



TEMPLATE

MONITORING REPORT

PUBLICATION DATE 14.10.2020

VERSION v. 1.1

RELATED SUPPORT – TEMPLATE GUIDE Monitoring Report v. 1.1

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Key Project Information

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KEY PROJECT INFORMATION

Key Project Information

GS ID (s) of Project (s)	GS5699
Title of the project (s) covered by monitoring report	30 MW Solar PV Project by Nirosha Solar Power Private Limited
Version number of the PDD/VPA-DD (s) applicable to this monitoring report	03
Version number of the monitoring report	02
Completion date of the monitoring report	18/02/2022
Date of project design certification	15/01/2018
Date of Last Annual Report	NA
Monitoring period number	03
Duration of this monitoring period	01/07/2020 to 19/09/2021 (inclusive of both dates)
Project Representative	Nirosha Solar Power Private Limited
Host Country	India
Activity Requirements applied	<input type="checkbox"/> Community Services Activities <input checked="" type="checkbox"/> Renewable Energy Activities <input type="checkbox"/> Land Use and Forestry Activities/Risks & Capacities <input type="checkbox"/> N/A
Methodology (ies) applied and version number	ACM0002- Grid-connected electricity generation from renewable sources - Version 17
Product Requirements applied	<input checked="" type="checkbox"/> GHG Emissions Reduction & Sequestration <input type="checkbox"/> Renewable Energy Label <input type="checkbox"/> N/A

Table 1 - Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/ Products
SDG 7	Affordable and Clean Energy: Ensure access to affordable, reliable, sustainable and modern energy for all	63,212 MWh	MWh
SDG 8	Decent Work and Economic Growth: Promote inclusive and sustainable economic growth, employment and decent work for all	Employment opportunities provided to 20 people and 4 trainings conducted	Number
SDG 13	Take urgent action to combat climate change and its impacts	61,802 tCO ₂ e	tCO ₂ e (GS-VERs)

Table 2 – Product Vintages

Start Dates	End Dates	Amount Achieved		
		SDG 7	SDG 8	SDG 13
01/07/2020	31/12/2020	24,860 MWh	10 people were employed and 2 trainings were conducted	24,306 tCO ₂ e (GS-VERs)
01/01/2021	19/09/2021	38,352 MWh	10 people were employed and 2 trainings were conducted	37,496 tCO ₂ e (GS-VERs)

SECTION A. DESCRIPTION OF PROJECT

A.1. General description of project

The main purpose of this project activity is to generate clean form of electricity through renewable solar energy source. Nirosha Solar Power Private Limited is the promoter of the proposed project activity. The project activity involves installation of 30 MW (AC) solar power project at Village: Bendo, District: Mahoba, Uttar Pradesh. The project replaces anthropogenic emissions of greenhouse gases (GHG’s), thereon displacing certain 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 project activity is connected to 132 KV substation.

The details of the project and the state of installation are mentioned in the table:-

Project Promoters’ Name	Capacity in MW	Commissioning Date	Connection with Grid	State	Usage of Electricity
Nirosha Solar Power Private Limited	30 MW (AC)	20/09/2016	Indian Grid	Uttar Pradesh	Sale to Grid

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.

