



SOLAR POWER PROJECT BY MYTRAH ENERGY INDIA PRIVATE LIMITED



Document Prepared by Infinite Solutions

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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 372 MW solar project in different states of India through SPVs.

Over the 10 years of first crediting period, the project is replacing anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 638,520 tCO₂e per year, thereon displacing 681,607 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian grid, which is mainly dominated by thermal/fossil fuel based power plant.

The commission details of the SPVs for the project are given in section 3.1. The first plant was commissioned on 19-June-2017 and last was commissioned on 26-November-2018.

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 22 of Section 5.2.1 of applied methodology is the following:

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

Hence, pre-project scenario and baseline scenario are the same.

Total emission reductions achieved in this monitoring period:

During the Current Monitoring Period from 01-June-2021 to 28-February-2022 (First and last date included) the project activity has supplied 456,006 MWh of electricity, and thus the total VCUs achieved during this monitoring period is 427,182 tCO₂e.

1.2 Sectoral Scope and Project Type

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

Sectoral Scope : 01 - Energy industries (renewable / non-renewable sources)
Project Type : I - Renewable Energy Projects
Project Category : Grid-connected electricity generation from renewable sources
 ACM0002- Version 19.0¹

The project is not a grouped project activity.

1.3 Project Proponent

Organization name	Mytrah Energy India Private Limited
Contact person	Mr. Ramesh Kure
Title	Assistant Manager
Address	8001, 8th Floor, Q-City, Nanakramguda, Gachibowli, Hyderabad 500032, Telangana, India
Telephone	+91 72888 75975
Email	cleancredits@mytrah.com

1.4 Other Entities Involved in the Project

Organization name	Infinite Solutions
Role in the Project	Carbon Consultant
Contact person	Richa Thakur
Title	Project Manager
Address	214-215 Milinda Manor, Opp. Next Treasure Island, 2 RNT Marg, Indore- 452001
Telephone	+91-731-4050174
Email	richa@infisolutions.org

¹ <http://cdm.unfccc.int/methodologies/DB/VJI9AX539D9MLOPXN2AY9UR1N4IYGD>

1.5 Project Start Date

Start date of the project activity is the earliest date of interconnection with the grid i.e., 19-June-2017. This is the date of commissioning of 2 * 25 MW solar PV project activity by Mytrah Aadhya Power Pvt Ltd.

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

1.6 Project Crediting Period

Crediting Period Start date: 19-June-2017

Crediting Period End date: 18-June-2027

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

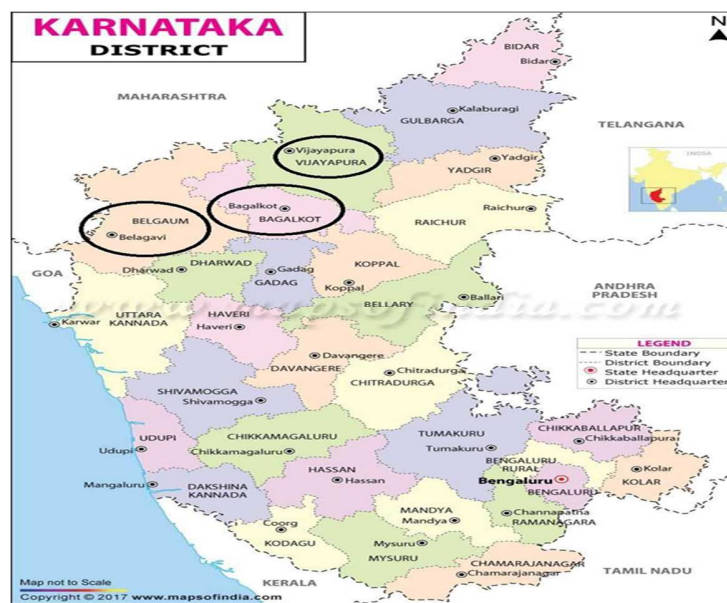
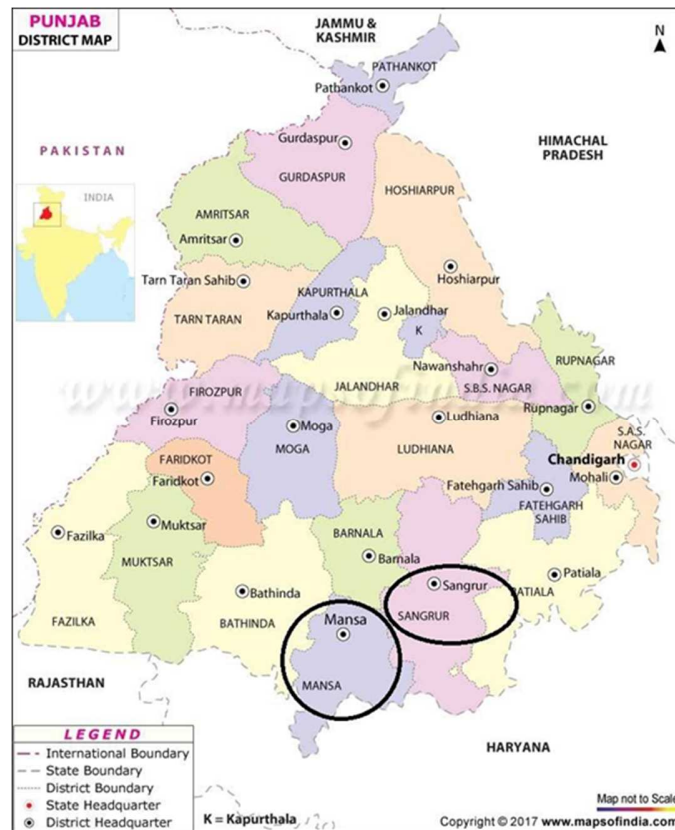
1.7 Project Location

