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

Document Prepared by EKI Energy Services Limited

Project Title	Bundled Solar Power Project by SolarArise India Projects Pvt. Ltd.
Version	02
Report ID	VVER1762
Date of Issue	09-December-2020
Project ID	1762
Monitoring Period	26-April-2018 to 25-August-2020 (Inclusive of both days)
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1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

The main purpose of this project activity is to generate clean form of electricity through renewable solar energy source. The project is a bundled project activity which involves installation of 120 MW solar project in different states of India through SPVs.

Over the 10 years of first crediting period, the project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 244,968 tCO_2e per year, thereon displacing 253,776 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian grid, which is mainly dominated by thermal/fossil fuel based power plant.

The details of the SPVs for the project and their location of installation are mentioned in the table below:-

Name of SPVs	Capacity in MW	COD	Connection with Grid	State	Usage
Talettutayi Solar Projects Pvt Ltd	10 MW	23-June-2016	Indian Grid	Telangana	Sale to State DISCOM
NV Vogt Solar One Pvt Ltd[1]	10 MW	23-June-2016	Indian Grid	Telangana	Sale to State DISCOM
Talettutayi Solar Projects Four Pvt Ltd	50 MW	10-August-2017	Indian Grid	Maharashtra	Sale to SECI
Talettutayi Solar Projects One Pvt Ltd	30 MW	05-January-2018	Indian Grid	Karnataka	Sale to SECI
Talettutayi Solar Projects Two Pvt Ltd	20 MW	07-August-2019	Indian Grid	Karnataka	Sale to State DISCOM

These are the SPVs of SolarArise India Projects Pvt. Ltd. and the project is promoted by SolarArise India Projects Pvt. Ltd.

Sectoral Scope : 01 - Energy industries (renewable / non-renewable sources)
Project Type : I - Renewable Energy Projects
Project Category : Grid-connected electricity generation from renewable sources ACM0002- Version 18.1

[1] SPV name is changed to TALETTUTAYI SOLAR PROJECTS SIX PRIVATE LIMITED on 18-June-2018. The Certificate of incorporation pursuant to change of name is being submitted.

Tools referred with above methodology are:

Tool to calculate the emission factor for an electricity system[2] - Version 06.0 (EB 97, Annex 07)

Scenario existing prior to the implementation of project activity:

The scenario existing prior to the implementation of the project activity, is electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system".

Baseline Scenario:

As per the applicable methodology, a Greenfield power plant is defined as "a new renewable energy power plant that is constructed and operated at a site where no renewable energy power plant was operated prior to the implementation of the project activity".

As the project activity falls under the definition of a Greenfield power plant, the baseline scenario as per paragraph 24 of Section 5.2.1 of applied methodology is the following:

If the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system". Hence, pre-project scenario and baseline scenario are the same.

Total emission reductions achieved in this monitoring period:

During the Current Monitoring Period from 26-April-2018 to 25-August-2020 (First and last date included) the project activity has supplied 569,212.3 MWh of electricity, and thus contributing to the GHG reductions 549,453 tCO2e.

1.2 Sectoral Scope and Project Type

The project activity falls under the following Sectoral scope and Project Type:

Sectoral Scope : 01 - Energy industries (renewable / non-renewable sources)
Project Type : I - Renewable Energy Projects

[2] http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v6.pdf

Project Category : Grid-connected electricity generation from renewable sources
ACM0002- Version 18.1[3]
The project is not a grouped project activity.

1.3 Project Proponent

Organization name	SolarArise India Projects Pvt. Ltd.
Contact person	Kirandeep Singh
Title	Head Project Finance
Address	304, ILD Trade Centre, Sohna road, sector - 47, Gurgaon - 122001
Telephone	9589899649
Email	info@solararise.com

1.4 Other Entities Involved in the Project

Organization name	EKI Energy Services Limited
Role in the Project	Project Consultant
Contact person	Mr. Prakash Sahu
Title	Project Manager
Address	Office No 201, Plot No 48, Scheme 78, Vijay Nagar Part- II, Indore 452010, India
Telephone	+91-9589899649
Email	prakash@enkingint.org

1.5 Project Start Date

Start date of the project activity is the earliest date of interconnection with the grid i.e. 23-06-2016. This is the date of commissioning of 10 MW solar PV project activity by Talettutayi Solar Projects Pvt Ltd and 10 MW solar PV project activity by NV Vogt Solar One Pvt Ltd.

