BUNDLED SOLAR POWER PROJECT BY VECTOR GREEN ENERGY PRIVATE LIMITED

Document Prepared By EKI Energy Services Limited

Project Title	Bundled Solar Power Project by Vector Green Energy Private Limited
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Project ID	1770
Monitoring Period	23-December-2019 to 01-April-2021 (First and last date included)
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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 105 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 163,888 tCO2e per year, thereon displacing 234,844 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian grid, which is mainly dominated by 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
Winsol Solar Fields (Polepally) Pvt Ltd	15 MW	01-July -2016	Indian Grid	Telangana	Sale to State Discom
	50 MW	31 -December -2016	Indian Grid	Telangana	Sale to State Discom
Hindupur Solar Park Pvt Ltd	40 MW	28-June-2016	Indian Grid	Andhra Pradesh	Sale to State Discom

Total emission reductions achieved in this monitoring period:

During the Current Monitoring Period from 23-December-2019 to 01-April-2021 (First and last date included), the project activity has supplied 234,844 MWh of electricity, and thus contributing to the GHG reductions 226,692 tCO_2e.

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
Project Category: Grid-connected electricity generation from renewable sources ACM0002- Version 18.1[1]

The project is not a grouped project activity.

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

1.3 Project Proponent

Organization name	Winsol Solar Fields (Polepally) Pvt Ltd
Contact person	Mr Lokesh Jeengar
Title	GM (Power Sales & Business)
Address	Office No. 504/2, 5th Floor, White House Block I, 6-3-1192/1/1, Kundanbagh, Begumpet, Hyderabad Telangana- 500016 India
Telephone	-
Email	-

Organization name	Hindupur Solar Park Pvt Ltd
Contact person	Mr Lokesh Jeengar
Title	GM (Power Sales & Business)
Address	Office No. 504/2, 5th Floor, White House Block I, 6-3-1192/1/1, Kundanbagh, Begumpet, Hyderabad Telangana- 500016 India
Telephone	-
Email	-

1.4 Other Entities Involved in the Project

Organization name	EKI Energy Services Limited
Role in the Project	Project Consultant
Contact person	Tapti Saha
Title	Assistant Manager
Address	Office No. 201, EnKing Embassy, Plot No. 48, Scheme No. 78, Part II, Vijay Nagar INDORE – 452010, India.
Telephone	+91 9770900207
Email	anjali@enkingint.org

1.5 Project Start Date

Start date of the project activity is the earliest date of interconnection with the grid i.e. 28-June-2016. This is the date of commissioning of 40 MW solar PV project activity by Hindupur Solar Park Pvt Ltd.

1.6 Project Crediting Period

Crediting Period Start date: 28-June-2016

Crediting Period End date: 27-June-2026

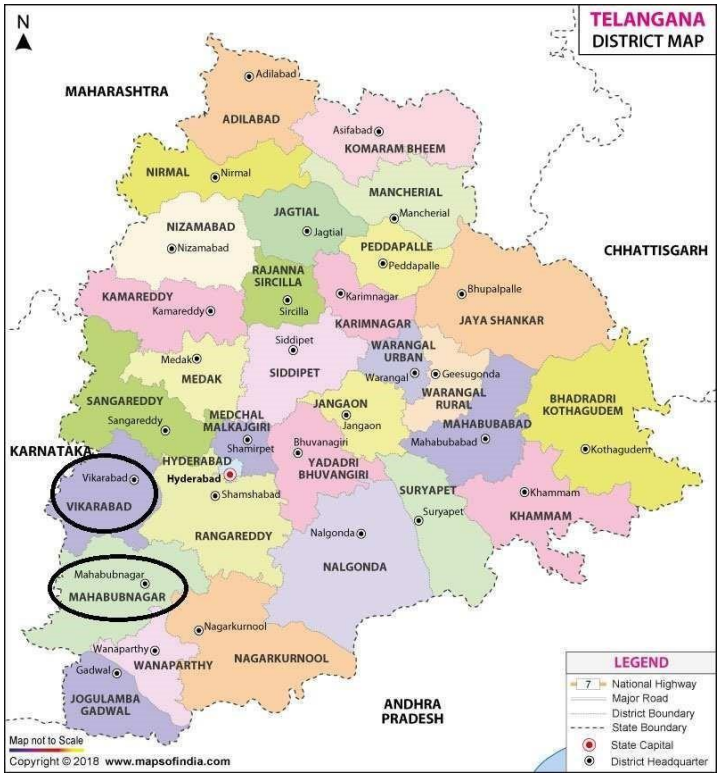
The project activity adopts renewable crediting period of 10 years period which can be renewed for maximum 2 times.