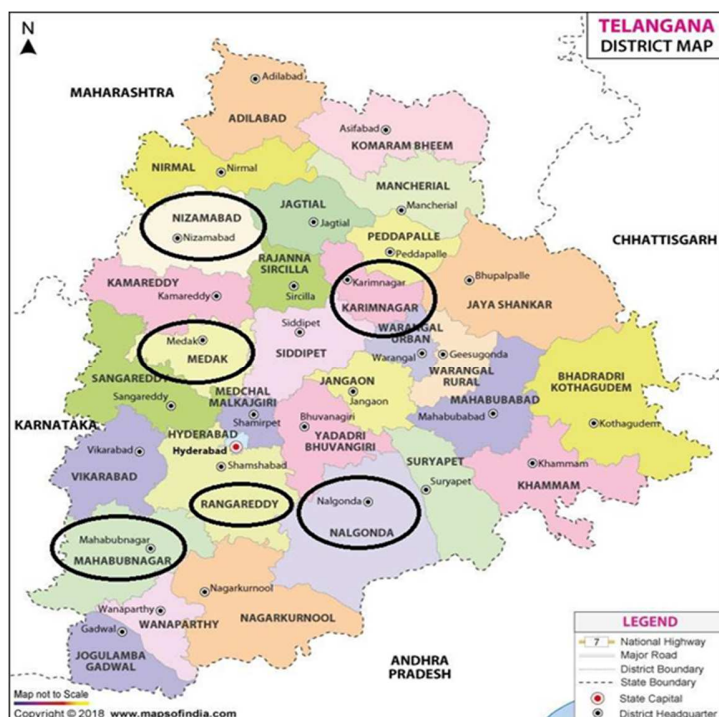
The details of the project locations are mentioned in the table below

Sl. No	Name of SPVs	Site	District	State	Latitude (N)	Longitude (E)
1	Mytrah Abhinav Power Pvt Ltd	Thimajipet	Mahabubnagar	Telangana	16° 41.321'0"	78° 10' 33.12"
		Arvapally	Nalgonda		17° 18.134'0"	79° 30.879' 0"
		Domakonda	Nizamabad		18° 16'12.00"	78° 27' 40.26"
		Alampur	Gadwal		15° 55' 2"	77° 57' 47"
		Gadwal	Gadwal		16° 15' 59"	77° 46' 59"
		Tandur	Rangareddy		17° 19' 16"	77° 36' 42"
		Nagarkurnool	Mahabubnagar		16° 29'21.89"	78° 26' 1.24"
2	Mytrah Adarsh Power Pvt Ltd	Reddypet	Nizamabad	Telangana	18° 26' 22.6752"	78° 23' 44.1060"
		Chegunta	Medak		17° 56'20.3604"	78° 32'07.1700"
		Thunkibollaram	Siddipet		17° 45'06.0012"	78° 33'01.0008"
		Tungathurthuvu	Nalgonda		17° 27'24.2064"	79° 38'15.0180"
		Guntipally	Nalgonda		16° 41'56.6880"	78° 48'22.2480"

		Shanigaram	Siddipet		18° 10'39.5004"	79° 02'04.8804"
3	Mytrah Agriya Power Pvt Ltd	Kamareddy	Kamareddy	Telangana	18° 23'03.0372"	78° 16'11.9136"
4.	Mytrah Akaash Power Pvt Ltd	K.M.Pally	Nalgonda	Telangana	16° 46.380'0"	78° 52.095' 0"
5	Mytrah Aadhya Power Pvt	Bareta	Mansa	Punjab	29° 52'30.00"	75° 40' 34.68"
		Balran	Sangrur	Punjab	29° 50'38.40"	75° 50' 38.40"
6.	Mytrah Advaith Power Pvt	Hunagund	Bagalkot	Karnataka	16° 0' 0.00"	76° 06' 0.00"
		Sindagi	Bijapur		17° 0' 0.00"	76° 12' 0.00"
7.	Mytrah Akshaya Energy Pvt Ltd	Raibagh	Belagavi	Karnataka	16° 24' 0.00"	74° 54' 0.00"

The project locations have been shown in the maps 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 19.0²

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 system³ - Version 07.0 (EB 100, Annex 04)
- Methodological Tool- Tool for the demonstration and assessment of additionality⁴ - Version 07.0.0 (EB 70, Annex 08)

² <http://cdm.unfccc.int/methodologies/DB/VJI9AX539D9MLOPXN2AY9UR1N4IYGD>

³ <http://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-07-v7.0.pdf>

⁴ <http://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-01-v7.0.0.pdf>

1.9 Participation under other GHG Programs

The project has neither been registered, nor seeking registration under any other GHG programs. The project is seeking registration only in VCS program.

1.10 Other Forms of Credit

- Emission Trading Programs and Other Binding Limits: Net GHG emission reductions or removals generated by the Project will not be used for compliance with an emissions trading program or to meet binding limits on GHG emissions in any Emission Trading program or other binding limits.
- Other Forms of Environmental Credit: The Project has no intend to generate any other form of GHG-related environmental credit for GHG emission reductions or removals claimed under the VCS Program.

However, it can be crosschecked that PP is not claiming REC benefits, the same can be verified with the REC accreditation body of India⁵.

1.11 Sustainable Development Contributions

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 372 MW solar project in different states of India through SPVs.

During the current monitoring period the project generated clean and affordable energy 456,006 MWh through renewable sources through which the project avoided release of 427,182 tCO₂ in to the atmosphere. The project has created employment to 470 people during these monitoring period and provided 20 training to the employees.

Hence the project is contributing towards SDG 7, SDG 8 and SDG 13 during the current monitoring period.

⁵ https://recregistryindia.nic.in/index.php/general/publics/accredited_regens_pdf

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 456,006 MWh, renewable electricity has supplied to Indian grid during the reported period that helps to increase the renewable energy share in the energy mix.	Since Commissioning, about 2,032,646.71 MWh renewable electricity has supplied to Indian grid that helps to increase the renewable energy share in the energy mix.		
					Monitoring period	Contribution	Unit
					19-June-2017 to 17-March-2019	595,937.14	MWh
					18-March-2019 to 31-03-2020	650,378.57	MWh
					01-April-2020 to 31-May-2021	786,331	MWh

2)	8.6	8.6.1 Proportion of youth (aged 15-24) not in education, employment or training	Implemented increase	activities to	Total 470 peoples are employed during this reporting period. Total 20 training was provided during the current monitoring period-	No contribution was reported in previously submitted SD reports		
3)	13.0	Tonnes of greenhouse gas emissions avoided or removed	Implemented increase	activities to	By supplying 456,006 MWh clean electricity to Indian grid, the project avoided release of 427,182 tCO ₂ in to the atmosphere during the reporting period.	Prevented the release of 1,903,300 tCO ₂ in the atmosphere		
						Monitoring period	Contribution	Unit
						19-June-2017 to 17-March-2019	557,667	tCO ₂
						18-March-2019 to 31-03-2020	609,256	
						01-April-2020 to 31-May-2021	736,377	

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 same⁶.

