



GRID CONNECTED SOLAR ENERGY PROJECT

Project title	Grid Connected Solar Energy Project
Project ID	VCS 1890
Monitoring period	01-Sep-2023 to 31-Dec-2024 (both days inclusive)
Original date of issue	05-Dec-2025
Most recent date of issue	19-Feb-2026
Version	1.2
VCS Standard Version	4.7
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¹The name of the company has been changed from the CLP India Private Limited to Apraava Energy Private Limited (AEPL) with effect from 29/09/2021.

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PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

Apraava Energy Private Limited (AEPL) (formerly known as CLP India Private Limited)² has involved in installation of 170 MW_{AC} solar projects in the states of Telangana and Maharashtra of India. The project activity constitutes of three solar projects viz. 100 MW_{AC} Veltor by CLP India Private Limited, 50 MW_{AC} Gale by Gale Solar farms Private Limited and 20 MW_{AC} Tornado by Tornado Solar farms Private Limited. The main purpose of this project activity is to generate electricity through renewable energy source and to sale the same to Indian grid. The project activity utilizes solar energy to generate clean power with a view to bring in greenhouse gas emission reductions. This project activity constitutes of three independent solar projects with different capacities. Details of the sub-project activity are mentioned below:

Name of Legal Entity	Commercial Date of Operation	Capacity	Location (Village/State)
CLP India Private Limited ³	07-Aug-2017	100 MW _{AC}	Dwarakanagar, Ammapur and Muthyalampalle villages in Mahbubnagar dist. in the state of Telangana, India
Gale Solar farms Private Limited	08-Feb-2018	50 MW _{AC}	Saltek and Bhamer villages in Dhule district of Maharashtra, India
Tornado Solar farms Private Limited	09-Nov-2017	20 MW _{AC}	

The project activity utilises solar energy to generate clean power with a view to bring in greenhouse gas emission reductions. The power generated from this project activity is being supplied to the state electricity grid which is a part of Indian grid. The project is fully commissioned and is supplying electricity to Indian Grid.

The Project activity is a new facility and the purpose of the project activity is to generate energy electricity by the utilization of solar energy and further selling the generated energy to the Indian Grid. In this process there is no consumption of any fossil fuel and hence the project does not lead to any greenhouse gas emissions. Thus, electricity would be generated through sustainable means without causing any negative impact on the environment.

² The name of the company has been changed from the CLP India Private Limited to Apraava Energy Private Limited (AEPL) with effect from 29/09/2021.

³The legal entity of SE Solar Limited has now been merged with CLP India Private Limited. Thus, deviation has been considered in last verification

The Project activity helps to reduce the demand- supply gap in the country and also helps in contributing to the sustainable development by using solar energy as the source of power generation and reduction of GHG emissions. The first project under this project activity was commissioned on 07-Aug-2017 and last project was commissioned on 08-Feb-2018. The expected operational lifetime of the project is for 25 years.

During this monitoring period the project activity has exported 449,870 MWh of net energy to the Indian grid system. The total emission reductions achieved during the monitoring period from 01-Sep-2023 to 31-Dec-2024 (both days inclusive) is 421,438 tCO₂.

1.2 Audit History

The audit history of the project is provided below:

Audit Type	Period	Program	VVB Name	Number of years
Validation and Verification	07-Aug-2017 – 31-Mar-2019	VCS	LGAI Technological Center S.A.	1 year, 7 months, 25 days
Verification	01-Apr-2019 – 20-Jul-2020	VCS	Earthood Services Private Limited	1 year, 3 months, 20 days
Verification	21-Jul-2020 – 20-May-2021	VCS	Earthood Services Private Limited	10 months
Verification	21-May-2021 – 30-Sep-2022	VCS	LGAI Technological Center S.A.	1 year, 4 months
Verification	21-Sep-2022 – 31-Aug-2023	VCS	LGAI Technological Center S.A.	11 months
Verification	01-Sep-2023 – 31-Dec-2024	VCS	Eco-lance Private Limited	1 year, 4 months

1.3 Sectoral Scope and Project Type

Sectoral scope⁴	01-Energy Industries (renewable/non-renewable sources)
Project activity type	Type I – Renewable Energy Projects
Sectoral scope	Not applicable

⁴Projects, activities, or methodologies may be developed under any of the 16 VCS sectoral scopes: <https://verra.org/programs/verified-carbon-standard/vcs-program-details/#sectoral-scopes>

AFOLU project category ⁵	Not applicable
Project activity type	Not applicable

1.4 Project Proponent

Organization name	Apraava Energy Private Limited
Contact person	Jogendra Behera
Title	Head - Policy, Regulatory and Non-Utility Markets
Address	7th Floor, Fulcrum, Sahar Road, Andheri East, Mumbai – 400099
Telephone	+91- 22-67588888
Email	carbongroup@apraava.com

1.5 Other Entities Involved in the Project

Organization name	Gale Solar farms Private Limited
Role in the project	Project Developer
Contact person	Jogendra Behera
Title	Head - Policy, Regulatory and Non-Utility Markets
Address	7th Floor, Fulcrum, Sahar Road, Andheri East, Mumbai – 400099
Telephone	+91- 22-67588888
Email	carbongroup@apraava.com

Organization name	Tornado Solarfarms Private Limited
Role in the project	Project Developer
Contact person	Jogendra Behera
Title	Head - Policy, Regulatory and Non-Utility Markets
Address	7th Floor, Fulcrum, Sahar Road, Andheri East, Mumbai – 400099
Telephone	+91- 22-67588888

⁵See Appendix 1 of the VCS Standard

Email	carbongroup@apraava.com
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1.6 Project Start Date

Project start date	07-Aug-2017
Justification	As per the Section 3.8 of the VCS Standard v.4.7, "The project start date of a non-AFOLU project is the date on which the project began generating GHG emission reductions or removals". The project is a non-AFOLU project and the earliest date of interconnection with the grid. Commercial date of Operations of Veltoor, Gale and Tornado solar projects are on 07-Aug-2017, 08-Feb-2018 and 09-Nov-2017 respectively. Thus, projects are started emission reduction from its commercial date of operations respectively. Therefore, the start date for this project is 07-Aug-2017 which is the commercial date of operation of Veltoor solar project.