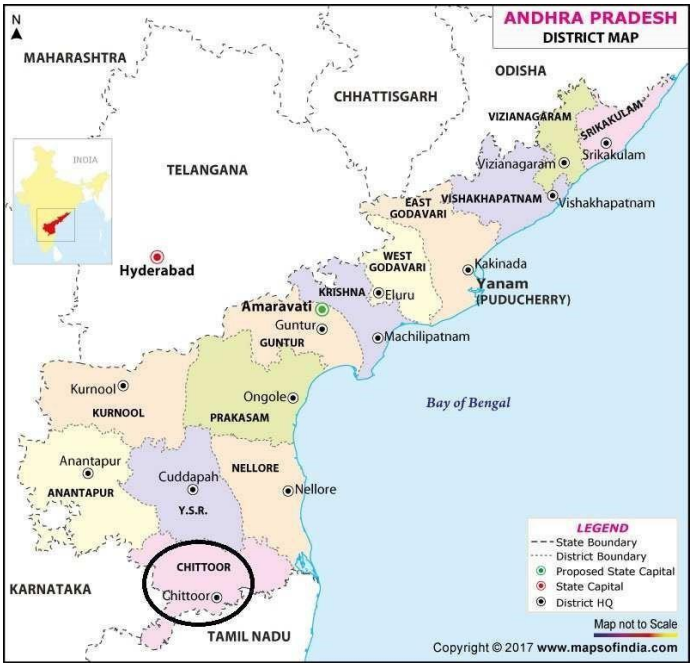
1.7 Project Location

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

Name of SPVs	Capacity (MW)	State	Village	Mandal	District	Latitude (N)	Longitude (E)
Winsol Solar Fields (Polepally) Pvt Ltd	15 MW	Telangana	Karoor	Nawabpet	Mahabubnagar	16°51'49.9"	78°05'33.6"
	50 MW	Telangana	Indur	Peddumal	Vikarabad	17°20'41.4"	77°36'56.6"
Hindupur Solar Park Pvt Ltd	40 MW	Andhra Pradesh	Nelapalle	Peddapanjani	Chittoor	13°20'24"	78°30'00.0"

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[2]

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[3] - Version 06.0 (EB 97, Annex 07)
- Methodological Tool- Tool for the demonstration and assessment of additionality[4] - 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.

[2] http://cdm.unfccc.int/methodologies/DB/5725LCHYPYM4I1V8OD9SFYVAMFFWNP
[3] http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v6.pdf
[4] http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf

The project activity is not availing any REC benefits and the same can be confirmed from publicly available link of REC generators. [5]

1.10 Other Forms of Credit

Include the following information, as applicable:

- Emission Trading Programs and Other Binding Limits: The PP has not applied this project in any Emission Trading Programs and other Binding Limits.
- Other Forms of Environmental Credit: The PP has not applied this project in any other form of environmental credits.

1.11 Sustainable Development

Contribution to sustainable development:

Ministry of Environment, Forest and Climate Change, has stipulated economic, social, environment and technological well-being as the four indicators of sustainable development. The project contributes to sustainable development using the following ways.

Social well-being: The project is helped in generating employment opportunities during the construction and operation phases. The project activity will lead to development in infrastructure in the region like development of roads and also may promote business with improved power generation.