The details of the commissioning dates of the individual project activity are mentioned in the section 1.1 of this report.

[3] http://cdm.unfccc.int/methodologies/DB/5725LCHYPYM4I1V8OD9SFYVAMFFWNP

1.6 Project Crediting Period

Crediting Period Start date: 23-June-2016

Crediting Period End date: 22-June-2026

The project activity adopts renewable crediting period of 10 years period which can be renewed for maximum 2 times.

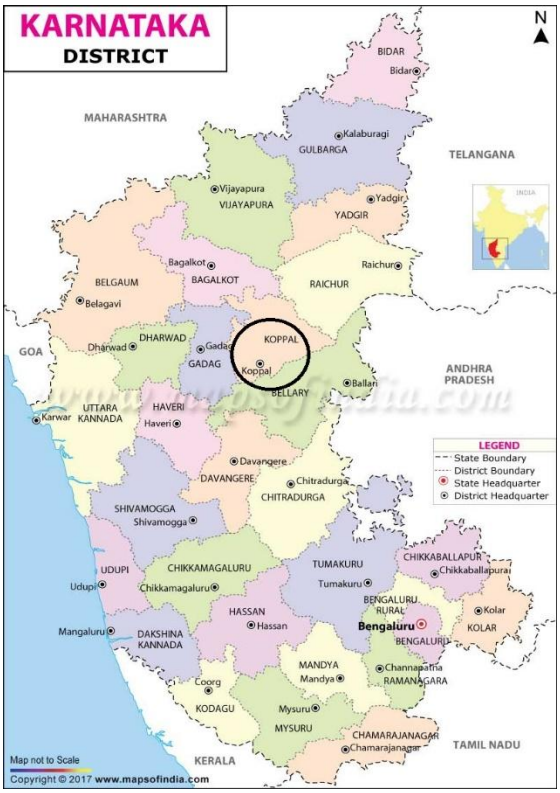
1.7 Project Location

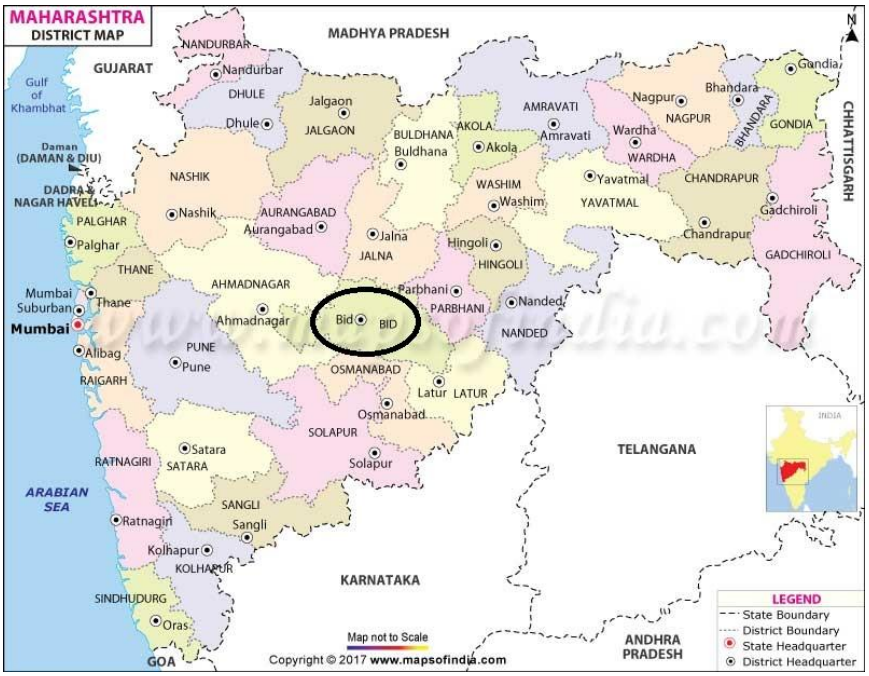
The details of the project locations are mentioned in the table below

