



## Verification Report UCR ID: 486

Prepared by




**Naturelink Solutions Pvt. Ltd.**

<b>Title</b>	<b>Bundled Small Scale Solar Power Project by M/s Dharamdeep Commodities Pvt. Ltd. in Gujarat, India</b>		
<b>Project Owner</b>	<b>M/s Dharamdeep Commodities Pvt. Ltd.</b>		
<b>Project Location</b>	<b>Village: Nidroda, District: Patan State: Gujarat, India,</b>		
	<b>SPV Name</b>	<b>Latitude</b>	<b>Longitude</b>
	Sandipkumar Dharmendrakumar	23°56'52.5"N	72°11'27.3"E
	Dharmendra Pukhraj	23°56'49.6"N	72°11'30.6"E
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	Sandip P Jain	23°56'44.4"N	72°11'26.8"E
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<b>Date</b>	<b>25/03/2025</b>		

**COVER PAGE****Project Verification Report Form (VR)****BASIC INFORMATION**

<b>Name of approved UCR Project Verifier / Reference No.</b>	Naturelink Solutions Pvt. Ltd
<b>Type of Accreditation</b>	<input type="checkbox"/> CDM Accreditation <input type="checkbox"/> ISO 14065 Accreditation <input checked="" type="checkbox"/> UCR Approved Verifier
<b>Approved UCR Scopes and GHG Sectoral scopes for Project Verification</b>	Sectoral Scope: 01 Energy Industries
<b>Validity of UCR approval of Verifier</b>	May - 2022 onwards
<b>Completion date of this VR</b>	25/03/2025
<b>Title of the project activity</b>	Bundled Small Scale Solar Power Project by M/s Dharamdeep Commodities Pvt. Ltd. in Gujarat, India
<b>Project reference no. (as provided by UCR Program)</b>	486
<b>Name of Entity requesting verification service</b>	Creduce Technologies Private Limited (Creduce) (Aggregator) M/s Dharamdeep Commodities Pvt. Ltd. (Project Owner)
<b>Contact details of the representative of the Entity, requesting verification service</b> (Focal Point assigned for all communications)	Mr. Shailendra Singh Rao (Creduce) shailendra@creduce.tech
<b>Country where project is located</b>	India
<b>Applied methodologies</b>	AMS-I. D: "Grid connected renewable electricity generation", version 18
<b>Sectoral Scope(s):</b>	01 Energy industries (Renewable/Non-Renewable Sources)
<b>Project Verification Criteria:</b> Mandatory requirements to be assessed	<input checked="" type="checkbox"/> UCR Verification Standard <input checked="" type="checkbox"/> Applicable Approved Methodology

	<input checked="" type="checkbox"/> Applicable Legal requirements /rules of the host country <input checked="" type="checkbox"/> Eligibility of the Project Type <input checked="" type="checkbox"/> Start date of the Project activity <input checked="" type="checkbox"/> Meet applicability conditions in the applied methodology <input checked="" type="checkbox"/> Credible Baseline <input checked="" type="checkbox"/> Do No Harm Test <input checked="" type="checkbox"/> Emission Reduction calculations <input checked="" type="checkbox"/> Monitoring Report <input checked="" type="checkbox"/> No GHG Double Counting <input type="checkbox"/> Others (please mention below)
<b>Project Verification Criteria:</b> Optional requirements to be assessed	<input checked="" type="checkbox"/> Environmental Safeguards Standard and do-no-harm criteria <input type="checkbox"/> Social Safeguards Standard do-no-harm criteria
<b>Project Verifier's Confirmation:</b> The <i>UCR Project Verifier</i> has verified the UCR project activity and therefore confirms the following:	<p>The UCR-approved verifier Naturelink Solutions Pvt. Ltd., verifies the following with respect to the UCR Project Activity "Bundled Small Scale Solar Power Project by M/s Dharamdeep Commodities Pvt. Ltd. in Gujarat, India"</p> <p><input checked="" type="checkbox"/> The project aggregator has correctly described the project activity in the Project Concept Note/9/ including the applicability of the approved methodology AMS-I. D/4/ and meets the methodology applicability conditions and has achieved the estimated GHG emission reductions, complies with the monitoring methodology and has calculated emission reductions estimates correctly and conservatively.</p> <p><input checked="" type="checkbox"/> The project activity is likely to generate GHG emission reductions amounting to the estimated 19,060 tCO<sub>2</sub>e, as indicated in the monitoring report/10/17/, which are additional to the reductions that are likely to occur in absence of the project activity and complies with all applicable UCR rules, including ISO 14064-2 and ISO 14064-3.</p>