1.7 Project Crediting Period

Crediting period	☐ Seven years, twice renewable ☒ Ten years, fixed ☐ Other (state the selected crediting period and justify how it conforms with the VCS Program requirements)
Start and end date of first or fixed crediting period	07-Aug-2017 to 06-Aug-2027

1.8 Project Location

Project is spread across two sites – Veltoor, Telengana and Dhule, Maharashtra. Location details of these sites are as follows

Site 1: Veltoor

The 100 MW_{AC} Veltoor solar plant is located in Dwarkanagar, Ammapur and Muthyapalle village in Kothakota, Chinnachintakunta and Devarkadramandal of Mehboobnagar district of Telengana. The site is accessed through National Highway 7 (NH-7) (9 km east of project site) and further reached by a 300 m long village road connecting Kottakota village to project site. The site lies around the coordinates 16° 26' 38.98" N and 77° 52' 3.83" E and at an altitude of approximately 352 m, above mean sea level. The nearest commercial city is Hyderabad, which is approximately 130 km from the Project site location.

Site 2: Dhule, Maharashtra

The 50 MW_{AC} Gale and 20 MW_{AC} Tornado solar plants are located in Saltek and Bhamer villages in Dhule district of Maharashtra. The site is accessed through National Highway 7 (NH-7). The site lies around the coordinates 21.1° N and 74.3° E. The nearest commercial city is Nasik, which is approximately 170 km from the Project site location.

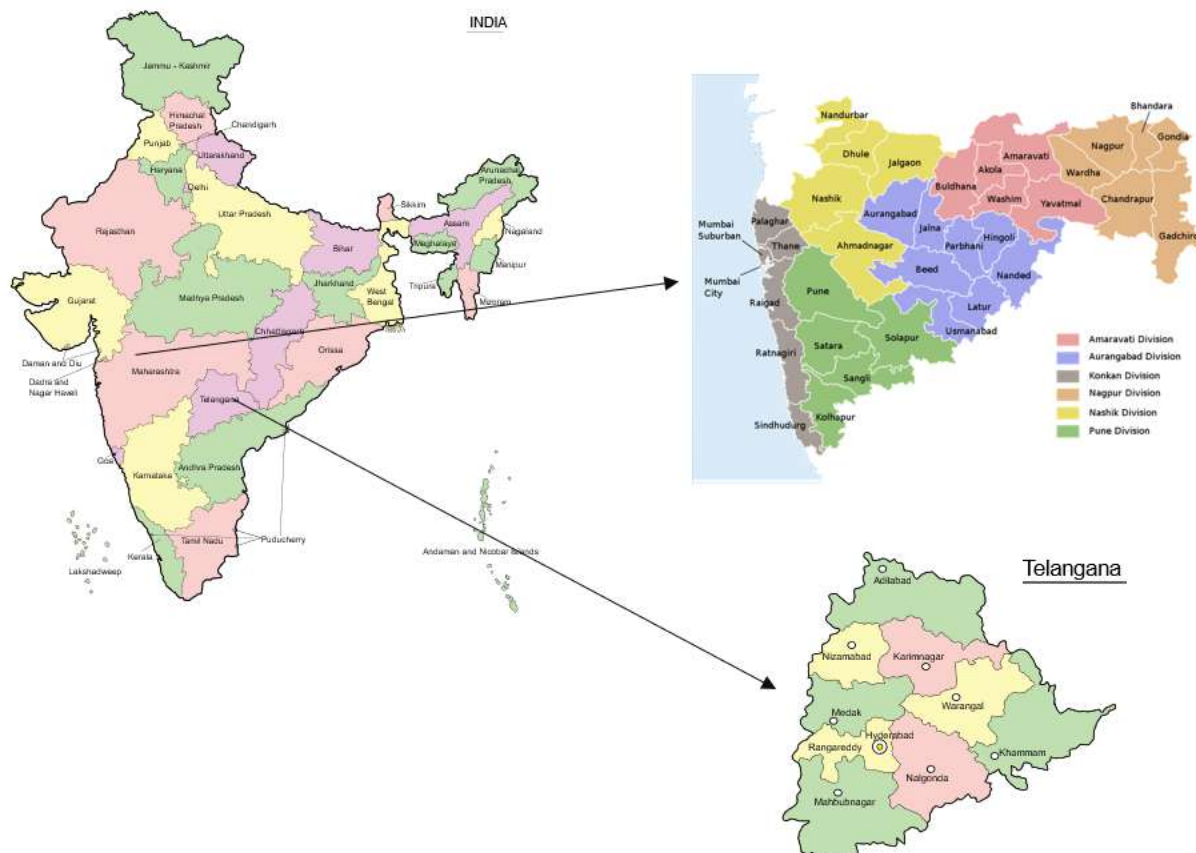


Fig. Map of India, Map of Maharashtra and Telangana

1.9 Title and Reference of Methodology

Type (methodology, tool or module).	Reference ID, if applicable	Title	Version
Methodology	ACM0002	Grid-connected electricity generation from renewable sources	19.0
Tool	07	Tool to calculate the emission factor for an electricity system (https://cdm.unfccc.int/methodologies/Amethodologies/tools/am-tool-07-v7.0.pdf)	7.0

Tool	01	Tool for the demonstration and assessment of additionality (https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf)	7.0
Guideline	NA	Methodological tool for Investment analysis (https://cdm.unfccc.int/Reference/Guidclarif/reg/reg_guid03.pdf)	9.0
Tool	27	Methodological tool for Investment analysis (https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v1.pdf) (https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v9.0.pdf)	6.0 9.0

1.10 Double Counting and Participation under Other GHG Programs

1.10.1 No Double Issuance

Is the project receiving or seeking credit for reductions and removals from a project activity under another GHG program?

☐ Yes ☒ No

1.10.2 Registration in Other GHG Programs

Was the project registered or seeking registration under any other GHG programs?

☐ Yes ☒ No

1.11 Double Claiming, Other Forms of Credit, and Scope 3 Emissions

1.11.1 No Double Claiming with Emissions Trading Programs or Binding Emission Limits

Are project reductions and removals or project activities also included in an emissions trading program or binding emission limit? See the VCS Program Definitions for definitions of emissions trading program and binding emission limit.

☐ Yes ☒ No

1.11.2 No Double Claiming with Other Forms of Environmental Credit

Has the project activity sought, received, or is planning to receive credit from another GHG-related environmental credit system? See the VCS Program Definitions for definition of GHG-related environmental credit system.

☐ Yes

☒ No

1.11.3 Supply Chain (Scope 3) Emissions

Do the project activities affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain?