Name of SPVs	Village / Site	Tehsil / Mandal	District	State	Latitude (N)	Longitude (E)
Talettutayi Solar Projects Pvt Ltd	Palwai	Gadwal	Mahabubnagar	Telangana	16.153°	77.763°
NV Vogt Solar One Pvt Ltd	Palwai	Gadwal	Mahabubnagar	Telangana	16.266°	77.784°
Talettutayi Solar Projects Four Pvt Ltd	Chatgaon	Telgaon Taluk	Beed	Maharashtra	18.966°	76.218°
Talettutayi Solar Projects One Pvt Ltd	Chikkoppa and Mudhol	Yelburga	Koppal	Karnataka	15.65°	75.99°
Talettutayi Solar Projects Two Pvt Ltd	Karehalli	Koppal	Koppal	Karnataka	15.37°	76.32°

The project locations have been shown in the map below:







1.8 Title and Reference of Methodology

Title	: Grid-connected electricity generation from renewable sources
Reference	: The project activity meets the eligibility criteria of large scale project as it is more than 15 MW
Methodology	: ACM0002: Grid-connected electricity generation from renewable sources - Version 18.1[4]
Type I	: Energy industries (renewable / non-renewable sources)
Category	: Approved Consolidated Methodology (ACM0002)

Tools referred with above methodology and applicable for project activity are:

- Tool to calculate the emission factor for an electricity system[5] - Version 06.0 (EB 97, Annex 07)
- Methodological Tool- Tool for the demonstration and assessment of additionality[6] - Version 07.0.0 (EB 70, Annex 08)

1.9 Participation under other GHG Programs

Not Applicable, as the project activity is not registered with any other program.

The undertaking from PP has been submitted for no any double accounting for current monitoring period and project activity is not participated any other GHG program other than VCS.

1.10 Other Forms of Credit

The project activity is not availing any REC benefits and the same can be confirmed from publically available link of REC generators.

Web-link: https://www.recregistryindia.nic.in/index.php/general/publics/registered_regens PP has also submitted undertaking for not availing other forms of environmental credit for the same crediting period under consideration. A letter of undertaking from the project participant is being submitted regarding no double counting from the project.

1.11 Sustainable Development

Contribution to sustainable development:

The National CDM Authority (NCDMA), which is the Designated National Authority (DNA) for the Government of India (GOI) under the Ministry of Environment and Forests (MoEF), has

[4] http://cdm.unfccc.int/methodologies/DB/5725LCHYPYM4I1V8OD9SFYVAMFFWNP

[5] http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v6.pdf

[6] http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf

mentioned four indicators for the sustainable development in the interim approval guidelines for Clean Development Mechanism (CDM) projects from India . Thus the project's contribution towards sustainable development has been addressed based on the following sustainable development aspects:

- Social well-being
  - Contribution to the development of an otherwise underdeveloped area.
  - Generation of employment opportunities for local people during various phases of the project activity.
- Economic well-being
  - Since, the project uses renewable solar power resources for power generation it does not lead to any emissions in the environment.
  - Avoiding further depletion of the already over-exploited, limited non-renewable sources like coal, oil, etc.
- Technological well-being
  - The technology selected for the power project would use well established Solar PV power generation and the project activity would promote the use of such technology.
- Environmental well-being
  - Solar being a renewable source of energy, it reduces the dependence on fossil fuels and conserves natural resources which are on the verge of depletion. Due to its zero emission the Project activity also helps in avoiding significant amount of GHG emissions.

2 SAFEGUARDS

2.1 No Net Harm

The project activity does not involve any major construction activity. It primarily requires the installation of the solar PV panels, interfacing the generators with the State Electricity Board by setting up HT transmission lines and installation of other accessories.

The report on "Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects" prepared by MNRE dated September 2013. This report clearly mentioned that solar PV project activity operations do not result in direct air pollution, noise pollution. Please refer below web link for the same[7].

[7] https://smartnet.niua.org/sites/default/files/resources/report-on-developmental-impacts-of-RE.pdf

Thus there are no any significant impacts due to implementation of project activity on air, water, soil quality and ambience are envisaged due to the project activity.