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

2.2 Local Stakeholder Consultation

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

At the time of project registration, Stakeholder meeting was organized in order to identify the major challenges around the area, stakeholders are invited well in advance through printed invitation, calls, meeting and a notice is placed around the local common areas. Various CSR activities around site are carried out with proper stakeholder requirements meeting. No any negative comments received during stakeholder meeting.

The stakeholders are also requested to share their experiences and grievances on continuous basis. Registers is used to records the grievances and feedback. Grievance register is placed at the main gate of site office and is accessible to everyone. During the current monitoring period, positive feedbacks had been received regarding site operation. No any grievances received during the current monitoring period, therefore, no any mitigation measures were required. In case of grievances, the nature of probable resolution is discussed with the plant head office and implemented by the site in-charge.

⁶ <https://mnre.gov.in/public-information/notifications/>

2.3 AFOLU-Specific Safeguards

This section is not applicable here as the project activity is a solar 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 372 MW of Solar PV plant located at different states in India. The project is promoted by **Mytrah Energy India Private Limited**.

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

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

The project shall result in replacing anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 638,520 tCO₂e per year, thereon displacing 681,607 MWh/year amount of electricity from the grid over the 10 years crediting period.

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

Sl. No	Name of SPVs	Capacity (MW)	COD	Site	Connecti on with Grid	State	Usage
1	Mytrah Abhinav Power Pvt Ltd	8 MW	30-June-2017	Thimajipet	Indian Grid	Telangana	Sale to State Discom
		8 MW	19-July-2017	Arvapally			
		15 MW	05-December-2017	Domakonda			
		11 MW	19-August-2017	Alampur			
		15 MW	21-August-2017	Gadwal			
		15 MW	02-March-2018	Tandur			

		15 MW	27-February-2018	Nagarkurnool			
2	Mytrah Adarsh Power Pvt Ltd	15 MW	05-December-2017	Reddypet	Indian Grid	Telangana	Sale to State Discom
		15 MW	22-November-2017	Chegunta			
		15 MW	23-October-2017	Thunkibollaram			
		15 MW	08-November-2017	Tungathurthy			
		15 MW	25-September-2017	Guntipally			
		15 MW	23-May-2018	Shanigaram			
3	Mytrah Agriya Power Pvt Ltd	50 MW	25 MW on 22-November-2018	Kamareddy	Indian Grid	Telangana	Sale to State Discom
			25 MW on 26-November-2018				
4.	Mytrah Akaash Power Pvt Ltd	50 MW	12.5 MW on 16-March-2018	K.M.Pally	Indian Grid	Telangana	Sale to State Discom
			17.5 MW on 12-April-2018				
			20 MW on 22-November-2018				
5.	Mytrah Aadhyaa Power Pvt Ltd	25 MW	19-June-2017	Bareta	Indian Grid	Punjab	Sale to State Discom
		25 MW	19-June-2017	Balran		Punjab	

6.	Mytrah Advaith Power Pvt Ltd	15 MW	09-February-2018	Hunagund	Indian Grid	Karnataka	Sale to State Discom
		15 MW	08-February-2018	Sindagi			
7.	Mytrah Akshaya Energy Pvt Ltd	15 MW	23-January-2018	Raibagh	Indian Grid	Karnataka	Sale to State Discom

These are the SPVs of Mytrah Energy India Private Limited and the project is promoted by Mytrah Energy India Private Limited. As on date, the entire 372 MW capacity has been commissioned.

The project activity aims to harness solar energy through installation of Solar PV project with total installed capacity of 372 MW.

Solar PV Project Technology Details –

The technical specification for 15 MW solar project by Mytrah Advaith Power Private Limited at Hunagund site, Karnataka

Sl. No.	Technical details of the equipment ⁷	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320, 325 Total No. of Modules: 53040
2	Number of Inverters & Capacity	9 Inverters Capacity- 1667 KW
3	Number of Transformers & Capacity	No. of Transformers- 3 Capacity- 5 MVA (3 no. of Inverter transformers)

The technical specification for 15 MW solar project by Mytrah Advaith Power Private Limited at Sindagi site, Karnataka

⁷ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

Sl. No.	Technical details of the equipment ⁸	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320, 325 Total No. of Modules: 54040
2	Number of Inverters & Capacity	9 Inverters Capacity- 1732 KW
3	Number of Transformers & Capacity	No. of Transformers- 3 Capacity- 5 MVA (3 no. of Inverter transformers)

The technical specification for 15 MW solar project by Mytrah Akshaya Energy Private Limited at Raibagh site, Karnataka

Sl. No.	Technical details of the equipment ⁹	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 320, 325 Total No. of Modules: 53880
2	Number of Inverters & Capacity	9 Inverters Capacity- 1667 KW
3	Number of Transformers & Capacity	No. of Transformers- 3 Capacity- 5 MVA (3 no. of Inverter transformers)

The technical specification for 25 MW solar project by Mytrah Aadhya Power Private Limited at Bareta site, Punjab

⁸ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 175 MW.

⁹ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

Sl. No.	Technical details of the equipment ¹⁰	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 310, 315, 320
2	Number of Inverters & Capacity	8 Inverters
3	Number of Transformers & Capacity	No. of Transformers- 9 (8 Inverter transformers & 1 Power transformer) Capacity-2.5 MVA (8 no. of Inverter transformers) 25 MVA (1 no. of Power transformer)

The technical specification for 25 MW solar project by Mytrah Aadhya Power Private Limited at Balran site, Punjab

Sl. No.	Technical details of the equipment ¹¹	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 310, 315, 320, 335, 340, 345, 350
2	Number of Inverters & Capacity	18 Inverters

¹⁰ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 185 MW.

¹¹ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 25 MW.

3	Number of Transformers & Capacity	No. of Transformers- 11 (10 Inverter transformers & 1 Power transformer) Capacity- 1.5 MVA (4 no. of Inverter transformers) 2.5 MVA (6 no. of Inverter transformers) 25 MVA (1 no. of Power transformer)
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The technical specification for 8 MW solar project by Mytrah Abhinav Power Private Limited at Thimajipet site, Telangana

Sl. No.	Technical details of the equipment ¹²	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 310, 315, 320, 325 Total No. of Modules: 28920
2	Number of Inverters & Capacity	8 Inverters Capacity- 1000 KW
3	Number of Transformers & Capacity	No. of Transformers- 2 Capacity- 4 MVA (2 no. of Inverter transformers)

The technical specification for 8 MW solar project by Mytrah Abhinav Power Private Limited at Arvapally site, Telangana

Sl. No.	Technical details of the equipment ¹³	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320 Total No. of Modules: 29760

¹² It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 8 MW.