Economic well-being: The project is a clean technology investment in the region, which would not have been taken place in the absence of the VCS benefits the project activity will also help to reduce the demand supply gap in the state.

The project activity generates power using zero emissions Solar PV based power generation which helps to reduce GHG emissions and specific pollutants like Sox, Nox, and SPM associated with the conventional thermal power generation facilities.

Technological well-being: The successful operation of project activity led to promotion of Solar based power generation and encouraged other entrepreneurs to participate in similar projects

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.

[5] https://www.recregistryindia.nic.in/index.php/publics/faqs

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[6].

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

The Stakeholder Consultation Report primarily deals with socio-economic impact of the project activity and provided an opportunity for the local population to express their viewpoints and comments with respect to the project.

Before implementation of the project activity, the project proponent did thorough consultation with stakeholders – identifying the stakeholders, consultation with the stakeholders in number of phases and through number of media – focus group discussion, detailed social mapping and fieldwork, inclusion of local stakeholders from all sections of community , explanation of project activity – purpose and details to them and resolving the grievances along with seeking suggestions from them. The PP has engaged a number of local NGOs for local stakeholder consultations by applying various strategies to engage them in project and for taking care of their grievances. The process is ongoing and continuous; this process is undertaken throughout the year.

During the current monitoring period, the project proponent has engaged with the local stakeholders in different ways including various Corporate Social Responsibility (CSR) activities undertaken by the company. Besides, the PP has kept grievance register in plant site office seeking grievances from local community. There has also been the provision of receiving letters from local community for any suggestion.

Sl. No.	Date	Site	Comments	Resolution Date	Resolution
1.	02-January-2020	Karoor	Water purifier is not working.	05-January-2020	Water purifier to be repaired.

[6] http://164.100.94.214/sites/default/files/uploads/report-on-developmental-impacts-of-RE.pdf

2.	22-March-2020	Hindupur	Road is not clean.	23-March-2020	Cleaning of road to be done.

2.3 AFOLU-Specific Safeguards

This section is not applicable because the project activity is not 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 105 MW of Solar PV plant located at different states in India. The project is promoted by Vector Green Energy Private Limited.

The Project activity is a new facility (Greenfield) and the electricity generated by the project is being 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 163,888 tCO2e per year, thereon displacing 169,781 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 105 MW. The technical specification of each SPV mentioned during validation of project activity.

The technical specification of 40 MW plant interconnection with grid on 28-June-2016 by Hindupur Solar Park Pvt Ltd are as follows:

Sl. No.	Technical details of the equipment[7]	Description
1	Make of modules installed	First solar series4V2
2	No. of the modules installed	432300

[7] It is to be noted that in future there is possibility of change in module configuration, however project capacity in total remains same as 40 MW.

3	Make & Model of Invertor	ABB
4	Number of Inverters	40
5	Make & Number of Transformers	Power transformer- 2, make CROMPTON GREAVES LTD ; Inverter transformers- 20, make- VOLTAMP TRANSFORMER LTD

The technical specification of 15 MW plant interconnection with grid on 01-July-2016 by Winsol Solar Fields (Polepally) Pvt Ltd are as follows:

Sl. No.	Technical details of the equipment[8]	Description
1	Make of modules installed	First solar series4V2
2	No. of the modules installed	172788
3	Make & Model of Invertor	ABB
4	Number of Inverters	15
5	Make & Number of Transformers	Power transformer- 1, make- Schneider Electric ; Inverter transformers-8, makeVOLTAMP

The technical specification of 50 MW plant interconnection with grid on 31-December-2016 by Winsol Solar Fields (Polepally) Pvt Ltd are as follows:

Sl. No.	Technical details of the equipment[8]	Description
1	Make of modules installed	First solar series4V2
2	No. of the modules installed	551840
3	Make & Model of Invertor	SMA, ABB
4	Number of Inverters	22
5	Make & Number of Transformers	Power transformer- 2, make-Bharat Beejali ; Inverter transformers-22, Make Voltamp, Shilchar

During this monitoring period, all sites under the project are operating normally, and no events happened, which may impact the GHG emission reductions or removals and monitoring.