☐ Yes

☒ No

If yes:

Is the project proponent(s) or authorized representative a buyer or seller of the product(s) (goods or services) that are part of a supply chain?

☐ Yes

☒ No

If yes:

Has the project proponent(s) or authorized representative posted a public statement on their website saying, "Carbon credits may be issued through the Verified Carbon Standard project [project ID] for the greenhouse gas emission reductions or removals associated with [project proponent or authorized representative organization name(s)] [name of product(s) whose emissions footprint is changed by the project activities]."

☐ Yes

☒ No

The Project Activity is a solar power project and does not involve any supply chain involved in the project such as manufacturers, wholesalers, distributors and retailers. So, no indirect upstream and downstream GHG emissions are not involved in the project activity. Thus, the Scope 3 emissions are not applicable in this project activity.

1.12 Sustainable Development Contributions

The main purpose of this project activity is to generate clean electricity through renewable energy source. The project activity constitutes of three solar projects viz. 100 MWAC Veltoor by CLP India Private Limited, 50 MWAC Gale by Gale Solar farms Private Limited and 20 MWAC Tornado by Tornado Solar farms Private Limited. The Project is fully commissioned and is supplying electricity to NEWNE 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 activity is expected to supply 3.09 GWh/year of energy to the integrated Indian Grid

each year, which is mainly dominated by thermal/fossil fuel-based power plant. This is expected to result in emission reductions of 289,503 tCO_{2e} per year of operation.

The project activity has resulted in various contributions towards the SDGs has been given below:

SDG 7.2.1: Renewable energy share in the total final energy consumption: The Project activity is a new facility (Greenfield) and the electricity generated by the project is exported to the Indian electricity grid. The project therefore displaces an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid. During the current monitoring period 449,870 MWh electricity has supplied to Indian grid.

SDG 8 Quality of Employment: The implementation of the project activity has led to increase in the Quality of Employment and skill upliftment. During the current monitoring period, 1 Training has been organized for staff on the use of PPT's and Hot work training.

SDG 13 Climate Action: The main purpose of this project activity is to generate a clean electricity through renewable energy sources. The project is a solar project which is located at Telengana and Maharashtra State of India. The project supplies clean electricity from the solar power plants to the Indian Grid, hence displacing the electricity generated from grid connected fossil fuel power plants and thereby avoiding the equivalent Carbon dioxide which is a greenhouse gas. By supplying 449,870 MWh clean electricity to Indian grid, the project avoided release of 421,438 tCO_{2e} into the atmosphere during the current monitoring period.

Table 1: Sustainable Development Contributions

Row number	SDG target	SDG indicator	Net impact on SDG indicator	Current project contributions	Contributions over project lifetime
1	7.2	7.2.1: Renewable energy share in the total final energy consumption	Implemented activities to increase	About 449,870 MWh renewable electricity has been supplied to Indian grid during the reported period that helps to increase the renewable energy share.	Overall 2,295,121 MWh renewable electricity has been supplied to Indian grid throughout the project lifetime that helps to increase the renewable energy share in the energy mix
2	8	Quality of Employment	Implemented activities to increase	1 Training has been provided during current monitoring period, The training was organized for staff on the use of PPT's and Hot work training.	Overall 1 Training has been provided during current monitoring period, the training was organized for staff on the use of PPT's and Hot work training.
3	13	Tonnes of greenhouse gas emissions avoided or removed	Implemented activities to increase	By supplying 449,870 MWh of clean electricity to Indian grid, the project avoided release of 421,438 tCO ₂ e in to the atmosphere during the reporting period.	Overall prevented the release of 2,205,611 tCO ₂ e into the atmosphere since project commissioning.

1.13 Commercially Sensitive Information

No commercially sensitive information has been excluded from the public version of the monitoring report.

2 SAFEGUARDS AND STAKEHOLDER ENGAGEMENT

2.1 Stakeholder Engagement and Consultation

2.1.1 Stakeholder Identification

Stakeholder Identification	Stakeholders associated with the project activity throughout its lifetime are identified at different stages of project development. The stakeholders identified are generally grouped under two categories- directly affected parties, and indirectly affected parties as shown below: a) Representatives and Employees from service provider (Apraava Renewable Energy Limited, Gale Solar farms Private Limited and Tornado Solar farms Private Limited); b) Employees of AREPL c) Contractor of AREPL d) Villagers from nearby villages Furthermore, all the stakeholders mentioned above were identified at the project's validation. There has been no change in stakeholder makeup since validation.
Legal or customary tenure/access rights	The project activity is a greenfield solar power project and it has not involved any legal or customary tenure/access rights to territories and resources. So, this section is not applicable
Stakeholder diversity and changes over time	Not applicable This is renewable energy project and does no impact on the diversity of the stakeholders.
Expected changes in well-	There are not any significant impacts due to implementation of project activity on air, water, soil quality and ambience are envisaged due to the

being	project activity. Furthermore, solar projects in India have indirect positive socio-economic impacts: a) Job Creation: Solar energy projects create indirect jobs in various sectors, contributing to local economic growth. b) Economic well-being: The project activity is likely to provide employments to the locality thus economic well beings are expected c) Environmental well-being – as this project activity 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 and specific pollutants like SO_x, NO_x, and SPM associated with the conventional thermal power generation facilities.
Location of stakeholders	Location of stakeholders i) Mehboobnagar district of Telengana ii) Dhule district of Maharashtra No negative impact generated outside/inside of the project boundary. (All stakeholders who will be directly affected by the project activity are included within the project boundary. Further, this project activity does not require the relocation of any stakeholder, Indigenous people, or local communities.)
Location of resources	Not Applicable (In the project activity, neither any territories and resources are owned by the stakeholders, nor they have any customary access)

2.1.2 Stakeholder Consultation and Ongoing Communication

Ongoing consultation	Stakeholders' consultation is a continuous process and hence a feedback register is kept at the project site office where any stakeholder can come and share his/her feedback. The feedback irrespective of the type is taken care by PP with utmost priority.
Date(s) of stakeholder consultation	i. At Veltoor project, the meeting was carried on 18-Jul-2018 at the site office in Veltoor solar project at 02:00 pm ii. At Gale Solar farms Private Limited and Tornado Solar farms Private Limited, the meeting was carried on 17-Jun-2018 at the Site office at 2:00 pm
Communication of monitored results	Monitored outcomes are conveyed to the stakeholders in two ways:

	1. Through VERRA Website: - PP submits third-party (i.e., VVB) verified monitoring results to VERRA, and once approved, the project documentation is made publicly available on the VERRA webpage for each monitoring period. 2. Through PP regional office: - A copy of all the project related documents and monitoring data (e.g., grievance register) is available at regional offices of the PP, which is accessible to all the stakeholders associated with the project activity.
Consultation records	The Local Stakeholder Consultation (LSC) records were submitted to VVB at the time of validation and grievance register records for the current monitoring period will be submitted to VVB.
Stakeholder input	Stakeholder input/feedback received during LSC and the LSC report for the same had been submitted to the VVB during validation. Furthermore, the stakeholder feedback/grievance received during the current MP, through ongoing consultation mechanism, has been taken care as per the standard procedure adopted by PP, provided in section 2.1.4 of the VCS-MR. There were no major comments from the stakeholders which could impact on the design of the project.