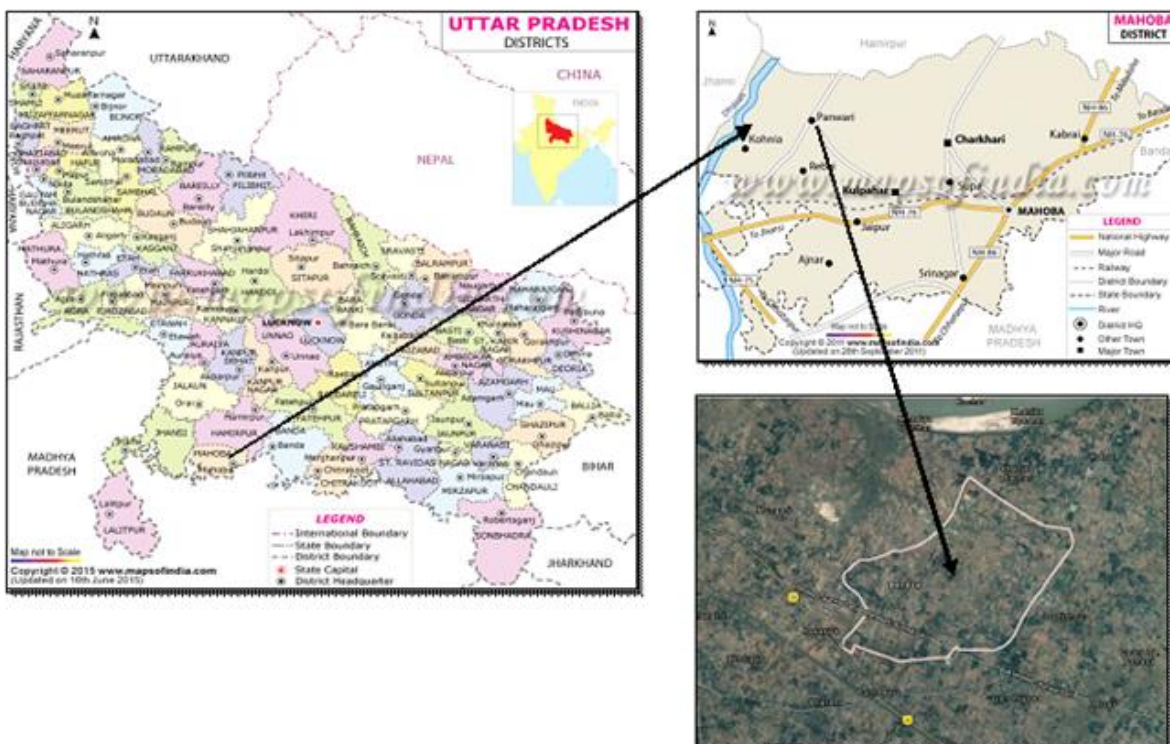
Reduction of GHGs emissions due to the project activity:

The GHG emission reductions achieved from current monitoring period is 61,802 tCO₂e.

A.2. Location of project

Host Country: India
State: Uttar Pradesh
District: Mahoba
Village: Bendo

The location of the project activity has been highlighted in the map shown below



Location details of the Project are mentioned below:

Project Promoters’ Name	Latitude	Longitude
Nirosha Solar Power Private Limited	25.42 N	79.44 E

A.3. Reference of applied 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 17.0¹

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 system²- Version 05.0

A.4. Crediting period of project

Project Start date	05/07/2016
Start Date of 1st Crediting Period	20/09/2016
Length of 1 st Crediting Period	20/09/2016 to 19/09/2021
Duration of 1 st Crediting Period	5 Years
Total length of Crediting Period	15 years
Type of Crediting Period	Renewable

SECTION B. IMPLEMENTATION OF PROJECT

B.1. Description of implemented project

The main purpose of this project activity is to generate clean form of electricity through renewable solar energy source. Nirosha Solar Power Private Limited is the promoter of the proposed project activity. The project activity involves installation of 30 MW (AC) solar power project at Village: Bendo, District: Mahoba, Uttar Pradesh. The project replaces anthropogenic emissions of greenhouse gases (GHG’s) thereon displacing certain 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.

Technical details of the project activity:

Technical detail of the equipment	Remark
Technology	Polycrystalline modules on Seasonal Tilt at 25 degree and 5 degree.
Solar photovoltaic module	Total Capacity: 34.886 MW Module Capacity: 260 Wp & 265 Wp Module make: Suntech
No. of modules	132,384
Total Number of Inverters	38 Units
Details of Inverters	680 KW , Schneider Electric
Power transformer	1 No. of 25/31.5 MVA, 11/132 KV Make: Schneider Electric
Inverter Transformer	1. 1 No. of 4 MVA Transformer; 380/11000 V, Make: Sudhir

¹ <https://cdm.unfccc.int/methodologies/DB/8W400U6E7LFHHYH2C4JR1RJWWO4PVN>

² <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v5.0.pdf>

	2. 8 Nos. of 2.8 MVA Transformers; 380/11000 V, Make: Sudhir
Auxiliary Transformer	1 No. of 100 KVA Transformer; 415/11000 V
Technical & Operational Lifetime	25 years

The project activity was commissioned on 20/09/2016 and is running satisfactorily for current monitoring period.