¹³ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 8 MW.

2	Number of Inverters & Capacity	3 Inverters Capacity- 2520 KW
3	Number of Transformers & Capacity	No. of Transformers- 3 Capacity- 2.7 MVA (3 no. of Inverter transformers)

The technical specification for 15 MW solar project by Mytrah Abhinav Power Private Limited at Domakonda site, Telangana

Sl. No.	Technical details of the equipment ¹⁴	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 320, 325, 350 Total No. of Modules: 47449
2	Number of Inverters & Capacity	349 Inverters Capacity- 43 KW
3	Number of Transformers & Capacity	No. of Transformers- 4 Capacity- 3 MVA (1 no. of Inverter transformer) 4 MVA (3 no. of Inverter transformers)

The technical specification for 11 MW solar project by Mytrah Abhinav Power Private Limited at Alampur site, Telangana

Sl. No.	Technical details of the equipment ¹⁵	Description
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¹⁴ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

¹⁵ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 11 MW.

1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320 Total No. of Modules: 38300
2	Number of Inverters & Capacity	4 Inverters Capacity- 2700 KW
3	Number of Transformers & Capacity	No. of Transformers- 4 Capacity- 2.75 MVA (4 no. of Inverter transformers)

The technical specification for 15 MW solar project by Mytrah Abhinav Power Private Limited at Gadwal site, Telanagana

Sl. No.	Technical details of the equipment ¹⁶	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320, 325 Total No. of Modules: 53960
2	Number of Inverters & Capacity	15 Inverters Capacity- 1000 KW
3	Number of Transformers & Capacity	No. of Transformers- 4 Capacity- 4 MVA (3 no. of Inverter transformers) 3 MVA (1 no. of Inverter transformer)

The technical specification for 15 MW solar project by Mytrah Abhinav Power Private Limited at Tandur site, Telanaga

¹⁶ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

Sl. No.	Technical details of the equipment ¹⁷	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 320, 325, 350 Total No. of Modules: 42180
2	Number of Inverters & Capacity	15 Inverters Capacity- 1000 KW
3	Number of Transformers & Capacity	No. of Transformers- 4 Capacity- 4 MVA (3 no. of Inverter transformers) 3 MVA (1 no. of Inverter transformer)

The technical specification for 15 MW solar project by Mytrah Abhinav Power Private Limited at Nagarkurnool site, Telanaga

Sl. No.	Technical details of the equipment ¹⁸	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320, 325 Total No. of Modules: 58240
2	Number of Inverters & Capacity	6 Inverters Capacity- 2500 KW
3	Number of Transformers & Capacity	No. of Transformers- 6 Capacity- 2.5 MVA (6 no. of Inverter transformers)

The technical specification for 15 MW solar project by Mytrah Adarsh Power Private Limited at Reddypet site, Telanaga

Sl. No.	Technical details of the equipment ¹⁹	Description
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¹⁷ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

¹⁸ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

¹⁹ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320, 325 Total No. of Modules: 53360
2	Number of Inverters & Capacity	349 Inverters Capacity- 43 KW
3	Number of Transformers & Capacity	No. of Transformers- 4 Capacity- 4 MVA (3 no. of Inverter transformers) 3 MVA (1 no. of Inverter transformer)

The technical specification for 15 MW solar project by Mytrah Adarsh Power Private Limited at Chegunta site, Telanaga

Sl. No.	Technical details of the equipment ²⁰	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320, 325 Total No. of Modules: 47168
2	Number of Inverters & Capacity	349 Inverters Capacity- 43 KW
3	Number of Transformers & Capacity	No. of Transformers- 3 Capacity- 5 MVA (3 no. of Inverter transformers)

The technical specification for 15 MW solar project by Mytrah Adarsh Power Private Limited at Thunkibollaram site, Telanagana

Sl. No.	Technical details of the equipment ²¹	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 320, 325, 350 Total No. of Modules: 42852

²⁰ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

²¹ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

2	Number of Inverters & Capacity	349 Inverters Capacity- 43 KW
3	Number of Transformers & Capacity	No. of Transformers- 4 Capacity- 4 MVA (3 no. of Inverter transformers) 3 MVA (1 no. of Inverter transformer)

The technical specification for 15 MW solar project by Mytrah Adarsh Power Private Limited at Tungathurthy site, Telanaga

Sl. No.	Technical details of the equipment ²²	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 320, 325 Total No. of Modules: 57440
2	Number of Inverters & Capacity	349 Inverters Capacity- 43 KW
3	Number of Transformers & Capacity	No. of Transformers- 4 Capacity- 4 MVA (3 no. of Inverter transformers) 3 MVA (1 no. of Inverter transformer)

The technical specification for 15 MW solar project by Mytrah Adarsh Power Private Limited at Guntipally site, Telangana

Sl. No.	Technical details of the equipment ²³	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 320, 325, 330, 345 Total No. of Modules: 53280
2	Number of Inverters & Capacity	15 Inverters Capacity- 1000 KW

²² It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

²³ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

3	Number of Transformers & Capacity	No. of Transformers- 4 Capacity- 4 MVA (3 no. of Inverter transformers) 3 MVA (1 no. of Inverter transformer)
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The technical specification for 15 MW solar project by Mytrah Adarsh Power Private Limited at Shanigaram site, Telangana

Sl. No.	Technical details of the equipment ²⁴	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 320, 325, 350 Total No. of Modules: 53020
2	Number of Inverters & Capacity	15 Inverters Capacity- 1000 KW
3	Number of Transformers & Capacity	No. of Transformers- 5 Capacity- 2 MVA (2 no. of Inverter transformers) 3 MVA (1 no. of Inverter transformer) 4 MVA (2 no. of Inverter transformers)

The technical specification for 50 MW solar project by Mytrah Agriya Power Private Limited at Kamareddy site, Telangana

Sl. No.	Technical details of the equipment ²⁵	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320, 325 Total No. of Modules: 107920
2	Number of Inverters & Capacity	20 Inverters Capacity- 2500 KW

²⁴ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 15 MW.

²⁵ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 50 MW.