2.2 Local Stakeholder Consultation

As a part of continual improvement process, feedback from the associated stakeholders is vital, therefore a dedicated Visitor register cum grievance register has been placed at the project site which is accessible to stakeholders to provide their feedback on the project. It is appropriate publicly accessible location at which local stakeholders can provide their feedback on the project. This location is also conducive to continuous and regular checks for stakeholder comments. For the global stakeholders, the suggestion and the grievance can be submitted to info@solar-arise.com

Stakeholder meetings were organized at the time of registration of project activity in order to identify the major challenges around the area, stakeholders were invited well in advance through printed invitation, calls, meeting and a notice is placed around the local common areas. Various CSR activities around site are carried out. The stakeholder are also request to share their experiences and grievances on continuous basis. Registers is used to records the grievances and feedback. Grievance record has been submitted to the DOE.

During the current monitoring period, positive feedback are received regarding site operation. No any grievances received during the current monitoring period, therefore, no any mitigation measures are required. In case of grievances, the nature of probable resolution is discussed with the plant head office and implemented by the site incharge.

2.3 AFOLU-Specific Safeguards

Not applicable to this as this is not an AFOLU project activity.

3 IMPLEMENTATION STATUS

3.1 Implementation Status of the Project Activity

The project activity involves the installation of Solar PV project. The total installed capacity of the project is 120 MW of Solar PV plant located at different states in India. The project is promoted by SolarArise India Projects Pvt. Ltd.

The Project activity is a new facility (Greenfield) and the electricity generated by the project will be exported to the Indian electricity grid. The project will therefore displace an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid. The Project Proponent plans to avail the VCS benefits for the project.

In the Pre- project scenario the entire electricity, delivered to the grid by the project activity, would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources.

The project shall result in replacing anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 244,968 tCO2e per year, thereon displacing 253,776 MWh/year amount of electricity from the gird over the 10 years crediting period.

Solar PV Project Technology Details –

The project activity aims to harness solar energy through installation of Solar PV project with total installed capacity of 120 MW.

The technical specification of 10 MW plant interconnection with grid on 23-06-2016 by Talettutayi Solar Projects Pvt Ltd are as follows:

Sl. No.	Technical details of the equipment	Description
1	Technology Used	Poly Crystalline Silicon
2	Make of modules installed	Trina Solar
3	Model of the modules installed	TSM-310PC14, TSM-315PC14
4	Number of Inverters	10 Nos.
5	Make & Number of Transformers	Make- Voltamp Model- 2 MVA, 5 Nos.

The technical specification of 10 MW plant interconnection with grid on 23-06-2016 by NV Vogt Solar One Pvt Ltd are as follows:

Sl. No.	Technical details of the equipment	Description
1	Technology Used	Poly Crystalline Silicon
2	Make of modules installed	Trina Solar
3	Model of the modules installed	TSM-310PC14, TSM-315PC14
4	Number of Inverters	10 Nos.
5	Make & Number of Transformers	Make- Voltamp Model- 2 MVA, 5 Nos.

The technical specification of 50 MW plant interconnection with grid on 10-08-2017 by Talettutayi Solar Projects Four Pvt Ltd are as follows:

Sl. No.	Technical details of the equipment	Description
1	Technology Used	Poly Crystalline Silicon
2	Make of modules installed	JA Solar
3	Model of the modules installed	320 Wp & 325 Wp
4	Make & Model of Invertor	Make- Sungrow, Model- SG 2500
5	Number of Inverters	20
6	Make & Number of Transformers	Make- Sudhir, Model- 5 MVA, 10 Nos.

		Make- Voltamp, Model- 50 MVA, 1 No.

The technical specification of 30 MW plant interconnection with grid on 05-01-2018 by Talettutayi Solar Projects One Pvt Ltd are as follows:

Sl. No.	Technical details of the equipment	Description
1	Technology Used	Poly Crystalline Silicon
2	Make of modules installed	JA Solar
3	Model of the modules installed	320 Wp & 325 Wp
4	Make & Model of Invertor	Make- Sungrow, Model- SG 2500
5	Number of Inverters	12
6	Make & Number of Transformers	Make- Silchar, Model- 5 MVA, 6 Nos. Make- Raychem, Model- 30 MVA, 1 No.

3.2 Deviations

2.3.1 Methodology Deviations

No methodology deviation is applied during the monitoring period.