Technology Transfer

No technology transfer from other countries is involved in the project.

The project activity is a Voluntary initiative by the PP and is contributing to the SDG goals set forth by GS as detailed below:

1- SDG 7- Affordable and Clean Energy (Contribution to Climate Security & Sustainable Development) – 47,884 MWh/year

2- SDG 8- Decent Work and Economic Growth- Minimum 1 training/annum and 10 people employed and people are getting better salary as compared to local level due to implementation of the project activity

3- SDG 13- Climate Action- 46,815 tCO₂e/annum

B.1.1. Forward Action Requests

Not Applicable, as there are no FARs from previous verification.

B.2. Post-Design Certification changes

Not Applicable during the current monitoring period. There are no post-design certification changes for this project.

B.2.1. Temporary deviations from the approved Monitoring & Reporting Plan, methodology or standardized baseline

Not Applicable during the current monitoring period. There are no temporary deviations in the monitoring & reporting plan, methodology or standardized baseline of the project.

B.2.2. Corrections

Not Applicable during the current monitoring period. There are no corrections.

B.2.3. Changes to start date of crediting period

Not Applicable during the current monitoring period. There is no change in start date of crediting period.

B.2.4. Permanent changes from the Design Certified monitoring plan, applied methodology or applied standardized baseline

Not Applicable during the current monitoring period. There are no permanent changes from the design certified monitoring plan, applied methodology or applied standardized baseline of this project.

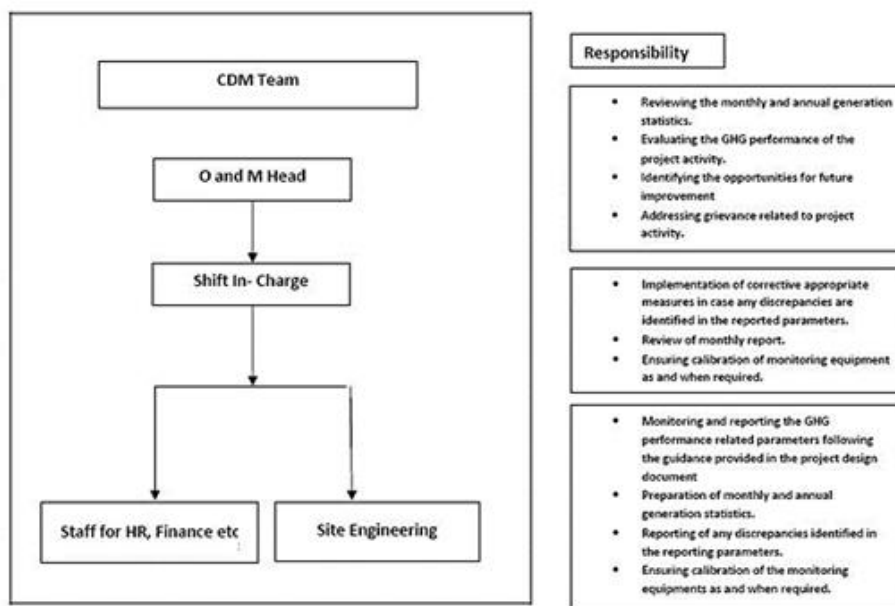
B.2.5. Changes to project design of approved project

Not Applicable during the current monitoring period. There are no changes to project design of the approved project.

SECTION C. DESCRIPTION OF MONITORING SYSTEM APPLIED BY THE PROJECT

The monitoring plan is developed in accordance with the modalities and procedures for current GS 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 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 equipment for this project activity. The team comprises of the following members:



Data Measurement

The export and import energy is measured continuously using above mentioned Main and Check meters located at the substation. Authorized officer of SEB in the presence of PP takes Readings of meters on monthly basis. Invoices are raised based on the Meter Reading Statement issued to Nirosha Solar Power Private Limited. These invoices are used for cross checking the meter readings taken for the respective project activity.

Data collection and archiving:

Readings from meters is 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 is for 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 (GS team) 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.

