



VERIFICATION REPORT

SOLAR POWER PROJECT BY MYTRAH ENERGY INDIA PRIVATE LIMITED



South Asia

Document Prepared By

TÜV SÜD South Asia Pvt.Ltd

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Summary:

TÜV SÜD South Asia Pvt. Ltd. has performed the second verification of the aforementioned VCS project activity. The verification is based on the currently valid documentation of the VCS and United Nations Framework Convention on Climate Change (UNFCCC).

The Verification has been conducted for the monitoring period 18/03/2019 to 31/03/2020.

The verification process includes three phases:

- Desk review of documents;
- On-site audit and follow-up interviews with the relevant personnel;
- Resolution of outstanding issues and the issuance of final verification report and opinion.

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 Telangana, Punjab and Karnataka states of India through SPVs.

The electricity generated by the project is exported to the Indian grid. The project activity is therefore displaces an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid.

The 372 MW solar project was commissioned on different dates for different SPVs, with start date of the 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. In the state of Punjab.

3 Clarification Requests (CLs) and 2 Corrective Action Requests (CARs) have been raised during the course of verification process and has been successfully closed. No Forward Action Request (FAR) was raised during this monitoring period.

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1 INTRODUCTION

1.1 Objective

TÜV SÜD has been commissioned by the aforementioned client to perform an independent verification assessment.

The objective of the verification work is to comply with the requirements of Verified Carbon Standards requirements. According to this assessment TÜV SÜD shall:

- ensure that the project activity has been implemented and operated as per the registered PDD, and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place,
- ensure that the published MR and other supporting documents provided are complete, verifiable and in accordance with applicable VCS and CDM VVS requirements,
- ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology,
- evaluate the data recorded and stored as per the applicable requirements.
- assessment of the sustainability monitoring parameters as per the VCS requirements

1.2 Scope and Criteria

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of VCS project activities, the scope is set by:

- VCS v4.0 requirements
- Clean Development Mechanism Validation And Verification Standard (VVS) for Project Activities v2.0
- Baselines and monitoring methodologies (including GHG inventories)
- Environmental issues relevant to the applicable sectoral scope
- Current technical and operational knowledge of the specific sectoral scope and information on best practice
- Stakeholder consultation and feedback

The verification process is not meant to provide any form of consulting for the project participant (PP). However, stated requests for clarifications, corrective actions, and/or forward actions may provide input for improvement of the project design.

1.3 Level of Assurance

The errors identified in the project are below the threshold limit of materiality and hence not material. The GHG emission reductions are calculated without material misstatements.

The VVB confirms that a reasonable level of assurance has been achieved during the verification process.

1.4 Summary Description of the Project

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 proponent has changed its name from "Mytrah Energy (INDIA) Ltd" to "Mytrah Energy India Private Limited". The Certificate of incorporation has been submitted and has been verified to confirm the change of name to 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.

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 372 MW solar project was commissioned on different dates for different SPVs, with start date of the 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. in the state of Punjab.

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
1	Mytrah Abhinav Power Pvt Ltd	8 MW	30-06-2017	Thimajipet
		8 MW	19-07-2017	Arvapally
		15 MW	05-12-2017	Domakonda
		11 MW	19-08-2017	Alampur
		15 MW	21-08-2017	Gadwal
		15 MW	02-03-2018	Tandur
		15 MW	27-02-2018	Nagarkurnool
2	Mytrah Adarsh Power Pvt Ltd	15 MW	05-12-2017	Reddypet
		15 MW	22-11-2017	Chegunta
		15 MW	23-10-2017	Thunkibollaram
		15 MW	08-11-2017	Tungathurthy
		15 MW	25-09-2017	Guntipally
		15 MW	23-05-2018	Shanigaram
3	Mytrah Agriya Power Pvt Ltd	50 MW	25 MW on 22-11-2018	Kamareddy
			25 MW on 26-11-2018	

4	Mytrah Akaash Power Pvt Ltd	50 MW	12.5 MW on 16-03-2018	K.M.Pally
			17.5 MW on 12-04-2018	
			20 MW on 22-11-2018	
5	Mytrah Aadhya Power Pvt Ltd	25 MW	19-06-2017	Bareta
		25 MW	19-06-2017	Balran
6	Mytrah Advait Power Pvt Ltd	15 MW	09-02-2018	Hunagund
		15 MW	08-02-2018	Sindagi
7	Mytrah Akshaya Energy Pvt Ltd	15 MW	23-01-2018	Raibagh

2 VERIFICATION PROCESS

2.1 Method and Criteria

The information provided by the project participants is assessed by applying the means of verification specified in the VCS v4, Toolkit and the VVS.