3	Number of Transformers & Capacity	No. of Transformers- 22 Capacity-31.5 MVA (2 no. of Inverter transformers) 2.5 MVA (20 no. of Inverter transformers)
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The technical specification for 50 MW solar project by Mytrah Akaash Power Private Limited at K.M.Pally site, Telangana

Sl. No.	Technical details of the equipment ²⁶	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 320, 325, 330 Total No. of Modules: 95493
2	Number of Inverters & Capacity	20 Inverters Capacity- 2500 KW
3	Number of Transformers & Capacity	No. of Transformers- 22 Capacity- 31.5 MVA (2 no. of Inverter transformers) 2.5 MVA (20 no. of Inverter transformers)

The project has been under operation since commissioning i.e 19-June-2017 which is the start date of the project activity, without any major breakdowns. Though normal breakdowns (as referred in appendix II) due to O&M measures are continuously being worked upon by the dedicated O&M contractor for the projects WEGs. The plant is running smoothly since commissioning with scheduled maintenance. No events or situations happened expect the normal breakdowns for the reported monitoring period that can alter the applicability of the applied methodology.

²⁶ It is to be noted that in future there is possibility of change in module configuration, however project capacity in total will remain same as 50 MW.

3.2 Deviations

3.2.1 Methodology Deviations

There is no methodology deviation.

3.2.2 Project Description Deviations

Deviation 1-

The VCS registered Joint PD & MR mentioned that 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. However, as per the state government policy of Karnataka 115% transmission losses are accounted in calculation of net electricity supplied to grid by the project activity. The formula used for net electricity calculation is mentioned below: -

$EG_{PJ,grid,y}$ or $EG_{PJ,facility,y}$ = Energy export-115% Of Import Energy

This is the actual practice being followed at the site. The net electricity can be verified from the invoices provided by the PP. Thus deviation is requested to correct project description information. This deviation is permanent in nature.

This deviation is reducing the electricity generation thereby reducing the emission reductions which is conservative. This deviation does not have any impact on the project applicability, baseline scenario, additionality etc.

Deviation 2-

In the Verra Registry, the project proponent is listed as Mytrah Energy (INDIA) Ltd. While during the previous monitoring period, the project proponent has changed its name from "Mytrah Energy (INDIA) Ltd" to "Mytrah Energy India Private Limited". And it is also confirmed from PP that Mytrah Energy India Private Limited is the same legal entity as Mytrah Energy (INDIA) Ltd.

The deviation has already been approved during the monitoring period of 18-March-2019 to 31-March-2020.

Deviation-3-

During Current Monitoring period, there is change in other entity as per registered VCS PD. The details of other entity involved in the project is mentioned below-

Organization name	Infinite Solutions
Role in the Project	Carbon Consultant
Contact person	Richa Thakur
Title	Project Manager

Address	214-215 Milinda Manor, Opp. Next Treasure Island, 2 RNT Marg, Indore- 452001
Telephone	+91-731-4050174
Email	richa@infisolutions.org

This deviation is requested in current monitoring period and does not have any impact on the project applicability, baseline scenario, additionality etc.

3.3 Grouped Projects

The project activity is not a grouped project activity.

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 14, Dec 2018 ²⁷
Value applied	0.9610
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 07” as 3-year generation weighted average using data for the years 2015-16, 2016-17 & 2017-18. The data are obtained from “CO ₂ Baseline Database for Indian Power Sector” version 14, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of Data	For the calculation of the Baseline Emission
Comments	This parameter is fixed ex-ante for the entire crediting period.

Data / Parameter	EF _{grid, BM, y}
Data unit	tCO ₂ /MWh
Description	Build Margin CO ₂ emission factor in year y

²⁷ http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver14.pdf

Source of data	Calculated from CEA database, Version 14, Dec 2018 ²⁸
Value applied	0.8644
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 07” as per the latest data available for the most recent year 2017-18. The data is obtained from “CO ₂ Baseline Database for Indian Power Sector” version 14, 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 14, Dec 2018 ²⁹
Value applied	0.9368
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 CO₂ emission factor in year y (tCO₂/MWh) EF_{grid,OM,y}= Operating margin CO₂ emission factor in year y (tCO₂/MWh) W_{OM} = Weighting of operating margin emissions factor (%) = 75% W_{BM}= Weighting of build margin emissions factor (%) = 25%
Purpose of Data	For the calculation of the Baseline Emission
Comments	This parameter is fixed ex-ante for the entire crediting period.

4.2 Data and Parameters Monitored

For Karnataka Site

Data / Parameter	EG _{PJ,grid,y} or EG _{PJ,facility,I,y}
Data unit	MWh

²⁸ http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver14.pdf

²⁹ http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver14.pdf

Description	Quantity of electricity generated and supplied by the project power plant to the grid
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 115% of import is used for monthly values of net electricity supplied to the grid by the project activity and same value will be considered for ER calculations.
Frequency of monitoring/recording	Continuous measurement & monthly recording
Value monitored	56,782
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.
QA/QC procedures to be applied	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.³⁰ The monthly electricity supplied/exported by the project activity in the JMR report is cross checked with the monthly invoices of sale. In the absence or delay in the meter calibration appropriate Guidelines will be applied appropriately to confirm the conservativeness of metering. The metering arrangement, accuracy class of meters, calibration frequency is under control of state electricity board and PP do not have any control on it. PP is getting value of net electricity supplied to grid and the same is considered the monitoring parameter. The billing is raised based on substation meters.
Purpose of the data	Calculation of baseline emissions
Calculation method	Thus, Net electricity supplied to the grid by the project plant in a given month = Export, kWh – Import, kWh
Comments	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VES for this project activity, whichever occurs later.

For Punjab Site

Data / Parameter	EG _{PJ,grid,y} or EG _{PJ,facility,l,y}
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³⁰ http://www.aegcl.co.in/Metering_Regulations_Of_CEA_17_03_2006.pdf

Data unit	MWh
Description	Quantity of electricity generated and supplied by the project power plant to the grid
Source of data	Monthly joint meter reading reports
Description of measurement methods and procedures to be applied	The difference of final value of export and import is used for monthly values of net electricity supplied to the grid by the project activity and same value will be considered for ER calculations
Frequency of monitoring/recording	Continuous measurement & monthly recording
Value monitored	55,091
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.
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.³¹ The monthly electricity supplied/exported by the project activity in the JMR report is cross checked with the monthly invoices of sale. In the absence or delay in the meter calibration appropriate Guidelines will be applied appropriately to confirm the conservativeness of metering. The metering arrangement, accuracy class of meters, calibration frequency is under control of state electricity board and PP do not have any control on it. PP is getting value of net electricity supplied to grid and the same is considered the monitoring parameter. The billing is raised based on substation meters.
Purpose of the data	Calculation of baseline emissions
Calculation method	Thus, Net electricity supplied to the grid by the project plant in a given month = Export, kWh– Import, kWh
Comments	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VERs for this project activity, whichever occurs later.