SECTION D. DATA AND PARAMETERS

D.1. Data and parameters fixed ex ante or at renewal of crediting period

SDG 13 (Indicators 13.2.1)

Data/parameter	EF_{grid,OM,y}
Unit	tCO ₂ /MWh
Description	Operating Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 11, April 2016
Value(s) applied	0.9941 tCO ₂ /MWh
Choice of data or Measurement methods and procedures	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 2012-13, 2013-14, & 2014-15. The data are obtained from "CO ₂ Baseline Database for Indian Power Sector" version 11, published by the Central Electricity Authority, Ministry of Power, and Government of India.
Purpose of data	For the calculation of the Baseline Emission
Additional comment	This parameter is fixed ex-ante for the entire crediting period.

Data/parameter	EF_{grid,BM,y}
Unit	tCO ₂ /MWh
Description	Build Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 11, April 2016
Value(s) applied	0.9285 tCO ₂ /MWh
Choice of data or Measurement methods and procedures	Calculated as per "Tool to calculate the emission factor for an electricity system, version 05" as per the latest available for the most recent year 2014-15. The data is obtained from "CO ₂ Baseline Database for Indian Power Sector" version 11, published by the Central Electricity Authority, Ministry of Power, and Government of India.
Purpose of data	For the calculation of the Baseline Emission
Additional comment	This parameter is fixed ex-ante for the entire crediting period.

Data/parameter	EF_{grid,CM,y}
Unit	tCO ₂ /MWh
Description	Combined Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 11, April 2016
Value(s) applied	0.9777 tCO ₂ /MWh
Choice of data or Measurement methods and procedures	The combined margin emissions factor is calculated as follows:

	$EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$ <p>Where:</p> <p>$EF_{grid,BM,y}$ = 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%</p>
Purpose of data	For the calculation of the Baseline Emission
Additional comment	This parameter is fixed ex-ante for the entire crediting period.

D.2. Data and parameters monitored

SDG 7 (Indicators 7.2.1)

Data / Parameter	EG_{facility,y}						
Unit	MWh/year						
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh						
Source of data	Monthly joint meter reading reports						
Value(s) applied	63,212 MWh <table border="1" data-bbox="564 1211 1378 1335"> <thead> <tr> <th>Year</th> <th>Net power generated</th> </tr> </thead> <tbody> <tr> <td>01/07/2020 to 31/12/2020</td> <td>24,860 MWh</td> </tr> <tr> <td>01/01/2021 to 19/09/2021</td> <td>38,352 MWh</td> </tr> </tbody> </table>	Year	Net power generated	01/07/2020 to 31/12/2020	24,860 MWh	01/01/2021 to 19/09/2021	38,352 MWh
Year	Net power generated						
01/07/2020 to 31/12/2020	24,860 MWh						
01/01/2021 to 19/09/2021	38,352 MWh						
Measurement methods and procedures	<p>Data Type: Measured Monitoring equipment: Energy Meters are used for monitoring Recording Frequency: Continuous monitoring and Monthly recording from Energy Meters, Summarized Annually Archiving Policy: Paper & Electronic Calibration frequency: Once in five years</p> <p>Electricity exported/imported to the grid is in kWh. However, for the calculation purpose electricity exported is converted in MWh.</p> <p>The Net electricity supplied to the grid by the project activity is calculated as a difference of electricity exported to the grid, electricity imported from the grid obtained from joint meter reading certificates/credit notes issued by state electricity board as per below equation:</p> $EG_{facility,y} = EG_{Export} - EG_{Import}$						

	<p>The joint reading at metering point is carried out once in a month in presence of O&M officials and state electricity board personnel. The calculations/measurement of net electricity supplied to grid is under purview of state electricity board and the PP/Project activity Instance owner has no role on it. PP/Project activity Instance owner gets value of net electricity supplied to grid and hence this parameter is mentioned as a part of monitoring plan.</p> <p>Cross Checking:</p> <p>Quantity of net electricity supplied to the grid is cross checked from the invoices raised by the PP to the State Electricity Board or equivalent.</p>
Monitoring frequency	Continuous monitoring and monthly recording
QA/QC procedures	<p>The meters are 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 accuracy class of meters, calibration frequency of meters is totally under purview of state electricity board and PP do not have any control on it. Thus deviation against the accuracy class, calibration frequency, metering arrangement etc is acceptable for future period.</p>
Purpose of data	To Monitor the SDG 7 Indicator
Additional comment	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.