A competent assessment team is selected prior to the start of the verification. The team is selected to cover the technical area(s), sectoral scope(s) and relevant host country experience for evaluating the VCS project activity. Additionally, a competent Technical Reviewer or Technical Reviewer Team is appointed to conduct checks on quality and completeness.

The verification team performs first a desk review, followed by a remote assessment, which results in the formation of a draft report and a list of findings. The next step involves the evaluation of the findings through direct communication with the PPs and then finally the preparation of the verification report. This verification report and other supporting documents then undergo an internal quality control by the CB “Environment and energy” before submission to the VCS.

2.2 Document Review

The documents referred during the course of this verification are provided in Appendix 1.

2.3 Interviews

The VVB has not conducted the on-site inspection for this current monitoring period due to obligations imposed by COVID 19. However the VVB has ensured that reasonable level of assurance has been achieved as per Verra regulations on the relaxation of mandatory site visits by the VVB due to Covid-19. The VVB has conducted telephonic interviews and video calls to discuss with the client regarding the data and documents pertaining to the current verification period. The interviews and discussions were conducted successfully.

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Santosh	Mangaraju	Mytrah Energy (India) Limited	13/11/2020	Plant technology and monitoring	Eswar Murty
2	Golappagoud	Biradar	Mytrah Energy (India) Limited	13/11/2020	Plant technology and monitoring	Eswar Murty
3	Sharma	Barun	EKI Energy Services	13/11/2020	CDM Monitoring	Eswar Murty
4	Rao	Anjali	EKI Energy Services	13/11/2020	CDM Monitoring	Eswar Murty

2.4 Site Inspections

Please see 2.3

2.5 Resolution of Findings

CL from this verification

CL ID	01	Section no.	1.6	Date:	13/11/2020
Description of CL					
PP needs to provide the below 1. Commissioning certificates of all plants along with the start date evidence. 2. Calibration certificates of energy meters 3. JMR and invoices for the monitoring period					
Project participant response					Date:
					07/12/2020

The below documents has been included in this submission:-

1. Commissioning certificates of all plants along with the start date evidence.
2. Calibration certificates of the energy meters
3. JMRs & Invoices

Documentation provided by project participant

Commissioning Certificates, Calibration certificates, JMRs & Invoices

DOE assessment

Date: 10/12/2020

Hence the issue is closed

CL ID	02	Section no.		Date: 13/11/2020
Description of CL				
PP to provide plant wise shut down details during the monitoring period month wise. This should be reflected in the total number of operational days of the project during the current monitoring period.				
				Date: 07/12/2020
Plant wise details has been updated in MR V02 and supporting for the same has been submitted. Also, total number of operational days is based on the number of days covered in this monitoring period.				
Documentation provided by project participant				
VCS MR V02				
DOE assessment				Date: 10/12/2020
Hence the issue is closed				