2.1.3 Free, Prior, and Informed Consent

Consent	The project activity is greenfield solar power project, in which all the approvals and prior consent to operate have been taken from the local authorities and there was no objection from their side.
Outcome of FPIC	Not Applicable. The project activity does not affect any type of property rights, and there are no ongoing or unresolved conflicts over property rights, usage, or resources. This project activity does not involve any encroachment on land, people's relocation, or forced physical or economic displacement.

2.1.4 Grievance Redress Procedure

Grievances received	Resolution and outcome
No grievances were received during the current monitoring period	NA

The grievance mechanism process could be illustrated as below:

PP has placed a grievance register onsite where-in, the stakeholders can put down their request/complaint/requirements. Same is continuously monitored and appropriate actions are also being taken by management. Furthermore, PP has also placed a notice board on site to communicate any necessary information/updates to local stakeholders. PP has found this two-way communication with local stakeholders is very effective towards sustainability of the project in long run.

As part of organizational policy, there are continuous interactions undertaken by Project Participant's officials with local community stakeholders. During these discussions, local villagers share their observations and comments. All the observations, comments and queries raised during discussion have been adequately responded to. Some of the suggestions have also been incorporated in the overall vision and stakeholder engagement action plan of the organization.

2.1.5 Public Comments

No public comment was received during current monitoring period.

Summary of comments received	Actions taken
No comments from stakeholder during current monitoring period.	No action is required

2.2 Risks to Stakeholders and the Environment

2.2.1 Management Experience

The PP is Independent Power Producer (IPP) and has been in the renewable energy business for more than 20 years. PP has been actively involved in design or implementation of project activity. The management is experienced and well educated as per the understanding of the carbon market. The field staff has been trained well and annual trainings are provided to keep them up to date.

2.2.2 Risk assessment

	Risk identified	Mitigation or preventative measure(s) taken
Natural and human-induced risks to stakeholders' wellbeing	No risk identified	The project activity is a greenfield power project. There is no trade-off or any negative impact to their livelihood, land, food, etc. Therefore, no risk identified to stakeholder participation
Risks to stakeholder participation	No risk identified	Project activities create indirect livelihood opportunities for local people. The working conditions are in line with government norms.
Working conditions	Safety of employees at project site	PP has a health and safety policy, and procedure manual in place to ensure favorable working condition.
Safety of women and girls	Sexual harassment at workplace	PP has a sexual harassment policy (POSH) in place and committed to providing a workplace free from such unlawful conduct. The same policy has been shared with the VVB.
Safety of minority and marginalized groups, including children	No risk identified	Project does not adversely affect men and women of minority, marginalized or vulnerable communities including children.
Pollutants (air, noise, discharges to water, generation of waste, and release of hazardous materials and chemical pesticides and fertilizers)	No risk identified	Project does not cause air, noise, water pollution or release hazardous materials.

2.3 Respect for Human Rights and Equity

2.3.1 Labor and Work

Risks identified ⁶		Mitigation or preventative measure(s) taken
Discrimination	Discrimination on the basis of individual's race, gender, age, disability, ethnicity or cultural affiliation, sexual orientation, belief, educational background, or any other basis.	PP has code of conduct policy in place to prevent discrimination against anyone.
Sexual harassment	Unwelcome acts or behavior (whether directly or by implication)	PP is committed to providing an environment free from sexual harassment. PP follows company policy on 'Prevention of Sexual Harassment at the Workplace Policy' which protects from sexual harassment by vendors, contractors, and third parties.
Gender equity in labor and work	Biasness in hiring, promotions or terminations	The PP is Independent Power Producer (IPP) and has been in the renewable energy business for more than 20 years. The PP has policies in place to ensure fair opportunity and equal pay for work done to both men and women.
Forced labor	No risk identified	The project does not indulge in any forced labor.
Child labor	No risk identified	The project does not indulge in any child labor.
Human trafficking	No risk identified	The project does not indulge in any human trafficking.

2.3.2 Human Rights

Risks identified	Mitigation or preventative measure(s) taken
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⁶The identified risks and commensurate mitigation or preventative measure(s) for forced labor, child labor, and human trafficking, must be inclusive of staff and contracted workers employed by third parties.

No risk identified	There have been no human rights violation with any stakeholders during construction and operation of the project activity.
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2.3.3 Indigenous Peoples and Cultural Heritage

Risks identified	Mitigation(s) or preventative measure taken
No risk identified	The project activity is a greenfield power project and solar plant are installed in approved/permited areas. The project does not affect the indigenous people and their cultural heritage.

2.3.4 Property Right

Risks identified	Mitigation or preventative measure(s) taken
No risk identified	The project activity is a greenfield solar power project. This project does not infringe with property rights and resources. Hence, there is no need to implement any measures to protect and preserve the property rights of stakeholders, IPs, LCs, and customary rights holders.

2.3.5 Benefit Sharing

Summary of the benefit sharing plan	Project activity is a greenfield solar power project where the benefit sharing is not applicable.
Benefit sharing during the monitoring period	Not applicable because the project activity does not have any impacts property right.

2.4 Ecosystem Health

	Risk identified	Mitigation or preventative measure(s) taken during the monitoring period
Impacts on biodiversity and ecosystems	No risk identified	The project activity is solar power plant. This project activity does not involve any activity which may negatively impact biodiversity and ecosystem.
Soil degradation and soil erosion	No risk identified	The project activity is solar power plant. This project activity does not involve any activity which

Water consumption and stress	No risk identified	may result in soil degradation and soil erosion.
		The project activity is solar power plant. This project activity does not involve any activity which may consume water or result in any kind of water stress.