2.3.2 Project Description Deviations

No deviation has taken place in project description during the monitoring period.

3.3 Grouped Projects

The project is not a grouped project thus this is not applicable.

4 DATA AND PARAMETERS

4.1 Data and Parameters Available at Validation

Data / Parameter	$EF_{grid, OM, y}$
Data unit	tCO_2/MWh
Description	Operating margin CO_2 emission factor for the project electricity system in year y
Source of data	Calculated from CEA database, Version 12, May 2017[8]

[8] http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver12.pdf

Value applied	0.9843
Justification of choice of data or description of measurement methods and procedures applied	Calculated as per "Tool to calculate the emission factor for an electricity system, version 05" as 3-year generation weighted average using data for the years 2013-14, 2014-15 & 2015-16. The data are obtained from "CO2 Baseline Database for Indian Power Sector" version 12, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of Data	For the calculation of the Baseline Emission
Comments	This parameter is fixed ex-ante for the entire crediting period.

Data / Parameter	$EF_{grid, BM, y}$
Data unit	tCO_2/MWh
Description	Build margin CO_2 emission factor for the project electricity system in year y
Source of data	Calculated from CEA database, Version 12, May 2017[9]
Value applied	0.9083
Justification of choice of data or description of measurement methods and procedures applied	Calculated as per "Tool to calculate the emission factor for an electricity system, version 05" as per the latest data available for the most recent year 2015-16. The data is obtained from "CO_2 Baseline Database for Indian Power Sector" version 12, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of Data	Calculation of baseline emissions
Comments	The above value is fixed and it is same for the entire crediting period

Data / Parameter	$EF_{grid, CM, y}$
Data unit	tCO_2/MWh
Description	Combined margin CO_2 emission factor for the project electricity system in year y
Source of data	Calculated from CEA database, Version 12, May 2017[10]
Value applied	0.9653
Justification of choice of	The combined margin emissions factor is calculated as follows:

[9] http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver12.pdf

[10] http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver12.pdf

data or description of measurement methods and procedures applied	$EF_{grid,CM,y}= EF_{grid,OM,y}* WOM + EF_{grid, BM,y}* W_{BM}$ Where: $EF_{grid,BM,y}$= Build margin CO2 emission factor in year y (tCO2/MWh) $EF_{grid,OM,y}$= Operating margin CO2 emission factor in year y (tCO2/MWh) W_{OM} = Weighting of operating margin emissions factor (%) = 75% W_{BM}= Weighting of build margin emissions factor (%) = 25%
Purpose of Data	Calculation of baseline emissions
Comments	The above value is fixed and it is same for the entire crediting period

4.2 Data and Parameters Monitored

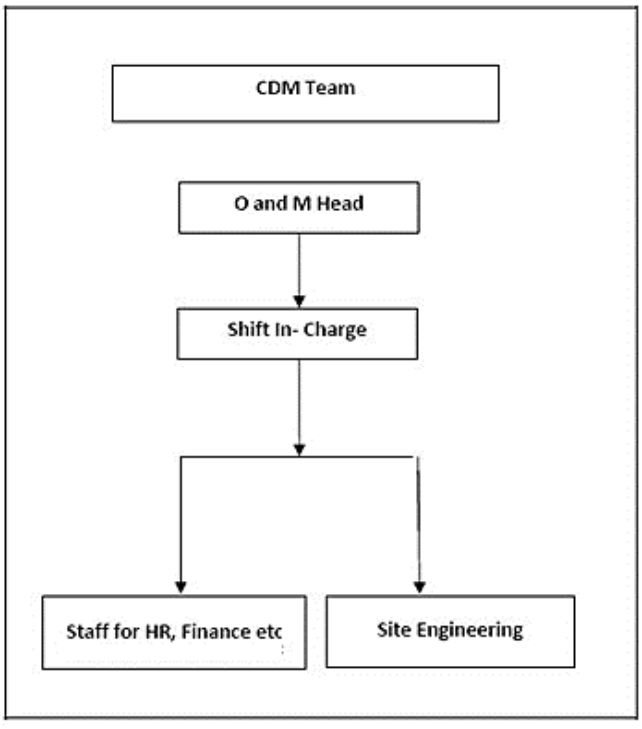
Data / Parameter	$EG_{PJ, y}$
Data unit	MWh/y
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh)
Source of data	Monthly joint meter reading reports
Description of measurement methods and procedures to be applied	The difference of final value of export and import is used for monthly values of net electricity supplied to the grid by the project activity and same value will be considered for ER calculations. For detailed schedule of Calibration of energy meters involved in project activity please refer Appendix 1
Frequency of monitoring/recording	Continuous measurement & monthly recording
Value monitored	569,212.3
Monitoring equipment	The electricity exported / supplied by the plant to pooling substation and further to RRVPNL substation. This meter also measures electricity imported by the plant from the grid.
QA/QC procedures to be applied	The meters is approved, tested & sealed by the State Utility. The meters are in the custody of State Utility. The frequency of calibration is once in 5 years. The monthly electricity supplied/exported by the project activity in the JMR report is 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. The metering arrangement, accuracy class of meters, calibration

