was referred while completing the Title page in the MR. These reference texts are given with font “Franklin Gothic Book”, font size 9.5. Hence same format has been kept consistently. |    |             |     |                         |
| Whereas all other section of the MR is kept in “Franklin Gothic Book 10.5 point, black” as the template prescribes to use “Arial or Franklin Gothic Book 10.5 point, black, regular (non-italic) font”.                                                                                                      |    |             |     |                         |
| However, as per the comment above the texts inside the table is now changed with “Century Gothic 10.5 point”.                                                                                                                                                                                                |    |             |     |                         |
| 2) The reference month (i.e. December) for the CEA database version 14 has been included in the revised MR. Also, the CEA database has been included for further reference.                                                                                                                                  |    |             |     |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                                                                                                                         |    |             |     |                         |
| Revised MR, version 02, 01/08/2020                                                                                                                                                                                                                                                                           |    |             |     |                         |
| <b>DOE assessment</b>                                                                                                                                                                                                                                                                                        |    |             |     | <b>Date: 11/08/2020</b> |

|                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. Assessment team confirm that PP has changed the font from “Arial” to “Franklin Gothic Book 10.5 point, black” and text inside the table now changed into with “Century Gothic 10.5 point”. Hence accepted.</li> <li>2. Assessment team confirm that PP has included reference month (i.e. December) for the CEA database version 14 in revised monitoring report. Hence accepted.</li> </ol> |
| CAR#1 Closed                                                                                                                                                                                                                                                                                                                                                                                                                           |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |             |     |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------|-----|------------------|
| CAR ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 02 | Section no. | 1.1 | Date:29/07/2020  |
| Description of CAR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |             |     |                  |
| PP is requested to include PPA arrangement in section 1.1 of monitoring report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |             |     |                  |
| Project participant response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |             |     | Date: 05/08/2020 |
| <p>The reference related to PPA has been included in the MR under the footnote 1.</p> <p>This is in consistent with the information reported in the registered PD.</p> <p>The information under the section 1.1 is reported as per MR filling guidelines in the template, hence this section has been filled with only the required information as prescribed.</p> <p>However, PP would like to confirm that the entire monitoring plan, project capacity, power evacuation facility etc. are as per PPA provisions. Those information are referred under the section 4.3 of the MR.</p> |    |             |     |                  |
| Documentation provided by project participant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |    |             |     |                  |
| Revised MR, version 02, 01/08/2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |             |     |                  |
| DOE assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |             |     | Date: 11/08/2020 |
| Assessment team accepted PP response as it's inline with VCS template requirement. Hence accepted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |             |     |                  |
| CAR#2 Closed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |             |     |                  |

|                                                                                             |    |             |     |                  |
|---------------------------------------------------------------------------------------------|----|-------------|-----|------------------|
| CAR ID                                                                                      | 03 | Section no. | 4.2 | Date:29/07/2020  |
| Description of CAR                                                                          |    |             |     |                  |
| PP is requested to correct meter calibration frequency in section 4.2 of monitoring report. |    |             |     |                  |
| Project participant response                                                                |    |             |     | Date: 05/08/2020 |

|                                                                                                                                                                                                                 |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| PP would like inform that it was a typographical error in the page 13, whereas information related to calibration frequency reported in the page 12 is correct. The correction has been made in the revised MR. |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                            |                         |
| Revised MR, version 02, 01/08/2020                                                                                                                                                                              |                         |
| <b>DOE assessment</b>                                                                                                                                                                                           | <b>Date: 11/08/2020</b> |
| Assessment team confirm that PP has corrected the meter calibration frequency in section 4.2 of the revised monitoring report. Hence accepted.                                                                  |                         |
| CAR#3 Closed                                                                                                                                                                                                    |                         |

|                                                                                                                                    |    |                    |     |                          |
|------------------------------------------------------------------------------------------------------------------------------------|----|--------------------|-----|--------------------------|
| <b>CAR ID</b>                                                                                                                      | 04 | <b>Section no.</b> | 5.4 | <b>Date :29/07/2020</b>  |
| <b>Description of CAR</b>                                                                                                          |    |                    |     |                          |
| PP is requested to provide comparison of ERs in between actual ER achieved and ex-ante estimated values.                           |    |                    |     |                          |
| <b>Project participant response</b>                                                                                                |    |                    |     | <b>Date : 05/08/2020</b> |
| PP had submitted the ER comparison under the ER sheet. However, the ER comparison is now included under the section 5.4 of the MR. |    |                    |     |                          |
| <b>Documentation provided by project participant</b>                                                                               |    |                    |     |                          |
| Revised MR, version 02, 01/08/2020                                                                                                 |    |                    |     |                          |
| <b>DOE assessment</b>                                                                                                              |    |                    |     | <b>Date: 11/08/2020</b>  |
| Assessment team confirm that PP has included ER comparison in section 5.4 of revised MR. Hence accepted.                           |    |                    |     |                          |
| CAR#4 Closed                                                                                                                       |    |                    |     |                          |

|                                                                                                                                                                                                                                                                              |    |                    |     |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------|-----|--------------------------|
| <b>CAR ID</b>                                                                                                                                                                                                                                                                | 05 | <b>Section no.</b> | 4.3 | <b>Date :29/07/2020</b>  |
| <b>Description of CAR</b>                                                                                                                                                                                                                                                    |    |                    |     |                          |
| <ol style="list-style-type: none"> <li>1. PP is requested to indicate meter calibration of applicable meters in current monitoring period.</li> <li>2. PP includes details of Meter replacement in the MR in line with the meter replacement documents submitted.</li> </ol> |    |                    |     |                          |
| <b>Project participant response</b>                                                                                                                                                                                                                                          |    |                    |     | <b>Date : 05/08/2020</b> |

PP would like to intimate that meter calibration frequency prescribed under the registered monitoring plan is once in 5 years. Therefore, the previous calibration reports still applicable. However, there was change in meter in the month of Dec 2019. Therefore, the newly calibrated meters were installed in Dec 2020 which are valid for a period of next 5 years.

PP has included the meter replacement details and their applicability of calibration conditions etc. in the revised MR. There are separate tables included under the section 4.3 of the MR to refer the meters and their details across the entire monitoring period.

#### Documentation provided by project participant

Revised MR, version 02, 01/08/2020

Records of meter replacement.

#### DOE assessment

Date: 11/08/2020

Assessment team confirm that PP has included meter change details in section 4.3 of the revised MR and meter calibration details included in MR are valid for entire monitoring period. Hence accepted.

CAR#5 Closed

Table 4.FAR from this verification

| FAR ID                                        | N/A | Section No. | N/A | Date: | N/A   |
|-----------------------------------------------|-----|-------------|-----|-------|-------|
| Description of FAR                            |     |             |     |       |       |
| N/A                                           |     |             |     |       |       |
| Project participant response                  |     |             |     |       | Date: |
| N/A                                           |     |             |     |       | N/A   |
| Documentation provided by project participant |     |             |     |       |       |
| N/A                                           |     |             |     |       |       |
| DOE assessment                                |     |             |     |       | Date: |
| N/A                                           |     |             |     |       | N/A   |