2.4.1 Rare, Threatened, and Endangered species

Species or habitat	Since the project activity is greenfield solar power project, no ecosystem impact were identified during validation
Areas needed for habitat connectivity	Not Applicable

	Risks identified	Mitigation or preventative measure(s) taken
Habitats for rare, threatened, and endangered species	Not Applicable	Not Applicable
Areas for habitat connectivity	Not Applicable	Not Applicable

2.4.2 Introduction of species

This project activity neither involve any planting activities nor introduction of species. Hence, not applicable.

Species introduced	Classification	Justification for use	Adverse effects and mitigation
Not Applicable	Not Applicable	Since the project activity is greenfield solar power project, it is not applicable as project activity does not introduce any species.	Not Applicable

This project activity does not involve introduction of any species which may be invasive in nature.

Existing invasive species	Mitigation measures to prevent the spread or continued existence of invasive species
Not Applicable	Not Applicable

	Risks identified	Mitigation or preventative measure(s) taken
Invasive species	Not Applicable	Not Applicable

2.4.3 Ecosystem conversion

The project activity is a greenfield solar power project. This project activity does not involve ARR, ALM, WRC or ACoGS activities. Hence, not applicable.

	Risks identified	Mitigation or preventative measure(s) taken
Ecosystem conversion	NA	NA

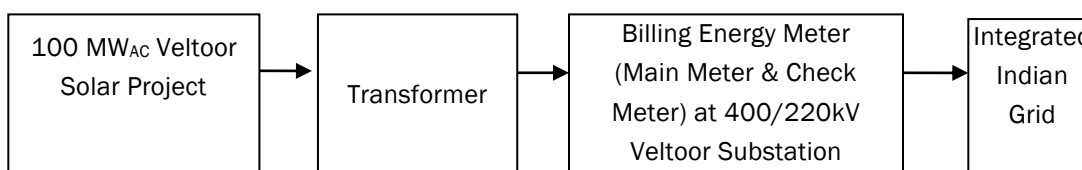
3 IMPLEMENTATION STATUS

3.1 Implementation Status of the Project Activity

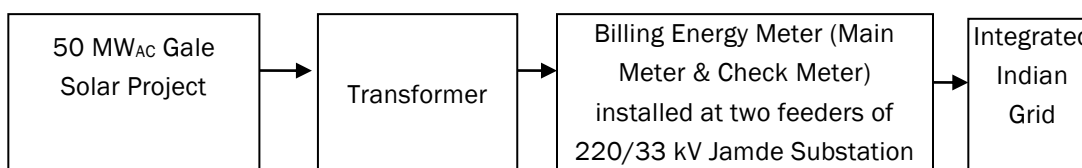
Implementation Status: All the solar project shave been commissioned and the Project is fully implemented. The commissioning dates of the projects have been provided in section 1.1

Events that may impact the GHG emission reductions or removals and monitoring: No such events took place during the monitoring period that may impact the GHG emission reductions for the project activity. The project activity has been exporting electricity continuously since commissioning. There were neither major breakdowns nor other events for the project activity during the monitoring period that may impact the GHG emission reductions for the project activity.

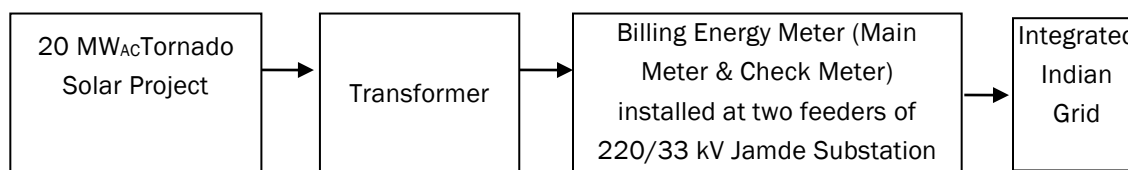
Monitoring equipment line diagram in Veltoor Site is detailed as below: -



Monitoring equipment line diagram in Gale Solar Site is detailed as below: -



Monitoring equipment line diagram in Tornado Site is detailed as below



3.2 Deviations

3.2.1 Methodology Deviations

No methodology deviation is applied during the monitoring period.

3.2.2 Project Description Deviations

There are no deviation considered during current monitoring period.

3.3 Grouped Projects

Not applicable, as the project is not a grouped project.

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes

☒ No

4 DATA AND PARAMETERS

4.1 Data and Parameters Available at Validation

Data / Parameter	EF _{grid,CM,y}
Data unit	tCO ₂ /MWh
Description	Combined margin emission factor for Indian grid connected power generation in year y calculated using the latest version of "Tool to calculate the emission factor for an electricity system"
Source of data	CO ₂ baseline database (Version 14.0) published by CEA on Dec-2018

Value applied:	0.9368
Justification of choice of data or description of measurement methods and procedures applied	This value is calculated using OM and BM values as per Version 7.0 of methodological tool to calculate the emission factor for an electricity system and using data base of CEA.
Purpose of Data	For the calculation of Emission Factor of the grid
Comments	This parameter is fixed ex-ante for the entire crediting period.

Data / Parameter	$EF_{grid,OM,y}$
Data unit	tCO ₂ /MWh
Description	Simple operating margin emission factor for Indian grid
Source of data	CO ₂ baseline database (Version 14.0) published by CEA on Dec-18
Value applied:	0.9610
Justification of choice of data or description of measurement methods and procedures applied	This value is calculated by taking weighted average of Simple Operating Margin of recent three years for Indian grid as per the “Tool to calculate the emission factor for an electricity system”, version 07.0.0
Purpose of Data	For the calculation of Emission Factor of the grid
Comments	This parameter is fixed ex-ante for the entire crediting period.

Data / Parameter	$EF_{grid,BM,y}$
Data unit	tCO ₂ /MWh
Description	Simple build margin emission factor for Indian grid
Source of data	CO ₂ baseline database (Version 14.0) published by CEA in Dec-18
Value applied:	0.8644
Justification of choice of	This value is calculated by taking weighted average of Simple

data or description of measurement methods and procedures applied	build Margin of recent three years for Indian grid as per the “Tool to calculate the emission factor for an electricity system”, version 07.0.0
Purpose of Data	For the calculation of Emission Factor of the grid
Comments	This parameter is fixed ex-ante for the entire crediting period.