During this monitoring period, no project proponents changed.

[8] It is to be noted that in future there is possibility of change in module configuration, however project capacity in total remains same as 15 MW.

3.2 Deviations

2.3.1 Methodology Deviations

No deviation is taken during the current monitoring period.

2.3.2 Project Description Deviations

No deviation is taken during the current monitoring period

3.3 Grouped Projects

The specified project is not a part of a grouped project.

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 in year y
Source of data	Calculated from CEA database, Version 12, May 2017[9]
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 "CO_2 Baseline Database for Indian
Purpose of Data	Power Sector" version 12, published by the Central Electricity Authority, Ministry of Power, Government of India. 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 in year y
Source of data	Calculated from CEA database, Version 12, May 2017[10]
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	For the calculation of the Baseline Emission
Comments	This parameter is fixed ex-ante for the entire crediting period.

Data / Parameter	$EF_{grid,CM,y}$
Data unit	tCO_2/MWh
Description	Combined Margin CO_2 emission factor in year y
Source of data	Calculated from CEA database, Version 12, May 2017[11]
Value applied	0.9653
Justification of choice of data or description of measurement methods and procedures applied	The combined margin emissions factor is calculated as follows: $EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$ Where: $EF_{grid,BM,y}$= Build margin CO_2 emission factor in year y (tCO_2/MWh) $EF_{grid,OM,y}$= Operating margin CO_2 emission factor in year y (tCO_2/MWh) W_{OM} = Weighting of operating margin emissions factor (%) = 75% W_{BM}= Weighting of build margin emissions factor (%) = 25%
Purpose of Data	For the calculation of the Baseline Emission
Comments	This parameter is fixed ex-ante for the entire crediting period.

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

4.2 Data and Parameters Monitored

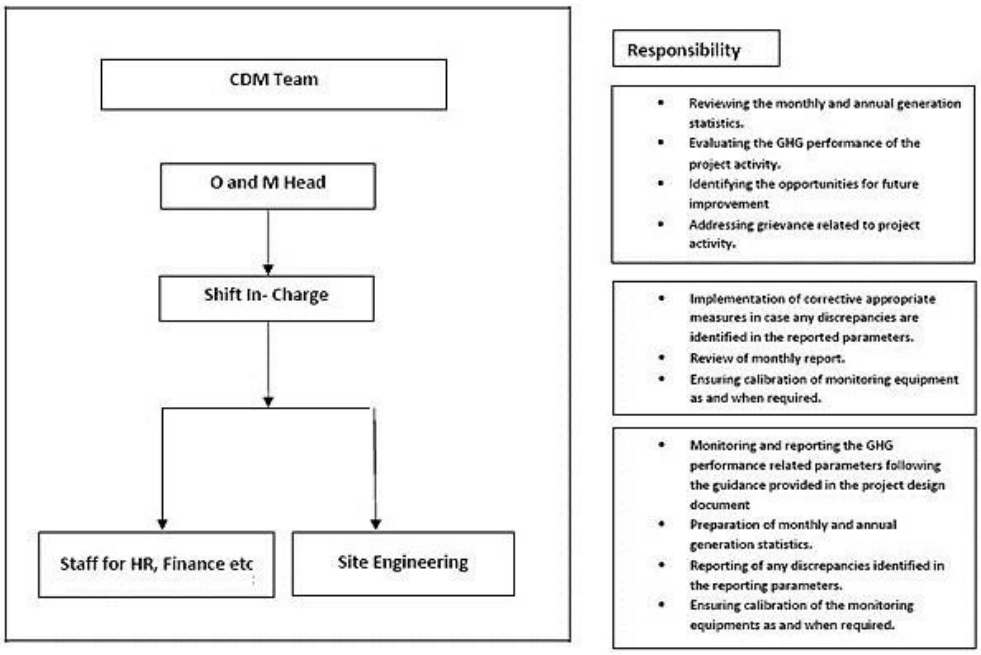
Data / Parameter	$EG_{PJ, y}$
Data unit	MWh/y
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh (This value is the sum of the net electricity generated from all 3 sites).
Source of data	Monthly joint meter reading reports
Description of 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 has been considered for ER calculations.
Frequency of monitoring/recording	Continuous measurement & monthly recording
Value monitored	234,844 MWh
Monitoring equipment	The electricity exported / supplied by the plant to pooling substation and further to substation. This meter also measures electricity imported by the plant from the grid. The billing meter used for project activity having following specification Monitoring: ABT cum Tri vector meter are used Data type: Measured Type of meter: Static type meter (Main, Check & Standby meter). Accuracy Class of meters: 0.2s The meter details are being mentioned over APPENDIX1: Meter Calibration Details
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 [9] 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 are 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 is implemented by the project participant describes about the monitoring organization, 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 equipment for this project activity.
The team comprises of the following members:



Data Measurement
The export and import energy have been 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 were raised. These invoices are used for cross checking the meter readings taken for the respective project activity.

Data collection and archiving

Readings from meters are collected in the presence of the plant in-charge. Export and Import data are 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

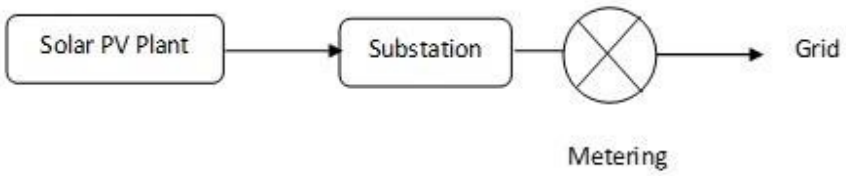
The project activity does not result in any unidentified activity that can result in substantial emissions from the project activity. No need for emergency preparedness in data monitoring is visualized.

Personnel training

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

Metering Arrangement

Line diagram with metering arrangement for the project activity is shown below.



The metering arrangement for all the three sites are the same. Each solar plant has their own dedicated metering arrangement at the substation end. The metering arrangement is under control of state electricity board and may change in future.

5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions

The baseline is the MWh produced by the renewable generating unit multiplied by an emission coefficient (measured in tCO_2equ/MWh) calculated in a transparent and conservative manner as:

$BE_y = EF_y \text{ X } EG_y$

Where,

BE_y: Baseline emissions due to displacement of electricity during year y in tons of tCO_2e
EG_y: Electricity supplied to the grid by the project activity during the year y in MWh,
EF_y: CO_2 baseline emission factor for the electricity displaced due to the project activity in during the year y in tons CO_2/MWh

Hence, Baseline Emission (BE_y)= CO_2 Emission Factor (EF_y) * Electricity supplied to the grid by the project activity during monitoring period

= 0.9653*234,844

= 226,692 (RoundDown)

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

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

$ER_y = BE_y - PE_y$

BE_y = Baseline Emissions

PE_y = Project emissions

Therefore, Net GHG Emission Reductions and Removals are calculated as follows:

ER_y = 226, 692– 0

= 226,692 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)
2019	12,040	0	0	12,040
2020	169,752	0	0	169,752
2021	44,900	0	0	44,900
Total	226,692	0	0	226,692

It is to be noted here that as per the estimated emission reduction to be achieved from the project activity for the current monitoring period is 208,789 tCO_2e, whereas actual emission reductions achieved are 226,692 tCO_2e, which is approximately 8.3% higher than the estimated emission reductions. The generation of electricity depends upon many other climatic conditions, which are not within the control of the project participant. The higher generation during the current verification period is due to certain natural conditions.

During the present monitoring period, actual emission reductions achieved are 226,692 tCO2e whereas estimated emission reductions was 209,238 tCO2e. The project witnessed an increase of 8.3% in emission reductions as compared to ex-ante emissions, which is due to natural phenomena and nature dependent and cannot be controlled by the Project Proponent.