	<input checked="" type="checkbox"/> The project activity is not likely to cause any net-harm to the environment and/or society  <input checked="" type="checkbox"/> The project activity complies with all the applicable UCR rules and therefore recommends UCR Program to register the Project activity with above mentioned labels.
<b>Project Verification Report, reference number and date of approval</b>	Verification Report UCR  UCR ID: 486  Version: 1.0  Date: 25/03/2025
<b>Name of the authorised personnel of UCR Project Verifier and his/her signature with date</b>	 Ms. Trapti Joshi GHG Assessor Naturelink Solution Pvt. Ltd. Date: 25/03/2025

# Table of Contents

1.	Project Verification Report .....	5
1.1	Executive Summary.....	5
1.2	Description of the Project.....	6
1.3	Project Verification team, technical reviewer and approver:.....	7
2	Verification Process .....	7
2.1.1	Desk/document review .....	7
2.1.2	Remote Inspection .....	8
2.1.3	Interviews .....	9
2.1.4	Clarification request (CLs), corrective action request (CARs) and forward action request (FARs) raised .....	10
3	Project Verification findings .....	11
3.1	Identification and eligibility of project type.....	11
3.2	General description of project activity .....	11
3.3	Application and selection of methodologies and standardized baselines .....	12
3.3.1	Application of methodology and standardized baselines .....	12
3.3.2	Clarification on applicability of methodology, tool, and/or standardized baseline.....	13
3.3.3	Project boundary, sources and GHGs.....	15
3.3.4	Baseline scenario .....	16
3.3.5	Estimation of emission reductions or net anthropogenic removal.....	16
3.3.6	Monitoring Report.....	18
3.4	Start date, crediting period and duration.....	19
3.5	Environmental impacts and safeguard assessment .....	19
3.6	Project Owner- Identification and communication .....	20
3.7	Positive Social Impact .....	20
3.8	Sustainable development aspects (if any) .....	21
3.9	Others (DAA) .....	21
4	Internal quality control: .....	21
5	Project Verification opinion:.....	21
6	Competence of team members .....	22
	Appendix 1: Abbreviations .....	23
	Appendix 2: Document reviewed or referenced.....	24
	Appendix 3: Clarification request, corrective action request and forward action request.....	26

# 1. Project Verification Report

## 1.1 Executive Summary

The verification work has been contracted by project aggregator M/s. Creduce Technologies Pvt Ltd and M/s Dharamdeep Commodities Pvt. Ltd. to perform an independent verification of its UCR project titled “**Bundled Small Scale Solar Power Project by M/s Dharamdeep Commodities Pvt. Ltd. in Gujarat, India**”, UCR approved project ID:486, to establish a number of CoUs generated by the project over the crediting period from 30/09/2022 to 31/12/2024 (both days included).

Verification for the period: 30/09/2022 to 31/12/2024

In our opinion, the total GHG emission reductions over the crediting / verification period stated in the Monitoring Report (MR) V2.0/17/, submitted are found to be correct and in line with the UCR guidelines. The GHG emission reductions were calculated on the basis of UCR guideline which draws reference from, the standard baseline, AMS-I. D: “Grid connected renewable electricity generation”, version 18/4/. The verification was done by remote inspection of the plant and submission of documents for verification through emails.

It is certified that the emission reductions from the Bundled Small Scale Solar Power Project by M/s Dharamdeep Commodities Pvt. Ltd. in Gujarat, India (UCR ID – 486) for the period 30/09/2022 to 31/12/2024 amounts to **19,060 CoUs (19,060 tCO<sub>2</sub>e)**.

### **Objective**

The objective of this verification is to have an independent third-party assessment of whether the project activity conforms to the qualification criteria set out in the UCR Program Manual/1/, UCR CoU Standard/2/ and UCR verification standard/3/ to attain real, measurable, accurate and permanent emission reductions.

### **Scope**

The scope of the verification is the independent, objective review and ex-post determination of the monitored reductions in GHG emission by the project activity.

1. To verify the project implementation and operation with respect to the registered PCN V1.0/09/.
2. To verify the implemented monitoring plan with the registered PCN V1.0/09/ applied baseline and monitoring methodology.
3. To verify that the actual monitoring systems and procedures follow the monitoring plan.
4. To evaluate the GHG emission reduction data and express a conclusion whether the reported GHG emission reduction data is free from material misstatement
5. To verify that reported GHG emission data is sufficiently supported by evidence.

The project is assessed against the requirements of the UCR Program Manual/1/, UCR CoU Standard/2/ and UCR verification standard/3/, ISO 14064-2:2019.