CL ID	03	Section no.	VER excel file	Date: 13/11/2020
Description of CL				
1) From date and To date is same in the month wise data 2) dd/mm/yyyy format has not been used 3) Month wise data is not correctly presented in the sheet for individual SPV. 4) SPV - Mytrah Aadhya Power Pvt Ltd data is missing 5) The spreadsheet 'Karnataka' mentions 115% import. Please clarify				
Project participant response				Date: 05/12/2020
1) From date and To date is same in VER Excel sheet because initial & final reading has been taken on the same date but the timing is different thus avoiding the case of double counting. For example- For the month of April of any year "Y", the initial reading has been taken at 12:00 PM while the final reading for the March of that very same year has been recorded around 11:59 AM. That is why From date and To date is same but no double counting is done here. 2) The VER excel file has now been revised in dd/mm/yyyy format. 3) The observed inconsistency has been rectified. 4) Data for SPV- Mytrah aadhya Power Pvt. Ltd. has been updated in the ER calculation sheet. 5) As per the state policy of Karnataka government 115% transmission losses are considered in net electricity export. That is why 115% import is accounted for Karnataka. Deviation has also been requested for this during this verification.				
Documentation provided by project participant				
VER Excel file				
DOE assessment				Date: 10/12/2020
Hence the issue is closed				

CARs from this verification

CAR ID	01	Section no.	2.2	Date: 13/11/2020
Description of CAR				
1. Project title is incorrectly mentioned in the MR 2. Local Stakeholder Consultation section is blank 3. Section 2.3 mentions wrongly as wind project				
Project participant response				Date: 04/12/2020
1. Project title has now been rectified in this submission. 2. Section 2.2 i.e Local stakeholder Consultation of the VCS MR has now been updated. 3. The typo-error observed in section 2.3 has been rectified in this submission.				
Documentation provided by project participant				
VCS MR V02				
DOE assessment				Date: 10/12/2020
Hence the issue is closed				

CAR ID	02	Section no.	4.2	Date: 13/11/2020
Description of CAR				
Data and Parameters Monitored – $EG_{PJ,y}$ - Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh is inconsistent with the data/ parameter and description provided with the methodology ACM 0002 v19.0 which refer to TOOL05: Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation”				
Project participant response				Date: 07/12/2020
Data and Parameters Monitored- $EG_{PJ,y}$ - Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh is now being made consistent with the data/parameter description provided with the methodology ACM 0002 v19.0 which refer to TOOL05.				
Documentation provided by project participant				
VCS MR V02				
DOE assessment				Date: 10/12/2020
Hence the issue is closed				

2.5.1 Forward Action Requests

There are no Forward Action Requests pending from the previous verification, nor any FAR has been raised in this verification.

2.6 Eligibility for Validation Activities

Not applicable

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The project activity is neither registered nor seeking registration in any other GHG program. The project proponent has also provided undertaking that it will not claim any GHG credits in any GHG program other than that under VERRA during the current monitoring period.

3.2 Methodology Deviations

NA

3.3 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 $EG_{PJ,facility,l,y}$ = Energy export -115% of Import Energy

Thus a deviation is being requested by the PP to correct project description information.

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 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. During the current monitoring period, the project proponent has changed its name from "Mytrah Energy (INDIA) Ltd" to "Mytrah Energy India Private Limited". It has been confirmed from the audit team that Mytrah Energy India Private Limited is the same legal entity as Mytrah Energy (INDIA) Ltd.

This deviation is requested to include the updates regarding name change and the applied deviation is of permanent nature which will remain same throughout the crediting period.

3.4 Grouped Project

NA

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

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.

The project activity is neither registered nor seeking registration in any other GHG program. The project proponent has also provided undertaking that it will not claim any GHG credits in any GHG program other than that under VERRA during the current monitoring period.

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 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 Advait Power Private Limited at Hunagund site, Karnataka

Sl. No.	Technical details of the equipment	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 Advait Power Private Limited at Sindagi site, Karnataka

Sl. No.	Technical details of the equipment	Description
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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	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

Sl. No.	Technical details of the equipment	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 310, 315, 320 Total No. of Modules: 83160
2	Number of Inverters & Capacity	8 Inverters Capacity- 2500 KW
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	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 310, 315, 320, 335, 340, 345, 350 Total No. of Modules: 77760
2	Number of Inverters & Capacity	18 Inverters Capacity- 500 & 2500 KW
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)

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	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	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 315, 320 Total No. of Modules: 29760
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	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	Description
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, Telanganana

Sl. No.	Technical details of the equipment	Description
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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, Telangana

Sl. No.	Technical details of the equipment	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, Telangana

Sl. No.	Technical details of the equipment	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, Telangana