SDG 13 (Indicators 13.2.1)

Data / Parameter	ER_y						
Unit	tCO ₂ e						
Description	Emission reductions achieved per year						
Source of data	As per Estimated ER sheet. During the verification, the results shall be obtained from the Actual ER sheet.						
Value(s) applied	<p>61,802 tCO₂e</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Emission Reductions achieved</th> </tr> </thead> <tbody> <tr> <td>01/07/2020 to 31/12/2020</td> <td>24,306 tCO₂e</td> </tr> <tr> <td>01/01/2021 to 19/09/2021</td> <td>37,496 tCO₂e</td> </tr> </tbody> </table>	Year	Emission Reductions achieved	01/07/2020 to 31/12/2020	24,306 tCO ₂ e	01/01/2021 to 19/09/2021	37,496 tCO ₂ e
Year	Emission Reductions achieved						
01/07/2020 to 31/12/2020	24,306 tCO ₂ e						
01/01/2021 to 19/09/2021	37,496 tCO ₂ e						
Measurement methods and procedures	The baseline emissions are the product of electrical energy baseline EG _{PJ,y} expressed in MWh of electricity produced by the renewable generating unit multiplied by an						

	emission factor.
Monitoring frequency	As per monitoring period
QA/QC procedures	Not Applicable
Purpose of data	To Monitor the SDG 13 Indicator
Additional comment	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.

SDG 8 (Indicators 8.5.1)

Data / Parameter	Quantitative employment and income generation												
Unit	-												
Description	Quantitative employment and income generation.												
Source of data	Employment records for project activity/Letter from O&M contractor for employment generation/ DOE interview with employees, local stakeholders etc												
Value(s) applied	<p>Total employment opportunities generated during the current monitoring period is 20.</p> <p>Further, below is the breakup of employment generated during the monitoring period.</p> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Year</th> <th>Skilled</th> <th>Unskilled</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>01/07/2020 to 31/12/2020</td> <td>5</td> <td>5</td> <td>10</td> </tr> <tr> <td>01/01/2021 to 19/09/2021</td> <td>5</td> <td>5</td> <td>10</td> </tr> </tbody> </table> <p>Four unskilled female staffs were employed during the current monitoring period.</p>	Year	Skilled	Unskilled	Total	01/07/2020 to 31/12/2020	5	5	10	01/01/2021 to 19/09/2021	5	5	10
Year	Skilled	Unskilled	Total										
01/07/2020 to 31/12/2020	5	5	10										
01/01/2021 to 19/09/2021	5	5	10										
Measurement methods and procedures	<p>The total number of persons working in the plant is calculated based on the daily log available at site.</p> <p>This parameter also monitors number of men/women employed by the project activity. The project activity ensures that "equal pay for work of equal value" for both men and women and there is no any discrimination against women.</p> <p>"The employment covers number of men and number of women employed by the project activity. The job is of type temporary/permanent or skilled/unskilled, local/ non-local etc. Also it is ensured that people get equal payment for equal work. The payment is based on work and there is no any gender inequality for payment for work of equal</p>												

	<p>value”.</p> <p>The average hourly earnings of a person is calculated by considering 8 hours per day working as per Indian standards and is depicted below.</p> <p>For e.g, a person is getting a monthly salary of INR 18,566; then his hourly earnings will be calculated as follows:</p> <p>Hourly Income = $18,566 / (30 * 8) = \text{INR } 77.36$.</p> <p>The hourly wages can be checked from the notification from the order published by the Chief Labour Commissioner (Central)³. As per the notification from Chief Labour Commissioner, for semi-skilled workers working in B Category of cities, the daily wage is INR 357, and accordingly the average hourly earnings comes out to be INR 44.62.</p> <p>Thus, it is justified that, PP is providing the employees/workers with salary/wages higher than the minimum wages as determined by the minimum wages order published by Chief Labour Commissioner (Central). The same can be checked from the salary slips provided.</p>
Monitoring frequency	Monthly monitoring and annual compilation
QA/QC procedures	<p>The number of persons employed would be mentioned in the plant register, which can be crossed checked with attendance register.</p> <p>Average hourly earnings of the employees/workers can be checked and calculated from the salary slips.</p>
Purpose of data	To Monitor the SDG 8 Indicator
Additional comment	Data are archived in paper & electronic form for two years after the end of crediting period or of the last issuance of GS-VERs for this project activity, whichever occurs later.