	frequency is under control of state electricity board and PP do not have any control on it. PP is getting value of net electricity supplied to grid and the same is considered the monitoring parameter. The billing is raised based on substation meters.
Purpose of the data	Calculation of baseline emissions
Calculation method	Thus, Net electricity supplied to the grid by the project plant in a given month = Export, kWh– Import, kWh
Comments	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VERs for this project activity, whichever occurs later.

4.3 Monitoring Plan

The monitoring plan is developed in accordance with the modalities and procedures for CDM project activities and is proposed for grid-connected solar power project being implemented. The monitoring plan, which will be implemented by the project participant describes about the monitoring organisation, parameters to be monitored, monitoring practices, quality assurance, quality control procedures, data storage and archiving.

The authority and responsibility for registration, monitoring, measurement, reporting and reviewing of the data rests with the project participant. PP proposed the following structure for data monitoring, collection, data archiving and calibration of equipments for this project activity. The team comprises of the following members:



Responsibility

- Reviewing the monthly and annual generation statistics.
- Evaluating the GHG performance of the project activity.
- Identifying the opportunities for future improvement
- Addressing grievance related to project activity.

- Implementation of corrective appropriate measures in case any discrepancies are identified in the reported parameters.
- Review of monthly report.
- Ensuring calibration of monitoring equipment as and when required.

- Monitoring and reporting the GHG performance related parameters following the guidance provided in the project design document
- Preparation of monthly and annual generation statistics.
- Reporting of any discrepancies identified in the reporting parameters.
- Ensuring calibration of the monitoring equipments as and when required.

Data Measurement

The export and import energy will be measured continuously using above mentioned Main and Check meters located at the substations. Readings of meters shall be taken on monthly basis by authorized officer of SEB in the presence of PP or representative of PP. Based on the Meter Reading Statement to PP, invoices will be raised. These invoices can be used for cross checking the meter readings taken for the respective project activity.

Data collection and archiving

Readings from meters will be collected in the presence of the plant in-charge. Export and Import data would be recorded and stored in logs as well as in electronic form on a daily basis. The records are checked periodically by the Plant Manager and discussed thoroughly with the plant supervisor. The period of storage of the monitored data will be 2 years after the end of crediting period or till the last issuance of VERs for the project activity whichever occurs later.

Emergency preparedness

The project activity will not result in any unidentified activity that can result in substantial emissions from the project activity. No need for emergency preparedness in data monitoring is visualized.

Personnel training

In order to ensure a proper functioning of the project activity and a properly monitoring of emission reductions, the staff will be trained. The plant helpers will be trained in equipment operation, data recording, reports writing, operation and maintenance and emergency procedures in compliance with the monitoring plan.

5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions

Baseline emissions include only CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid- connected power plants. The baseline emissions are to be calculated as follows:

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

Where:

BE_y = Baseline emissions in year y (tCO_2/yr)
$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/yr)

$EF_{grid, CM,y}$ = Combined margin CO2 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" (t CO_2/MWh)

Grid Emission Factor

The GEF is fixed ex-ante in the PD as given below:

Parameter	Value
OM	0.9843
BM	0.9083
CM	0.9653

Therefore,

BE_y = 569,212.3 x 0.9653

= 549,453 tCO_2e (Rundown values at vintage level)

5.2 Project Emissions

Not Applicable, since emissions from the project activity is zero as per ACM0002 methodology. Hence, $PE_y = 0$.