Sl. No.	Technical details of the equipment	Description
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, Telangana

Sl. No.	Technical details of the equipment	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)
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The technical specification for 15 MW solar project by Mytrah Adarsh Power Private Limited at Thunkibollaram site, Telangana

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

Sl. No.	Technical details of the equipment	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	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
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 Shanigaram site, Telangana

Sl. No.	Technical details of the equipment	Description
1	Modules capacity and total No. of Modules installed	Module Capacity: 320, 325, 350 Total No. of Modules: 53020

¹It 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	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	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
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 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	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)

Means of verification	Referring to VCS v4 and p.360, p.361, p.363 and p.364 of CDM VVS PA, v2.0, the below tables provide a summary on the verification of each monitoring parameter listed in the registered monitoring plan.	
	Data / Parameter:	EG _{P,J,y} / EG _{facility,y}
	Data unit:	MWh
	Description:	Quantity of electricity generated and supplied by the project power plant to the grid
	Source of data used:	Monthly Joint Meter Reading (JMR) by SEB
	Means of verification/Comments:	This value is calculated based on the difference between measured values of “export” and “import”
	Cross-check	Electricity Sales invoices submitted

	Compliance with the calibration frequency requirements for measuring instruments The audit team has checked the calibration certificates and records of the monitoring equipment as given below and found to be in line with the calibration frequency specified in the monitoring plan. The details of calibration and the check have been provided under this table below.
Conclusion	The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD. All parameters were monitored and determined as per the registered monitoring plan. Referring to p.360, p.361, p.363 and p.364 of CDM VVS PA, v2.0, VVB confirms through video call and telephonic interviews and from the document review, the actual monitoring system complies with the registered monitoring plan. The substantiation of this conformity on information flow for these parameters including the values in the monitoring reports is reported in the above During the verification, all relevant monitoring parameters of the registered monitoring plan have been verified with regard to the appropriateness of the verification method, the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures. After appropriate corrections, carried out by the project participant, it is confirmed that all monitoring parameters have been measured / determined without material misstatements and are in line with all applicable standards and relevant requirements. All parameters required to be monitored are recorded at the intervals required by the registered monitoring plan and the applied methodology. On the basis of review of source and nature of available evidences and records, the verification team confirms the quality of evidence for emission reduction provided is sufficient as per CDM VVS PA, v2.0.

Calibration of the meters

Name of SPVs	Site	State	Capacity in MW	Meter Details			Accuracy	Date of Calibration	Due date of calibration
				Main Meter Sl. No	Check Meter Sl. No	Standby Meter Sl. No			
Mytrah Advait Power Private Limited	Hunagund	Karnataka	15	17151028	17151010	-	0.2 s	13 July 2018	12 July 2023
	Sindagi		15	17151045	17151050	-	0.2 s	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 Aadhya Power Private Limited	Bareta	Punjab	25	PBB48780	PBB48781	-	0.2 s	01-January-2018	30-November-2023
	Balran		25	PBB48803	PBB48802	-	0.2 s	26-November-2018	25-November-2023
Mytrah Abhinav Power Private Limited	Thimajipet	Telangana	8	APX01099	APX01100	APX01101	0.2 s	14-November-2018	13-November-2023
	Arvapally		8	HT01160859	HT01160860	HT01160861	0.2 s	22-January-2019	21-January-2024
	Domakonda		15	TS04282	TS04283	TS04284	0.2 s	19-February-2018	18-December-2023
	Alampur		11	HT01161107	HT01161108	HT01161109	0.2 s	09-April-2018	8-April-2023
	Gadwal		15	HT01161111	HT01161112	HT01161113	0.2 s	22-February-2019	21-February-2024
	Tandur		15	2838075	2838076	2838077	0.2 s	04-April-2018	03-April-2023
	Nagakurnool		15	2831529	2831530	2831531	0.2 s	14-May-2018	13-May-2023
Mytrah Adarsh Power Private Limited	Reddypet	Telangana	15	TSS04286	TSS04288	TSS04274	0.2 s	15-May-2018	14-May-2023
	Chegunta		15	2838079	2838080	2838081	0.2 s	03-May-2018	02-May-2023
	Thunkibollaram		15	2838071	2838072	2838073	0.2 s	10-May-2018	09-May-2023
	Tungathurthy		15	HT01161100	HT01161101	HT01161102	0.2 s	22-January-2019	21-January-2024
	Guntipally		15	2832434	2832435	2832436	0.2 s	29-March-2018	28-March-2023
	Shanigaram		15	APX01630	APX01635	APX01640	0.2 s	03-January-2019	02-January-2024
Mytrah Agriya Power Private Limited	Kamareddy	Telangana	50	APZ00439	APZ00440	APZ00441	0.2 s	01-October-2018	30-September-2023
Mytrah Akaash Power Private Limited	K.M. Pally	Telangana	50	17250998	17250999	17251000	0.2 s	04-January-2019	03-January-2024