For Telangana Site

³¹ http://www.aegcl.co.in/Metering_Regulations_Of_CEA_17_03_2006.pdf

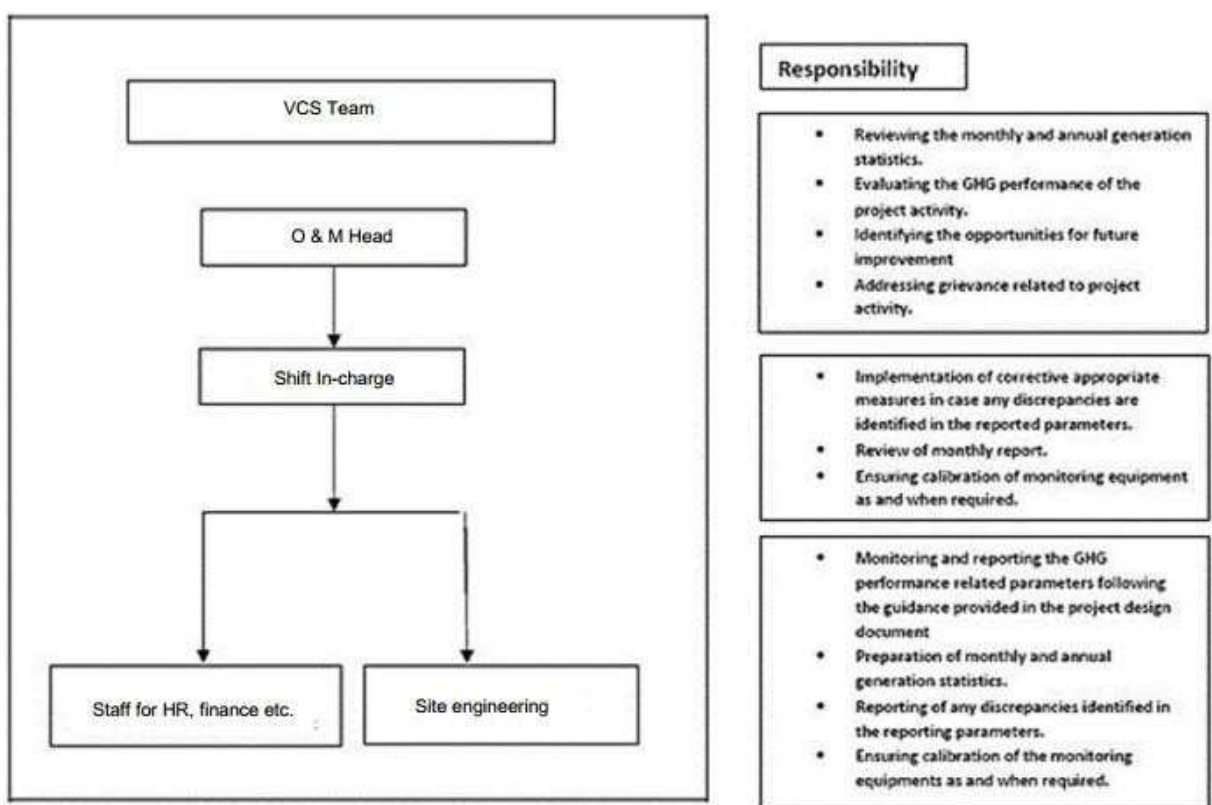
Data / Parameter	EGPJ,grid,y or EGPJ,facility,l,y
Data unit	MWh
Description	Quantity of electricity generated and supplied by the project power plant to the grid
Source of data	Monthly joint meter reading reports
Description of measurement methods and procedures to be applied	The difference of final value of export and import is used for monthly values of net electricity supplied to the grid by the project activity and same value will be considered for ER calculations
Frequency of monitoring/recording	Continuous measurement & monthly recording
Value monitored	344,134
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.
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.³²The monthly electricity supplied/exported by the project activity in the JMR report is cross checked with the monthly invoices of sale. In the absence or delay in the meter calibration appropriate Guidelines will be applied appropriately to confirm the conservativeness of metering. The metering arrangement, accuracy class of meters, calibration frequency is under control of state electricity board and PP do not have any control on it. PP is getting value of net electricity supplied to grid and the same is considered the monitoring parameter. The billing is raised based on substation meters.
Purpose of the data	Calculation of baseline emissions
Calculation method	Thus, Net electricity supplied to the grid by the project plant in a given month = Export, kWh– Import, kWh
Comments	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VERs for this project activity, whichever occurs later.

³² http://www.aegcl.co.in/Metering_Regulations_Of_CEA_17_03_2006.pdf

4.3 Monitoring Plan

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

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



Data Measurement

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

Data collection and archiving

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

Emergency preparedness

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

In the event that the main meter, which is used to record the net electricity exported by the project, is found to be faulty it will be repaired or replaced and the data from the check meter will be used in its place. In the unlikely event that the check meter fails it will also be repaired or replaced.