4.2 Data and Parameters Monitored

Data / Parameter	EGPJ, Veltloor, y
Data unit	MWh
Description	Quantity of net electricity generation supplied by the project Veltloor plant to the grid in year y
Source of data	Monthly Joint Meter Reading Report by state utility
Description of measurement methods and procedures to be applied	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: 5 years Accuracy class: 0.2s Electricity exported/imported to the grid is in kWh. However, for the calculation purpose electricity exported is converted in MWh. The Net electricity supplied to the grid by the Veltloor project activity will be calculated as a difference of electricity exported to the grid and electricity imported from the grid obtained from joint meter reading report notes issued by state utility as per below equation: $EG_{PJ, Veltloor, y} = EG_{Export, Veltloor} - EG_{Import, Veltloor}$ The calculation is done by state utility and project developer has no say in the calculation. Based on the joint meter reading report, the project shall raise the invoice. Export readings of Main and Check meters shall be taken on monthly basis by authorized officer of state utility in the presence of PP or representative of CLP.

	Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the invoices raised by the project participant to the grid.
Frequency of monitoring/recording	Continuous monitoring, hourly measurement and monthly recording
Value monitored	262,145 MWh
Monitoring equipment	The details of monitoring equipment installed at veltoor solar site are provided in appendix 1 of monitoring report.
QA/QC procedures to be applied	- The energy meter reading are taken on monthly basis - Energy meters will be calibrated once in a five year in line with guidance⁷ stipulated by Central Regulatory Authority, Govt. of India and faulty meters will be duly replaced immediately. - Details of energy meters are mentioned in Appendix-1 - All the energy meters are under the control of state utility and calibration/testing of energy meters is also under the jurisdiction of state utility. The Net electricity exported to the grid will be cross checked against the invoice raised by the PP towards the DISCOM
Purpose of the data	To calculate Baseline Emissions calculation
Calculation method	Not applicable
Comments	The data will be kept for two years after the end of the crediting period or the last issuance of VCUs for this project activity, whichever occurs later.

Data / Parameter	EG PJ, Gale, y
Data unit	MWh
Description	Quantity of net electricity generation supplied by the project Gale plant to the grid in year y
Source of data	Monthly Joint Meter Reading Report by state utility
Description of measurement methods and procedures to be applied	Data Type : Measured Monitoring equipment : Energy Meters are used for monitoring Recording Frequency: Continuous monitoring and Monthly recording from Energy Meters, Summarized Annually

⁷ <https://www.cbip.org/cearegulations/CEA%20DATA/MeteringRegulations/Jan2020/Metering%20Consolidated%20Regulations.pdf>

	Archiving Policy: Paper & Electronic Calibration frequency: 5 years Accuracy class: 0.2s Electricity exported/imported to the grid is in kWh. However, for the calculation purpose electricity exported is converted in MWh. The Net electricity supplied to the grid by the Gale project activity will be calculated as a difference of electricity exported to the grid and electricity imported from the grid obtained from joint meter reading report notes issued by state utility as per below equation: $EG_{PJ,Gale,y} = EG_{Export, Gele} - EG_{Import, Gale}$ The calculation is done by state utility and project developer has no say in the calculation. Based on the joint meter reading report, the project shall raise the invoice. Export readings of Main and Check meters shall be taken on monthly basis by authorized officer of state utility in the presence of PP or representative of PP. Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the invoices raised by the project participant to the grid.
Frequency of monitoring/recording	Continuous monitoring, hourly measurement and monthly recording
Value monitored	133,773 MWh
Monitoring equipment	The details of monitoring equipment installed at Gale solar site are provided in appendix 1 of monitoring report.
QA/QC procedures to be applied	- The energy meter reading are taken on monthly basis - Energy meters will be calibrated once in a five year in line with guidance stipulated by Central Regulatory Authority, Govt. of India and faulty meters will be duly replaced immediately. - Details of energy meters are mentioned in Annexure-1 - All the energy meters are under the control of state utility and calibration/testing of energy meters is also under the jurisdiction of state utility. The Net electricity exported to the grid has been cross checked against the invoice raised by the PP towards the DISCOM
Purpose of the data	To calculate Baseline Emissions calculation

Calculation method	Not applicable
Comments	The data will be kept for two years after the end of the crediting period or the last issuance of VCUs for this project activity, whichever occurs later.

Data / Parameter	EG PJ, Tornado, y
Data unit	MWh
Description	Quantity of net electricity generation supplied by the project Tornado plant to the grid in year y
Source of data	Monthly Joint Meter Reading Report by state utility
Description of measurement methods and procedures to be applied	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: 5 years Accuracy class: 0.2s Electricity exported/imported to the grid is in kWh. However, for the calculation purpose electricity exported is converted in MWh. The Net electricity supplied to the grid by the Tornado project activity will be calculated as a difference of electricity exported to the grid and electricity imported from the grid obtained from joint meter reading report notes issued by state utility as per below equation: $EG_{PJ, Tornado, y} = EG_{Export, Tornado} - EG_{Import, Tornado}$ The calculation is done by state utility and project developer has no say in the calculation. Based on the joint meter reading report, the project shall raise the invoice. Export readings of Main and Check meters shall be taken on monthly basis by authorized officer of state utility in the presence of PP or representative of PP. Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the invoices raised by the project participant to the grid.
Frequency of	Continuous monitoring, hourly measurement and monthly recording

monitoring/recording	
Value monitored	53,952 MWh
Monitoring equipment	The details of monitoring equipment installed at Tornado solar site are provided in appendix 1 of monitoring report.
QA/QC procedures to be applied	• The energy meter readings are taken on monthly basis • Energy meters will be calibrated once in a five year in line with guidance stipulated by Central Regulatory Authority, Govt. of India and faulty meters will be duly replaced immediately. • Details of energy meters are mentioned in Appendix-1 • All the energy meters are under the control of state utility and calibration/testing of energy meters is also under the jurisdiction of state utility. The Net electricity exported to the grid has been cross checked against the invoice raised by the PP towards the DISCOM
Purpose of the data	To calculate Baseline Emissions calculation
Calculation method	Not applicable
Comments	The data will be kept for two years after the end of the crediting period or the last issuance of VCU for this project activity, whichever occurs later.

4.3 Monitoring Plan

The monitoring methodology specified in the methodology requires that the project-monitoring plan to consist of monitoring of quantity of net electricity supplied to the grid in the year y. In order to monitor the mitigation of GHG due to the project activity, the total energy exported needs to be measured. The net energy supplied to grid by the project activity multiplied by emission factor for regional grid, would form the baseline for the project activity. Since the baseline emission factor is based on an ex-ante determination, monitoring of this parameter is not required. The sole parameter for monitoring is the net electricity exported to the grid.