4.2 Safeguards

4.2.1 No Net Harm

The project do not have any negative environmental impacts.

4.2.2 Local Stakeholder Consultation

Local stakeholder consultation has been conducted at the time of project registration. As confirmed by PP during interviews, for on-going stakeholders communication, PP has maintained feedback/complaint register at the site office. Local stakeholders can anytime lodge their grievances if any in the register over the operational life time of the project. Information regarding grievances/feedbacks has also been included in the MR. Stakeholders can put grievances if any in register at any time and is active process of ongoing communication.

The audit team has checked the updated information in the MR and found to be appropriate. Also during the current monitoring period, no grievances have been received. Thus the audit team is of the opinion that PP has addressed the process of ongoing local stakeholder communication and grievance redressal and of the opinion that the ongoing stakeholder mechanism is adequate and appropriate.

4.3 AFOLU-Specific Safeguards

Not applicable.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	The assessment of data and the calculation of baseline emission reduction in the MR and the ER excel sheet have been verified as per the following set of supporting documents: 1. Export and Import data 2. VER spreadsheets 3. Sales Invoices
Conclusion	Calculations applied formulae and method for calculation of baseline emission are in accordance with the registered monitoring plan and are in line with the requirements of the applied methodology.

Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the project activity. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been
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	carried out in accordance with the formulae and methods described in the registered monitoring plan
Conclusion	Project emissions are zero as per the requirement of the methodology and registered CDM PDD.

Calculation of leakage GHG emissions

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the project activity. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan
Conclusion	Leakage emissions are not applicable according to the applied methodology and registered CDM PDD

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

Means of verification	No lack of evidence and missing data were detected during this monitoring period. All values as per the monitoring plan were crosschecked by the verification team against basic monitored data and the calculations were found to be correct. The verification team confirms that all assumptions, emission factors and default values have been correctly justified. All the emission factors, application of maximum permissible errors and default values are explicitly mentioned in the monitoring report. Hence the VVB confirms that the methods and formulae used to obtain the emissions are appropriate. No reporting risks have been identified for the data reported. Troubleshooting procedure, maintenance and calibration of monitoring equipment, monitoring measurements and reporting, record handling and maintenance, reviewing monitored data are available at the plant. All the monitored data are archived partially in electronic and paper form. The data will be kept for the whole crediting period and 2 years after the last crediting period thereby meeting the requirement of the monitoring plan.
Conclusion	The formulae and the methods referred in the MR and the emission reduction calculation spread sheet comply with the methods described in the registered PDD. No lack of evidence and missing data were detected during this monitoring period. All values as per the monitoring plan were crosschecked by the verification team against basic monitored data and the GHG emission calculation is found correct. TUV SUD confirms that all assumptions, emission factors and default values have been correctly justified. All the emission factors and default values are

	explicitly mentioned in the monitoring report. Calculations applied formulae and method for calculation of GHG emission are in accordance with the registered monitoring plan and are in line with the requirements of VCS, the applied methodology and p. 372, p.373 of CDM VVS PA ver 2.0.
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4.6 Non-Permanence Risk Analysis

Not applicable.