5.3 Leakage

Not Applicable, since leakage emissions from the project activity is zero as per ACM0002 methodology. Hence, $LE_y = 0$.

5.4 Net GHG Emission Reductions and Removals

The Formula used to calculate the net emission reduction for the project activity is

$ER_Y = BE_y - PE_y - LE_y$

Where,

ER_y = Emission Reduction in tCO_2e/year

BE_y = Baseline emission in tCO_2e/year

PE_y = Project emissions in tCO_2e/year

LE_y = Leakage Emissions in tCO_2e/year

For the project activity during the current monitoring period, as per section 5.1

BE_y = 303,044 tCO_2e

PE_y = 0 tCO_2e

LE_y = 0 tCO_2e

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)

26-April-2018 to 31-December-2018	141,829	0	0	141,829
01-January-2019 to 31-December-2019	203,420	0	0	203,420
01-January-2020 to 25-August-2020	204,204	0	0	204,204
Total	**549,453**	**0**	**0**	**549,453**

The estimated GHG emission reduction during the current monitoring period is 572,487 tCO_2e. The achieved GHG emission is 4.02% is lower than the estimated value. Thus, the lower GHG emission is acceptable.

APPENDIX 1: CALIBRATION RECORDS

Meter Calibration details of 10 MW solar project by Talettutayi Solar Projects Pvt Ltd

Metering Location: 132/33 KV Gadwal Sub-Station

Meter Details	Main Meter	Check Meter	Standby Meter
Meter Serial No	APX00685	APX00686	APX00687
Meter Make	Secure	Secure	Secure
Accuracy Class	0.2 s	0.2 s	0.2 s
Date of Calibration	23-February-2016	23-February-2016	23-February-2016
Date of Calibration	22- February-2019	22-February-2019	22-February-2019
Due Date of Calibration	21- February-2024	21-February-2024	21-February-2024

Meter Calibration details of 10 MW solar project by NV Vogt Solar One Pvt Ltd
Metering Location: 132/33 KV Gadwal Sub-Station

Meter Details	Main Meter	Check Meter	Standby Meter
Meter Serial No	APX00682	APX00684	APX00704
Meter Make	Secure	Secure	Secure
Accuracy Class	0.2 s	0.2 s	0.2 s
Date of Calibration	23-February-2016	23-February-2016	23-February-2016
Date of Calibration	22- February-2019	22-February-2019	22-February-2019
Due Date of Calibration	21- February-2024	21-February-2024	21-February-2024

Meter Calibration details of 50 MW solar project by Talettutayi Solar Projects Four Pvt Ltd
Metering Location: 132 KV Telgaon Sub-Station

Meter Details	Main Meter	Check Meter
Meter Serial No	2832405	2832406
Meter Make	Elster	Elster
Accuracy Class	0.2 s	0.2 s
Date of Calibration	22-December-2020	22-December-2020
Due date of Calibration	21-December-2025	21-December-2025

Meter calibration and replacement are in the purview of the State electricity department, the previous calibration records are not available with the PP, therefore an error factor equivalent to accuracy class has been applied to the Talettutayi Solar Projects Four Pvt Ltd's export and import values. The latest calibration report is available and the error is within permissible limit.

Meter Calibration details of 30 MW solar project by Talettutayi Solar Projects One Pvt Ltd
Metering Location: 110 KV Yelburga Substation

Meter Details	Main Meter	Check Meter
Meter Serial No	16112288	16198152

Meter Make	L & T	L & T
Accuracy Class	0.2 s	0.2 s
Date of Calibration	11-October-2017	11-October-2017
Date of Calibration	17-July-2019	17-July-2019
Due date of Calibration	16-July-2024	16-July-2024

Meter Calibration details of 20 MW solar project by Talettutayi Solar Projects Two Pvt Ltd

Metering Location: 110 KV Kerehalli Substation

Meter Details	**Main Meter**	**Check Meter**
Meter Serial No	19004078	1904046
Meter Make	L & T	L & T
Accuracy Class	0.2 s	0.2 s
Date of Calibration	07-August-2019	07-August-2019
Date of Calibration	21-April-2020	21-April-2020
Due date of Calibration	20-April-2025	20-April-2025