Param Renewable Energy Ltd is the O&M contractor for veltoor project site and Mahindra Teqo Private Limited is the O&M contractor for Gale and Tornado project site. Further, all the companies will be responsible for maintaining respective monitoring data in respect of the project activity. CLP India Private Limited, Gale Solarfarms Private Limited and Tornado Solarfarms Private Limited have implemented the management structure for managing the monitored data.

This approved monitoring methodology requires monitoring of the following:

Net electricity supplied from the project activity: While Emission factor of the project activity is fixed ex ante hence no further monitoring of this parameter is required. As per ACM0002 leakage need

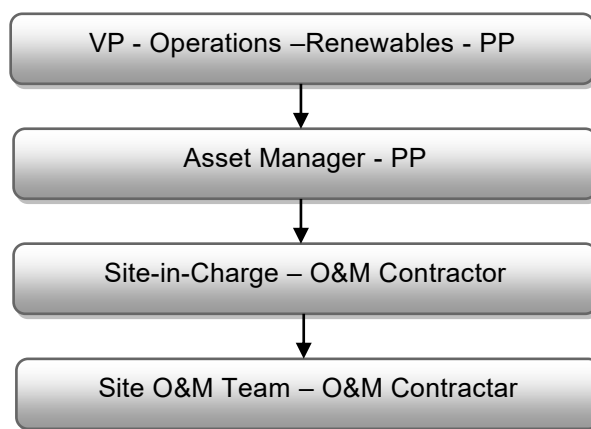
not be considered hence leakage has not been considered for the project activity. Hence, the sole parameter for monitoring is the net electricity supplied by the project activity to the grid.

The Project activity is operated and managed by CLP India Private Limited, Gale Solarfarms Private Limited and Tornado Solarfarms Private Limited respectively. CLP India Private Limited, Gale Solarfarms Private Limited and Tornado Solarfarms Private Limited follow the documentation practices to ensure the reliability and availability of the data for all the activities as required from the identification of the site, resource assessment, logistics, finance, construction, commissioning and operation of the solar power project.

Monitoring roles and responsibilities

The operational and management structure implemented for data monitoring is as follows:

The monitoring plan is developed in accordance with the modalities and procedures for VCS project activities and is proposed for grid-connected solar power project being implemented in Telengana and Maharashtra, India. The monitoring plan, which will be implemented by CLP India Private Limited, Gale Solarfarms Private Limited and Tornado Solarfarms Private Limited, 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 respective project proponent. CLP India Private Limited, Gale Solarfarms Private Limited and Tornado Solarfarms Private Limited proposed the following structure for data monitoring, collection, data archiving and calibration of equipment's for this project activity. The Project activity is operated and managed by the respective PP. CLP India Private Limited, Gale Solarfarms Private Limited and Tornado Solarfarms Private Limited follow the documentation practices to ensure the reliability and availability of the data for all the activities as required from the identification of the site, resource assessment, logistics, finance, construction, commissioning and operation of the solar power projects. The data for the project is compiled and subsequently stored by the PP. The roles and responsibilities for the project are described above.

Data Recording

The state utility and representative of concerned Power Producer / developer shall jointly read the metering system every month at the delivery point.

Meter readings taken jointly will be signed by the representatives of state utility and of concerned power producer/developer. If Power Producer/ Developer's representative is not present for joint meter reading then the meter reading taken by state utility shall be considered as final; provided a signed copy of the meter reading is sent to the Power Purchase / Developer within twenty-four (24) hours of such reading of the main metering system or back up metering system as the case may be.

The solar power developer has installed main meter and check meter of static type 0.2s class accuracy of ABT Meters at the Interconnection Point. The solar power developer has also installed stand-by meter of same accuracy as per the norms specified in the Metering Code by CEA. The main meter, check meter and stand-by meter shall consist of a pair of export and import parameters with facility for recording meter readings using meter recording instrument.

All the meters have installed shall be jointly inspected and sealed and shall not be interfered with, tested or checked except in the presence of representatives of both parties. The meter readings of the main meter shall form the basis of billing. If any of the meters installed at interconnection point are found to be registering inaccurately the affected meter shall be replaced immediately.

During meter test check of the main meter and check meter indicates an error in the main meter beyond the permissible limits of error provided in the relevant standards (as defined in the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, but no such error is indicated in the corresponding check meter, billing for the month shall be done on the basis of the reading of the check meter and the main meter shall be replaced immediately. If main meter and check meter indicate an error beyond the limits, billing for the month shall form the basis of the readings of the stand by meter, and the main meter and the check meter shall be replaced immediately.

Calibration Frequency

The main, check and standby meters shall be calibrated once in a five year in line with notification issued by Central Electricity Authority, Govt of India dated the 17-Mar-2006. The meters would be tested by any accredited laboratory in the presence of the parties (State Electricity Board, Project investor and the O&M Contractor) involved. Both parties shall seal main and backup meters. Defective meters shall be replaced immediately. As per the schedule, calibration of all energy meter, instruments and equipment will be carried out once in five year and recorded in calibration reports.

Emergency Preparedness

In case of any abrupt breakdown, the fault will be immediately identified by the O&M personnel. All minor faults shall be taken care of by the O& M personnel, In case of any major faults, the grid personnel will be informed and replacement of the equipment shall be made within 24 hours.

Data Adjustment in case of monitoring period different from billing period:

In case the dates of a particular monitoring period do not match with the dates of the billing period, the net electricity exported to the grid would be calculated as follows:

$$D = (A/B) * C$$

A = Difference of number of days which are not matching of billing period and monitoring period.

B = Number of days of the billing period/ month which was not matched with the monitoring period.

C = Net Electricity supplied to the grid for that given billing period/ month

The calculated value after apportioning would be used for calculation of emission reductions during that period.