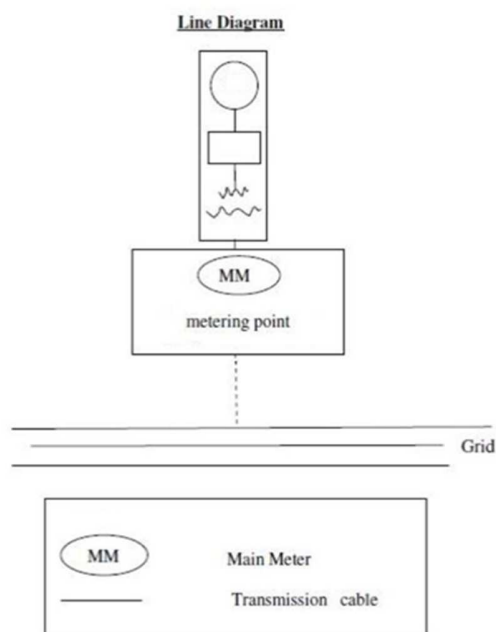
Personnel training

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

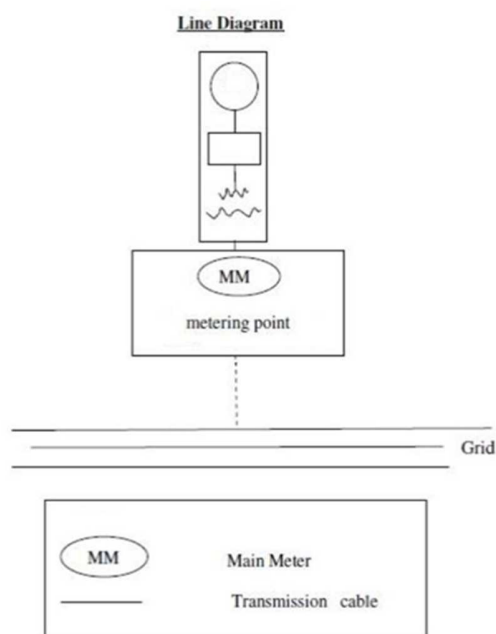
Metering Arrangement

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

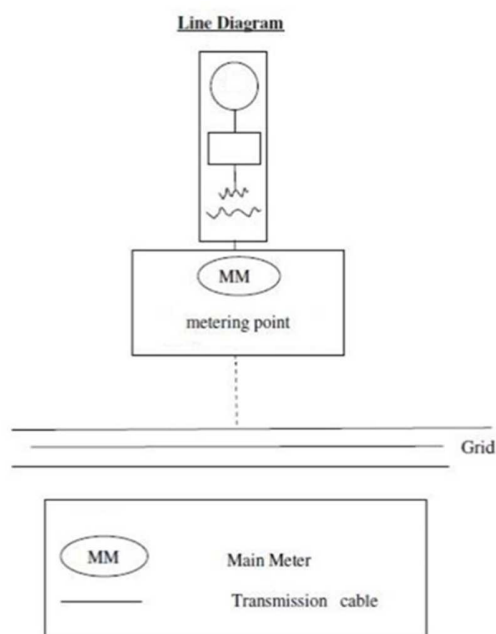
For Karnataka Site



For Punjab Site



For Telangana Site



QA/QC procedures

The energy meters at the feeders are maintained and owned by state electricity board. Neither the project proponent nor the site personnel have any control over it. The records will be crosschecked with the records of sold electricity to state electricity board. The meters are calibrated by state electricity board at-least once in five years.

Apportioning

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

- Apportioning the net electricity exported to grid, as recorded in the consolidated Share Certificate / JMR Report / Credit Notes certified by the respective state discom, based on the number of days in the monitoring period and the number of days for which Share Certificate / JMR Report / Credit Notes was prepared.

During the current monitoring period, apportioning has been done for the month of June 2021 and February 2022, since there is mismatch of monitoring period and billing cycle. The apportioning has been done by using the above mentioned approach.

5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions

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

Where:

BE_y : Baseline emissions in year y (tCO₂e/yr)

$EG_{PJ,grid,y}$ or $EG_{PJ,facility,I,y}$: Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the VCS project activity in year y (MWh/yr)

$EF_{grid,CM,y}$: Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system” (tCO₂e/MWh)

Parameter	Unit	Value
$EG_{PJ,grid,y}$ or $EG_{PJ,facility,I,y}$	MWh	456,006
$EF_{grid,CM,y}$	tCO ₂ e	0.9368
BE_y	=	456,006* 0.9368
	=	427,182 (ROUND DOWN)

5.2 Project Emissions

Not Applicable, since project emissions from the solar project activity is zero as per ACM0002 methodology.

5.3 Leakage

Not Applicable, since leakage emissions from the solar project activity is zero as per ACM0002 methodology.

5.4 Net GHG Emission Reductions and Removals

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
01-June-2021 to 31-December-2021	350,006	0	0	350,006
01-January-2022 to 28-February-2022	77,176	0	0	77,176
Total	427,182	0	0	427,182

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 477,577 tCO₂e, whereas actual emission reductions achieved are 427,182 tCO₂e, which is approximately 10.55% lower 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.

APPENDIX1: CALIBRATION DETAILS

Name of SPVs	Site	State	Capacity In MW	Meter Details			Accuracy	Date of Calibration	Due date of calibration	New Date of calibration	Due date
				Main ,meter Sl. no	Check Meter sl.no	Standby meter sl. no					
Mytrah Advait Power Private Limited	Hunagund	Karnataka	15	17151028	17151010		0.2s	13-July-2018	12-July-2023	-	-
	Sindagi		15	17151045	17151050		0.2s	03-December-2018	02-December-2023		
Mytrah Akshaya Energy Private Limited	Raibagh	Karnataka	15	17115537	17115532	-	0.2 s	05-January-2019	04-January-2024		
Mytrah Aadhy Power Private Limited	Bareta	Punjab	25	PBB4878 0	PBB4878 1		0.2s	01-December-2018	30-November-2023		
	Balran		25	PBB4880 3	PBB4880 2		0.2 s	26-November-2018	25-November-2023		
Mytrah Abhinav	Thimajipet	Telangana	8	APX0109 9	APX0110 0	APX0 1101	0.2s	14-November-2018	13-November-2023	17-Septem	16-Septemb er-2025

Power Private Limited										ber-2020	
	Arvapally		8	HT01160 859	HT01160 860	HT01 1608	0.2s	22-January-2019	21-Jaunuary-2024	18-Decem ber-2020	17-Decemb er- 2025
	Domakonda		15	TS04282	TS04283	TS04 284	0.2 s	19-February-2018	18-February-2023	17-August-2020	16-March-2025
	Alampur		11	HT01161 10	HT01161 108	HT01 161109	0.2 s	09-April-2018	08-April-2023	03-Decem ber-2021	02-Decemb er-2026
	Gadwal		15	HT01161 111	HT01161 112	HT01 1611	0.2 s	22-February-2019	21-February-2024	12-January -2022	11-January-2027
	Tandur		15	2838075	2838076	2838077	0.2 s	04-April-2018	03-April-2023	31-October -2020	30-October-2025
	Nagarkurnool		15	2831529	2831530	2831	0.2 s	14-May-2018	13-May-2023	06-Decem ber-2021	05-Decemb er-2026
Mytrah Adarsh Power	Reddypet	Telangana	15	TSS0428 6	TSS0428 8	TSS0 4274	0.2 s	15-May-2018	14-May-2023	10-August-2020	09-August-2025

Private Limited	Chegunta		15	2838079	2838080	2838081	0.2 s	03-May-2018	02-May-2023	12-May-2021	11-May-2026
	Thunki Bollaram		15	2838071	2838072	2838073	0.2 s	10-May-2018	09-May-2023	11-June-2021	10-June-2026
	Tungathurthy		15	HT01161100	HT01161101	HT01161102	0.2 s	22-January-2019	21-January-2024	22-December-2020	21-December-2025
	Guntipally		15	2832434	2832435	2832436	0.2 s	29-March-2018	28-March-2023	08-September-2021	07-September-2026
	Shanigaram		15	APX01630	APX01635	APX01640	0.2 s	03-January-2019	02-January-2024	14-February-2022	13-February-2027
Mytrah Agriya Power Private Limited	Kamareddy	Telangana	50	APZ00439	APZ00440	APZ00441	0.2 s	01-October-2018	30-September-2023	03-Nov-2020	02-Nov-2025
Mytrah Akaash Power Private Limited	K.M. Pally	Telangana	50	17250998	17250999	17251000	0.2 s	04-January-2019	03-January-2024	25-September-2020	24-September-2025