The higher generation during the current verification period is due to certain natural conditions. It is to be noted that due to the higher generation during the current monitoring period, there is no impact on the additionality and the IRR is still below the benchmark value. Hence, it is acceptable.

APPENDIX1: METER CALIBRATION DETAILS

For Winsol Solar-15 MW

Meter Details	Main Meter	Check Meter	Standby Meter
Meter Serial No	APX00924	APX00925	APX00926
Meter Make	Secure	Secure	Secure
Accuracy Class	0.2 s	0.2 s	0.2 s
Date of Calibration	30-August-2019	30-August-2019	30-August-2019
Due date of Calibration	29-Augus-2024	29-August-2024	29-August-2024

For Winsol Solar -50 MW

Meter Details	Main Meter	Check Meter	Standby Meter
Meter Sl. No	APW00111	AP925645	APX00645
Make	SECURE	SECURE	SECURE
Accuracy Class	0.2 s	0.2 s	0.2 s
Date of Calibration	25-October-2018	25-October-2018	25-October-2018
Due date of Calibration	24-October-2023	24-October-2023	24-October-2023

For Hindupur Solar-40 MW

Hindupur Solar Park Pvt Ltd- I			
Meter Details	Main Meter	Check Meter	Standby Meter
Meter Sl. No	APX00864	APX00865	APX00866
Make	SECURE	SECURE	SECURE
Accuracy Class	0.2 s	0.2 s	0.2 s
Date of Calibration	04-December-2017	04-December-2017	04-December -2017
Due Date of Calibration	03-December -2022	03-December -2022	03-December -2022

Hindupur Solar Park Pvt Ltd- II			
Meter Details	Main Meter	Check Meter	Standby Meter
Meter Sl. No	APX00858	APX00859	APX00860
Make	SECURE	SECURE	SECURE
Accuracy Class	0.2 s	0.2 s	0.2 s
Date of Calibration	21-September -2017	21-September -2017	21-September-2017

Due Date of Calibration	20 September -2022	20-September - 2022	20-September-2022

Hindupur Solar Park Pvt Ltd- III			
Meter Details	Main Meter	Check Meter	Standby Meter
Meter Sl. No	APX00861	APX00862	APX00863
Make	SECURE	SECURE	SECURE
Accuracy Class	0.2 s	0.2 s	0.2 s
Date of Calibration	04-December -2017	04-December - 2017	04-December - 2017
Due Date of Calibration	03-December - 2022	03-December - 2022	03-December - 2022

Hindupur Solar Park Pvt Ltd- IV			
Meter Details	Main Meter	Check Meter	Standby Meter
Meter Sl. No	APX00867	APX00868	APX00869
Make	SECURE	SECURE	SECURE
Accuracy Class	0.2 s	0.2 s	0.2 s
Date of Calibration	04-December -2017	04-December-2017	04-December-2017
Due Date of Calibration	03-December -2022	03-December -2022	03-December-2022

From October 2019 onwards the metering location of 40 MW Hindupur changed, the individual 132 KV Lilo at Beechinipalli tagged to 132 KV Hindupur – Dharmavaram line. The recent calibration of the meter occurred in 10-May-2018. The metering details of the 132 KV Hindupur - Dharmavaram line is mentioned below:

Meter Details	**Main Meter**	**Check Meter**	**Standby Meter**
Meter Sl. No	APX00618	APX00617	APX00701
Make	SECURE	SECURE	SECURE
Accuracy Class	0.2 s	0.2 s	0.2 s
Date of Calibration	10-May-2018	10-May-2018	10-May-2018
Due date of calibration	09-May-2023	09-May-2023	09-May-2023