SDG 8 (Indicators 8.6.1)

Data / Parameter	Quality of Employment
Unit	-
Description	Training of Staff
Source of data	Plant records or The training records for all the employees/DOE interview with employees, local stakeholders etc.
Value(s) applied	During the current monitoring period, a total of 4 trainings

³ <https://clc.gov.in/clc/min-wages>

	were conducted.
Measurement methods and procedures	Together with the technology supplier, the Project organise training for the staff on the technology and the monitoring of the plant operation, and the emergency and safety procedures.
Monitoring frequency	Annual
QA/QC procedures	The training records for all the employees
Purpose of data	To Monitor the SDG 8 Indicator
Additional comment	Data are archived in paper & electronic form for two years after the end of crediting period or of the last issuance of GS-VERs for this project activity, whichever occurs later.

D.3. Comparison of monitored parameters with last monitoring period

Data/Parameter	Value obtained in this monitoring period	Value obtained last monitoring period
NA	NA	NA

This section is Not Applicable since no community service activities are involved in this project activity.

D.4. Implementation of sampling plan

Not Applicable

SECTION E. CALCULATION OF SDG IMPACTS

E.1. Calculation of baseline value or estimation of baseline situation of each SDG Impact

1– SDG 7– Affordable and Clean Energy (Contribution to Climate Security & Sustainable Development)– 47,884 MWh/year

2– SDG 8– Decent Work and Economic Growth– Minimum 1 training/annum and 10 people employed and people are getting better salary as compared to local level due to implementation of the project activity

3– SDG 13– Climate Action– 46,815 tCO₂e/annum

E.2. Calculation of project value or estimation of project situation of each SDG Impact

SDG 7: Affordable and Clean Energy

For the current monitoring period, the clean energy generation contributed by the project activity is 63,212 MWh.

SDG 8: Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. During the current monitoring period, the project activity provided employment to 20 persons.

Also, project activity improves the quality of employment by giving training to employee. During the current monitoring period, 4 trainings has been conducted.

SDG 13: Climate Action

For the current monitoring period, the emission reductions contributed by the project activity (ER_y) is calculated as follows:

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

Where:

BE _y	=	Baseline emissions in year y (t CO ₂)
EG _{PJ,y}	=	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh
EF _{grid,CM,y}	=	Combined margin CO ₂ emission factor for grid connected power generation in year y

$$BE_y = 63,212 \text{ MWh} \times 0.9777 \text{ tCO}_2/\text{MWh}$$

$$= 61,802 \text{ tCO}_2\text{e (Round down value)}$$

$$ER_y = BE_y - PE_y$$

Where:

- ER_y = Emission reductions in year y (t CO₂e)
- BE_y = Baseline emissions in year y (t CO₂e)
- PE_y = Project emissions in year y (t CO₂e)

$$\text{Therefore, } ER_y = 61,802 - 0$$

$$= 61,802 \text{ tCO}_2\text{e}$$

E.3. Calculation of leakage

Not Applicable

E.4. Calculation of net benefits or direct calculation for each SDG Impact

SDG	SDG Impact	Baseline estimate	Project estimate	Net benefit
7	Affordable and Clean Energy	-	63,212 MWh	63,212 MWh
8	Decent Work and Economic Growth	-	No. of Employment opportunities created: 20 No. of trainings conducted: 4	No. of Employment opportunities created: 20 No. of trainings conducted: 4

13	Climate Action	61,802 tCO ₂ e	-	61,802 tCO ₂ e
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E.5. Comparison of actual SDG Impacts with estimates in approved PDD