APPENDIX 2: MAJOR BREAK DOWN DETAILS

For Hunagad Site

Date	Total_Down_Time (hours)	Reason_Of_Down
17-July-21	12:57	Outgoing End kit failuar
18-July-21	11:45	due to OC/EF due to moisture
22-October-21	11:30	ISU1 SHUT DOWN DUE TO NON AVAILABILITY OF IGBT MODULE SPARE

For Bareta Site

Date	Total_Down_Time (hours)	Reason_Of_Down
24-June-21	13:28	over temperature & CONT. fault

For Balran Site

Date	Total_Down_Time (Hours)	Reason_Of_Down
07-July-21	13:00	INV- 2c igbt blast
27-October-21	10:45	Inverter Breaker Faulty

For KM Pally

Date	Total_Down_Time(hours)	Reason_Of_Down
10-September-21	12:06	transformer Under BD due to 33 kv cable ground fault.
11-September-21	11:58	inverter Under BD due to 33 kv cable ground fault.

01-October-21	10:22	strings under bd due to ground cable fault&mc4 damaged..
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For Alampur site

Date	Total_Down_Time (hours)	Reason_Of_Down
29-August-21	12:11	inv4 carrer synch fault,found that OFC cable damaged

For Chegunta Site

Date	Total_Down_Time(hours)	Reason_Of_Down
15-July-21	11:20	IDT malfunction and Tripped on WTI high trip
15-July-21	12:20	IDT Tripped on O/c & E/f

For Shanigram Site

Date	Total_Down_Time (hours)	Reason_Of_Down
14-June-21	11:50	Inverter Measurement Transformer Failure

For Kamma reddy

Date	Total_Down_Time(hours)	Reson_of_Down
01-June-21	12:00	Transformer got failed
02-June-21	12:00	Transformer got failed
03-June-21	12:00	Transformer got failed
04-June-21	12:00	Transformer got failed
05-June-21	12:00	Transformer got failed
06-June-21	12:00	Transformer got failed
07-June-21	12:00	Transformer got failed

08-June-21	12:00	Transformer got failed
09-June-21	12:00	Transformer got failed
10-June-21	12:00	Transformer got failed
11-June-21	12:00	Transformer got failed
12-June-21	12:00	Transformer got failed
13-June-21	12:00	Transformer got failed
14-June-21	12:00	Transformer got failed
15-June-21	12:00	Transformer got failed
16-June-21	12:00	Transformer got failed
19-June-21	12:00	IDT Tripped on low oil, Observed heavy oil leakage from LV Chamber
10-July-21	12:00	3c*185sqmm HT Cable joint puncture in between ICR-9 and ICR-10 RMU
10-July-21	12:00	3c*185sqmm HT Cable joint puncture in between ICR-9 and ICR-10 RMU
04-September-21	11:55	Tripped on O/C & E/F
05- September -21	11:30	Manually taken shutdown
05- September -21	11:15	Tripped on O/C & E/F
06- September -21	12:00	Manually taken shutdown
06- September 21	12:00	Tripped on O/C & E/F
07- September -21	12:00	Manually taken shutdown
07- September -21	12:00	Tripped on O/C & E/F
08- September -21	12:00	Manually taken shutdown
28- September 21	11:45	IDT-2 TRIP due to Vac high
21-October-21	11:45	IDT-2 TRIP due to Vac high

For Thungathurthy site

Date	Total_Down_Time (hours)	Reason_Of_Down
17-August-21	10:40	Abnormal inverter circuit

For Gadwal Site

Date	Total_Down_Time (hours)	Reason_Of_Down
18-August-21	10:45	IGBT Section Flashover occurred in Y-Phase Section
19-August-21	11:50	Under under shutdown due to materials not available
20-August-21	11:56	IGBT Section Removed and shifted to another Inverter.
21-August-21	11:53	IGBT Section Removed and shifted to another Inverter.
22-August-21	12:07	IGBT Section Removed and shifted to another Inverter.
23-August-21	12:02	IGBT Section Removed and shifted to another Inverter.
24-August-21	12:04	IGBT Section Removed and shifted to another Inverter.
25-August-21	12:08	IGBT Section Removed and shifted to another Inverter.

26-August-21	11:45	IGBT Section Removed and shifted to another Inverter.
27-August-21	11:42	IGBT Section Removed and shifted to another Inverter.
28-August-21	11:01	IGBT Section Removed and shifted to another Inverter.
29-August-21	11:47	IGBT Section Removed and shifted to another Inverter.
23-September-21	11:27	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
24-September-21	11:33	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
25-September-21	11:30	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
26-September-21	11:29	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
27-September-21	10:12	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
28-September-21	11:10	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
29-September-21	11:20	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
30-September-21	11:30	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
01-October-21	11:07	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
02-October-21	11:35	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
03-October-21	11:33	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
04-October-21	10:52	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
05-October-21	11:18	Y-phase & B-Phase IGBT Stacks Removed and shifted to another Inverter.
18-October-21	11:10	Taken shutdown for TRC 3 trfo removal work

For Guntipally site-

Date	Total_Down_Time (hours)	Reason_Of_Down
24-June-21	12:09	IGBT failure
25-June-21	12:13	IGBT failure
26-June-21	11:40	IGBT failure
27-June-21	12:06	IGBT failure
28-June-21	12:12	IGBT failure

29-June-21	12:43	IGBT failure
30-June-21	12:22	IGBT failure
01-July-21	12:20	IGBT failure
08-July-21	11:55	work in progress
30-September-21	10:52	GSS end AB switch B-phase clamp damaged and Transmission lin at pole no:53 Jumper conductor damaged. And GSS End breaker to yard Bus jumper conductor damaged
30-September-21	11:50	Bypassed the CT's and charged back the breaker on no load . Lightly spark observed in HT cable joint kit and breaker kept in off position

For Domakonda

Date	Total_Down_Time(Hours)	Reason_Of_Down
07-June-21	12:30	Breaker Mall funtion