APPENDIX2: MAJOR BREAKDOWN DETAILS

For Winsol Solar -15 MW

For Winsol Solar -50 MW

S.no	Date	Duration	Remarks
1.	31-December-2019	3:19	Due to Installation of PT and CT,PT Testing.
2.	19-January-2020	3:43	132KV Bay Maintenance at 132KV GSS Polepally By AE-TS TRANSCO
3.	02-February-2020	3:45	Inverter tripped on DC BRK POS Fault due short in ISU-3
4.	03-February-2020	1:30	Pad Clamp Damaged at 4 Pole structure in Polepally Site,Ippaturu
5.	24-March-2020	1:25	Reset The fault and charged the inverter
6.	24-April-2020	1:25	Reset The fault and charged the inverter
7.	14-May-2020	1:25	Reset The fault and charged the inverter
8.	17-June-2020	1:25	Reset The fault and charged the inverter
9.	18-July-2020	3:10	Bypass the Line PT and 132KV transmission line charged
10.	04-August-2020	1:53	Inverter Tripped under K16 relay unhealthy due to ICU-1 over temperature.
11.	05-September-2020	1:22	Inverter Tripped under K16 relay unhealthy due to ICU-1 over temperature.
12.	07-October-2020	6:57	we Checked the inverter ISU section found one fan failure in ISU-1, isolate the ISU -1 and charged the inverter 65% load.
13.	13-November-2020	2:00	Charged the 33KV OUTGOING feeder after TL maintenance work completed
14.	14-December-2020	1:51	Charged the 33KV OUTGOING feeder after TL maintenance work completed
15.	29-December-2020	1:51	LC Returned and charged the plant after 132KV TL maintenance
16.	30-January-2021	6:08	Discussed with ABB Person Checked all cable tightness found ok, Reset the fault and charged the Inverter on full Load
17.	25-February-2021	2:15	Charged the feeder after the completion of ABT Meter calibration
18.	19-March-2021	0:20	Grid failure at GSS Due to E/F Operated
19.	27-March-2021	0:48	Inverter main auxiliary supply fail due to loose connection at T.B ,we found that one and immediately tightened the T.B

For Hindupur Solar -40 MW

S.no	Date	Duration	Remarks
1.	29-December-2019	6:38	Block 7 HT panel tripped in Earth Fault and Over current

2.	09-January-2020	6:38	Block 7 HT panel tripped in Earth Fault and Over current
3.	19-February-2020	6:38	Block 7 HT panel tripped in Earth Fault and Over current
4.	21-March-2020	6:38	Block 7 HT panel tripped in Earth Fault and Over current
5.	16-April-2020	11:31	Checked and found phase sensor & fault indicator blown sensor so removed it from circuit and megger value checked ,cleaned , and block OG and incomer2 end termination done, tighten & reset & start ok.
6.	30-May-2020	1:08	inv 3 tripped due to APP.Error.44 and communication 8 fault as per instructions communicated with ABB service engineers and restored
7.	23-June-2020	3:32	Feeder 4 tripped on E/L ,During line patrolling we found small branch of tree fall on line due to heavy wind
8.	08-July-2020	0:19	Feeder 1&4 are in same pole so Feeder 1 taken LC for rectification of Feeder 4.
9.	08-July-2020	2:05	feeder 1 trip on E/L from Plant end due to CT & PT cables damaged due to rat entry
10.	17-August-2020	5:03	Block 6 IDT 12 tripped in earth fault, related circuit checked then start
11.	24-September-2020	0:14	Feeder 1 tripped on Earth fault, Trail charge taken ,T/M line with standed and charged the feeder
12.	31-October-2020	3:41	Inverter 25 tripped on Earth fault and Over current fault, checked related Circuit. Found 2 no's 690V 1000A fuse failure in ISU
13.	21-December-2020	2:04	Feeder 4 tripped on E/L fault , T/M line patrolling done, found Snake crawling on the Pole and touches PH to Earth, LC Taken and removed the snake and Feeder charged.
14.	30-January-2021	1:13	Feeder 2 Tripped due to LA blast in HT Panel, LAs and PT fuses replaced and Restarted the Feeder.
15.	26-February-2021	1:24	Feeder 2 Failure due to Heavy rains and thunders
16.	26-March-2021	1:24	Feeder 3 Failure due to Heavy rains and thunders