SDG	Values estimated in ex ante calculation of approved PDD for this monitoring period	Actual values ⁴ achieved during this monitoring period												
7	58,510 MWh	63,212 MWh												
8	1 training/annum and employment to 10 persons	No. of Employment opportunities created: 20 <table border="1"> <thead> <tr> <th>Year</th> <th>Skilled</th> <th>Unskilled</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>01/07/2020 to 31/12/2020</td> <td>5</td> <td>5</td> <td>10</td> </tr> <tr> <td>01/01/2021 to 19/09/2021</td> <td>5</td> <td>5</td> <td>10</td> </tr> </tbody> </table> No. of trainings conducted: 4	Year	Skilled	Unskilled	Total	01/07/2020 to 31/12/2020	5	5	10	01/01/2021 to 19/09/2021	5	5	10
Year	Skilled	Unskilled	Total											
01/07/2020 to 31/12/2020	5	5	10											
01/01/2021 to 19/09/2021	5	5	10											
13	57,204 tCO ₂ e	61,802 tCO ₂ e												

E.5.1. Explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period

SDG 7: Affordable and Clean Energy

The annual estimated power generation for the project activity is 47,884 MWh, thus considering number of days covered during present monitoring period to be 446, the estimated power generation will be 58,510 MWh.

SDG 8: Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project will provide employment to at least 10 persons.

Also project activity improves the quality of employment by giving training to employee. Thus, minimum 1 training per year will be conducted by the project activity.

SDG 13: Climate Action

The annual estimated emission reduction for the project activity is 46,815 tCO₂e, thus considering number of days covered during present monitoring period to be 446, the estimated emission reduction contributing towards SDG 13 will be 57,204 tCO₂e.

⁴ Whenever emission reductions are capped, both the original and capped values used for calculations must be transparently reported. Use brackets to denote original values.

E.6. Remarks on increase in achieved SDG Impacts from estimated value in approved PDD

SDG 7 and SDG 13:

A total of 8.04% higher generation and emission reduction achieved with respect to estimated values due to higher shine hours. The actual PLF obtained during the current verification period is 19.68% which is within limit of breaching value (i.e. 20.78%). Also, the equity IRR value calculated with actual PLF of 19.68% comes to 12.06% which less than the benchmark value (i.e. 17.67%). Hence, it can be concluded that, due to increase in the PLF, there is no impact on the additionality of the project activity. Also, PLF is nature dependent and it will vary based on sun shine conditions and PP do not have any control on it.

SDG 8:

Number of training and employment figure is slight higher, which is conservative.

SECTION F. SAFEGUARDS REPORTING

As per the safeguarding Principle Assessment in Appendix-1 of the GS4GG PDD, there are no safeguarding principles which are to be included in the monitoring plan or hold any relevance to the project activity. Also there are no any impact (positive/negative/slightly) for any mitigation measures, being applicable to any of the safeguarding principles. Hence, this section is not relevant.

SECTION G. STAKEHOLDER INPUTS AND LEGAL DISPUTES

G.1. List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.

As a part of continuous feedback from stakeholders, the grievances register is placed at site and is being continuously monitored and if any comments are received, they are addressed through the grievance cell.

During the current monitoring period, there were no comments/feedbacks received in the grievance register.

G.2. Report on any stakeholder mitigations that were agreed to be monitored.

Not Applicable

G.3. Provide details of any legal contest that has arisen with the project during the monitoring period

Not Applicable

Annex-1: Meter Details

Meter Sl. No.	Meter Make	Accuracy Class	Date of Calibration	Due date for Calibration
15625430 (Main Meter)	Larson and Toubro Limited	0.2 s	01/12/2017	01/12/2022
15199969 (Check Meter)	Larson and Toubro Limited	0.2 s	01/12/2017	01/12/2022

Revision History

Version	Date	Remarks
1.1	14 October 2020	<p>Hyperlinked section summary to enable quick access to key sections</p> <p>Improved clarity on Key Project Information</p> <p>Section for POA monitoring</p> <p>Forward action request section</p> <p>Improved Clarity on SDG contribution/SDG Impact term used throughout</p> <p>Clarity on safeguard reporting</p> <p>Clarity on design changes</p> <p>Leakage section added for VER/CER projects</p> <p>Addition of Comparison of monitored parameters with last monitoring period</p> <p>Provision of an accompanying Guide to help the user understand detailed rules and requirements</p>
1.0	10 July 2017	Initial adoption