5 VERIFICATION CONCLUSION

The VVB confirms that

- the development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- the project is operated as planned and described in the project design document approved by the EB;
- the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately;
- the monitoring system is in place and generates GHG emission reductions data;
- the monitoring plan in Monitoring Report is as per the PDD and monitoring plan approved by the EB;
- the approved monitoring plan in the approved PDD is as per the applied methodology;
- There is an audit trail that contains the evidence and records that validate the stated figures.

Based on the information we have seen and evaluated, we confirm that the project activity achieved the verified amount of reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the project activity

Verification period: From 18 March 2019 to 31 March 2020

The estimated emission reduction to be achieved from the project activity for the current monitoring period is 663011 tCO₂e, whereas actual emission reductions achieved are 609,256 tCO₂e, which is approximately 8% lower than the estimated emission reductions.

The decrease observed in Emissions reductions is due the consideration of check meter values (which was not considered earlier) as main meter was showing errors. The inconsistency is observed for "Mytrah Adarsh Power Private limited"-15 MW having meter numbers 2538079 (Main meter) & 2838080 (Check meter). Initially, main meter (2538079) was considered for monitoring the generation values but from May-2019, check meter (2838080) values have been considered for monitoring generation values because of fault in main meter & standby meter.

The audit team has checked the emission reduction calculations and the daily generation reports to confirm the values.

Verified GHG emission reductions and removals in the above verification period:

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)
2019	444488	0	0	444488
2020	164788	0	0	164768
Total	609, 256	0	0	609,256

APPENDIX 1: DOCUMENTS REVIEWED

No.	Author	Title	References to the document
1	EKI Energy Services	VCS MR – Version 3.0	03/04/2021
2	UNFCCC	CDM VVS for PA v2.0	-
3	UNFCCC	ACM0002 – “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”, Version 17	-
4	State Electricity Board/ Power Distribution Company of Telangana Ltd/ Hubli Electricity Supply Co. Ltd/ Karnataka Power Transmission Corporation Ltd/	Commissioning Certificates for all SPVs	-
5	Hubli Electricity Supply Company Ltd	Calibration certificates for main and check energy meters – Hunagund	18/03/2019 to 31/03/2020
6	Hubli Electricity Supply Company Ltd	Calibration certificates for main and check energy meters – Sindagi	18/03/2019 to 31/03/2020
7	Hubli Electricity Supply Company Ltd	Calibration certificates for main and check energy meters – Raibagh	18/03/2019 to 31/03/2020
8	Punjab State Power Corporation Ltd	Calibration certificates for main and check energy meters – Bareta	18/03/2019 to 31/03/2020
9	Punjab State Power Corporation Ltd	Calibration certificates for main and check energy meters – Balran	18/03/2019 to 31/03/2020
10	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Thimajipet	18/03/2019 to 31/03/2020
11	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Arvapally	18/03/2019 to 31/03/2020
12	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Domakonda	18/03/2019 to 31/03/2020
13	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Alampur	18/03/2019 to 31/03/2020
14	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Gadwal	18/03/2019 to 31/03/2020

15	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Tandur	18/03/2019 to 31/03/2020
16	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Alampur	18/03/2019 to 31/03/2020
17	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Nagakurnool	18/03/2019 to 31/03/2020
18	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Reddypet	18/03/2019 to 31/03/2020
19	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Chegunta	18/03/2019 to 31/03/2020
20	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Thunkibollaram	18/03/2019 to 31/03/2020
21	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Tungathurthy	18/03/2019 to 31/03/2020
22	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters – Guntipally	18/03/2019 to 31/03/2020
23	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters - Shanigaram	18/03/2019 to 31/03/2020
24	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters - Kamareddy	18/03/2019 to 31/03/2020
25	Ganga Calibration Services Pvt Ltd	Calibration certificates for main and check energy meters - K.M. Pally	18/03/2019 to 31/03/2020
26	State Electricity Board	Joint Meter Reading	18/03/2019 to 31/03/2020
27	Mytrah SPVs	Monthly Invoices	18/03/2019 to 31/03/2020
28	Verra	VCS Standard v4.0	