QA/QC Procedure

All the meters are calibrated/ tested once in five years. The calibration is done by the officials of the state utility. The accuracy of monitoring parameter is ensured by adhering to the calibration and testing of the metering equipment once in five years. QA/QC procedures have been as implemented by Discom/ State utility pursuant to the provisions of the power purchase agreement. In case the main meter(s) is found to operate outside the permissible limits, the main meter will be either replaced or calibrated immediately. Whenever a main meter goes defective, the consumption recorded by the Check meter will be referred. The project participant is monitoring the data for electricity generation and calibration reports post project implementation. Param Renewable Energy Ltd is the O&M contractor for veltoor project site and Mahindra Teqo Private Limited is the O&M contractor for Gale and Tornado project site. These O&M contractors has responsibility of maintaining electricity generation records, calibration records and maintenance of respective project. The project participant also maintains the records of daily generation report and joint meter report.

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.

5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions

The baseline emissions are calculated as follows:

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

Where:

BE_y	=	Baseline emissions in year y (tCO ₂)
$EG_{PJ,y}$	=	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)
$EF_{grid,CM,y}$	=	Combined margin CO ₂ 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”

Since the project activity is the installation of a new grid-connected renewable power plant/ unit at a site where no renewable power plant was operated prior to the implementation of the project activity, therefore:

$$EG_{PJ,y} = EG_{facility,y}$$

Where:

$EG_{PJ,y}$	=	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)
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Baseline Emission (BE_y):

Vintage Period	Net Electricity Export by Project Activity (MWh)	Emission Factor (tCO ₂ /MWh)	Baseline Emissions (tCO ₂)	Project Emissions (tCO ₂)	Leakage (tCO ₂)	Emission Reductions (tCO ₂)
2023 (01-Sep-2023–31-Dec-2023)	107,601	0.9368	100,800	0	0	100,800
2024 (01-Jan-2024–31-Aug-2024)	342,269	0.9368	320,638	0	0	320,638
	449,870		421,438	-	-	421,438

5.2 Project Emissions

The project activity involves harnessing of solar energy and its conversion to electricity. Hence according to ACM0002 Version 19.0.0, there will be no project emissions in the project activity $PE_y = 0$

5.3 Leakage Emissions

As per ACM0002 Version 19.0.0, no leakage has been considered for the calculation of emission factor.

5.4 GHG Emission Reductions and Carbon Dioxide Removals

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reduction VCU (tCO ₂ e)	Removal VCU (tCO ₂ e)	Total VCU (tCO ₂ e)
2023 (01-Sep-2023-31-Dec-2023)	100,800	0	0	100,800	0	100,800
2024 (01-Jan-2024-31-Dec-2024)	320,638	0	0	320,638	0	320,638
Total	421,438	0	0	421,438	0	421,438

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
2023 (01-Sep-2023-31-Dec-2023)	96,765	100,800	4.17%	During the current monitoring period, the actual emission reductions achieved by Veltor project are 8.13% higher than estimated emission reductions. Similarly, actual emission reductions for Gale and Tornado project sites are 3.98% and 4.84% higher than the estimated values, respectively. As per sensitivity analysis presented in the registered VCS Project Description (PD), equity IRR would cross the benchmark only if PLF increases by 20.42% for the Veltor site, 21.56% for Gale site, and 21.57% for Tornado site. The observed increase in emission reductions during the current monitoring period remains lower than these threshold values. During current monitoring period, the higher emission reductions are due to improved PLF resulting from better sunshine availability, which is a natural phenomenon and beyond the control of the Project Proponent.
2024 (01-Jan-2024-31-Dec-2024)	290,297	320,638	10.47%	
Total	387,062	421,438	8.88%	

APPENDIX 1: COMMERCIALY SENSITIVE INFORMATION

Section	Information	Justification
Not applicable	not applicable	The project activity is greenfield solar power project, there are no commercially sensitive information so this section is not applicable.

APPENDIX 1: CALIBRATION DETAILS

A) Calibration details for 100 MW_{AC} Veltoor Solar Project in Telengana:

Sl. No.	Meter Identification No	Meter Make	Accuracy Class	Calibration Date	Calibration Validity Date
1	XD551230 (Main Meter)	Secure	0.2s	09-Mar-2023	08-Mar-2028
2	XD551231 (Check Meter)	Secure	0.2s	09-Mar-2023	08-Mar-2028
3	XD551232 (Standby Meter)	Secure	0.2s	09-Mar-2023	08-Mar-2028

B) Calibration details for 50 MW_{AC} Gale Solar Project in Dhule, Maharashtra:

Sl. No.	Meter Identification No	Meter Make	Accuracy Class	Calibration Date	Calibration Validity Date
1	X1305565 (Main Meter)	Secure	0.2s	18-Aug-2020	17-Aug-2025
2	X1305566 (Check Meter)	Secure	0.2s	18-Aug-2020	17-Aug-2025
3	XD462715 (New Standby Meter) The Old standby meter serial number XD462712 was replaced with new ABT standby meter serial number XD462715 on 18-Aug-2020.	Secure	0.2s	18-Aug-2020	17-Aug-2025

C) Calibration details for 20 MW_{AC} Tornado Solar Project in Dhule, Maharashtra:

Sl. No.	Meter Identification No	Meter Make	Accuracy Class	Calibration Date	Calibration Validity Date
1	Q0439034 (Old Main Meter)	Secure	0.2s	28-Jun-2021	27-Jun-2026
	Q1126678 (New Main Meter) On 09-Jul-2020, the earlier main meter Serial No. 2832488 was replaced with new ABT	Secure	0.2s	10-Mar-2025	09-Mar-2030

Sl. No.	Meter Identification No	Meter Make	Accuracy Class	Calibration Date	Calibration Validity Date
	meter serial no. 2892240. Subsequently, on 30-Jun-2021, the main meter Serial No. 2892240 was replaced with Serial No. Q0439034 due to a date and time error. Most recently, on 10-Mar-2025, the main meter Serial No. Q0439034 was replaced with Serial No. Q1126678 due to a powering-up error.				
2	Q0585663 (Check Meter) On 09-Jul-2020, the earlier check meter Serial No. 2832490 was replaced with new ABT meter serial no. 2892241. Subsequently, on 31-May-2022, earlier check meter Serial No. 2892241 was replaced with Serial No. Q0585663.	Secure	0.2s	31-May-2022	30-May-2027
3	Q0833057 (Standby Meter) On 09-Jul-2020, the earlier standby meter Serial No. 2832501 was replaced with new ABT meter serial no. 2892242. Subsequently, on 12-Oct-2023, earlier standby meter Serial No. 2892242 was replaced with Serial No. Q0833057.	Secure	0.2s	12-Oct-2023	11-Oct-2028

Calibration frequency of the meter is once in five years. There was not any significant period of shut-down or break-down period during this monitoring period.