APPENDIX 2: MAJOR BREAKDOWN DETAILS

Date	Site	Plant Break Down Detail	Breakdown Hrs
28-August-2018	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
28-August-2018	TT4	Grid B/D due to power swing	4:00 hours
29-August-2018	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
29-August-2018	TT4	Grid B/D due to power swing	4:00 hours
05-November-2018	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
05-November-2018	TT4	Grid B/D due to power swing	4:00 hours
09-July-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
10-July-2019	TT4	Grid B/D due to power swing	4:00 hours
13-December-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
13-December-2019	TT4	Grid B/D due to power swing	4:00 hours
14-December-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
14-December-2019	TT4	Grid B/D due to power swing	4:00 hours
15-December-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
30-March-2020	TT4	Grid B/D due to power swing	4:00 hours
31-March-2020	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
01-April-2020	TT4	Grid B/D due to power swing	4:00 hours
02-April-2020	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
15-April-2019	TT4	Grid B/D due to power swing	4:00 hours
16-April-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
16-April-2019	TT4	Grid B/D due to power swing	4:00 hours
08-July-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
09-July-2019	TT4	Grid B/D due to power swing	4:00 hours
12-December-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
12-December-2019	TT4	Grid B/D due to power swing	4:00 hours
13-December-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
13-December-2019	TT4	Grid B/D due to power swing	4:00 hours
14-December-2019	TT4	Inverter Tripped due to Power swing	3:00 hours
14-December-2019	TT4	Inverter Tripped due to Power swing	3:00 hours
07-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours
09-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours
09-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours
10-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours
10-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours
11-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours

11-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours
29-March-2020	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
29-March-2020	TT4	Grid B/D due to power swing	4:00 hours
30-March-2020	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
31-March-2020	TT4	Grid B/D due to power swing	4:00 hours
01-April-2020	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
02-April-2020	TT4	Grid B/D due to power swing	4:00 hours
15-April-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
16-April-2019	TT4	Grid B/D due to power swing	4:00 hours
16-April-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
07-July-2019	TT4	Grid B/D due to power swing	4:00 hours
07-July-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
08-July-2019	TT4	Grid B/D due to power swing	4:00 hours
08-July-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
09-July-2019	TT4	Grid B/D due to power swing	4:00 hours
09-July-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
13-July-2019	TT4	Grid B/D due to power swing	4:00 hours
13-July-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
14-July-2019	TT4	Grid B/D due to power swing	4:00 hours
14-July-2019	TT4	Inverter Tripped due to Power swing	3:00 hours
25-November-2019	TT4	Inverter Tripped due to Power swing	3:00 hours
26-November-2019	TT4	Inverter Tripped due to Power swing	3:00 hours
27-November-2019	TT4	Inverter Tripped due to Power swing	3:00 hours
28-November-2019	TT4	Inverter Tripped due to Power swing	3:00 hours
29-November-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
11-December-2019	TT4	Grid B/D due to power swing	4:00 hours
11-December-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
12-December-2019	TT4	Grid B/D due to power swing	4:00 hours
12-December-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
13-December-2019	TT4	Grid B/D due to power swing	4:00 hours
13-December-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
14-December-2019	TT4	Grid B/D due to power swing	4:00 hours
14-December-2019	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
07-March-2020	TT1	Grid B/D due to power swing	4:00 hours
07-March-2020	TT4	Grid B/D due to power swing	4:00 hours
07-March-2020	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
08-March-2020	TT1	Grid B/D due to power swing	4:00 hours
08-March-2020	TT4	Grid B/D due to power swing	4:00 hours
08-March-2020	TT and NV/TT6	Grid B/D due to power swing	4:00 hours
09-March-2020	TT1	Grid B/D due to power swing	4:00 hours

09-March-2020	TT4	Grid B/D due to power swing	4:00 hours
09-March-2020	TT1	Inverter Tripped due to Power swing	3:00 hours
10-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours
10-March-2020	TT1	Inverter Tripped due to Power swing	3:00 hours
11-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours
11-March-2020	TT1	Inverter Tripped due to Power swing	3:00 hours
29-March-2020	TT4	Inverter Tripped due to Power swing	3:00 hours