Due professional care has been exercised and ethical conduct has been followed by the assessment team during the verification process. The verification report is a fair presentation

of the verification activity. The validation of the project is not part of the present assignment and project is deemed validated post-registration by UCR.

## 1.2 Description of the Project

The project activity is a renewable power generation activity which incorporates operation of 6.6 MW DC ground mounted solar project developed by M/s Dharamdeep Commodities Pvt. Ltd. The project activity is located at Patan district in the state of Gujarat (India).

The project involves installation of solar plant of 6.6 MW at Gujrat state of India. The details of the bundled project activity are verified with the PCN V1.0/9/, MR V2.0/17/ and relevant documents submitted for verification as mentioned in appendix-2.

The project involves a 6.6 MW DC ground-mounted solar PV plant using Monocrystalline solar photovoltaic technology make by JINENERGY.

Solar cells convert sunlight directly into electricity by generating a small voltage when light hits a junction within the cell. These cells are connected in modules and protected in laminates, forming PV arrays, which are the main units of power generation in the system.

Technical specification of the all the bundled 6601 kW Ground Mounted technology plants are as follows:

Parameter	Description
Total number of Photovoltaic Modules and rating	1200 kW Plants: 8001 / 450 Wp 600 kW Plants: 6670 / 450 Wp
Module make	JINENERGY
Technology	Monocrystalline
No. of Inverter	1200 kW Plants: 15 600 kW Plants: 15
Invertor Rating	1200 kW Plants: 200 kW each x 5 x 3 600 kW Plants: 10 x 200 kW + 5 x 100 kW
Total Inverter	30
Invertor type	String
Invertor Make	Sungrow
Meter Make	Genus

As mentioned in the MR V 2.0/17/ and emission reduction calculation sheet/11/ submitted for verification, the project replaces anthropogenic emissions of greenhouse gases (GHGs) estimated to be 19,060 tCO<sub>2</sub>e for the verification period, there on displacing 22,769.80 MWh amount of electricity from the generation of fossil-fuel based power plants connected to the Indian electricity grid.

The project activity is a ground mounted solar plant for renewable energy generation project having a capacity of less than 15 MW. The project is a small-scale activity. The methodology applied in the MR V2.0/17/ is verified against the AMS-I. D: "Grid connected renewable electricity generation", version 18/4/ total emission reductions (ERs) achieved through the project activity during the monitoring period is summarised below:

Summary of the Project Activity and ERs Generated for the Monitoring Period	
Project start date	30/09/2022
Start date of this Monitoring Period	30/09/2022
Carbon credits claimed up to	31/12/2024
Total ERs generated (tCO <sub>2</sub> e)	19,060
Leakage Emission	0
Project Emission	0

### 1.3 Project Verification team, technical reviewer and approver:

Sr. No.	Role	Last name	First name	Affiliation	Involvement in		
					Doc review	Remote inspection	Interviews
1.	GHG Assessor	Joshi	Trapti	Naturelink Solutions Pvt. Ltd.	Yes	Yes	Yes

#### Technical Reviewer and Approver of the Verification report

Sr. No.	Role	Type of resource	Last name	First name	Affiliation
1.	Internal Technical Reviewer	IR	Mandliya	Shyam	Naturelink Solutions Pvt. Ltd.

## 2 Verification Process

### 2.1.1 Desk/document review

- A review of data and information presented to assess its completeness
- A review of the initial PCN/9/, MR/10/17/, emission reduction calculation sheet/11/, Methodology - AMS-I.D Version 18.0/4/.
- A cross-check between information provided in the monitoring report /10/17/ and data from other sources such as monthly electricity generation by PP/13/ and similar data sources;
- A review of calculations and assumptions made in determining the GHG data and emission reductions calculation/11/18/;

The list of documents reviewed is available in a subsequent section of this verification report under the appendix - 2 "Document reviewed or referenced".



### 2.1.2 Remote Inspection

The verification team conducted remote assessment of project activity via video conferencing on 07/03/2025 as mentioned in the below table.

Date of remote inspection:		07/03/2025		
No.	Activity performed during remote inspection	Site location	Date	Project Personnel
1.	Opening meeting	Project location	07/03/2025	Mr. Dharmendra Pukhraj Jain, Director Mr. Suresh Ghanchi, Site In charge Mr. Kashyap Trivedi, Senior Consultant
2.	Visit to all installation location and document verification	Project location	07/03/2025	Mr. Suresh Ghanchi, Site In charge Mr. Kashyap Trivedi, Senior Consultant
3.	Closing meeting	Project location	07/03/2025	Mr. Dharmendra Pukhraj Jain, Director Mr. Suresh Ghanchi, Site In charge Mr. Kashyap Trivedi, Senior Consultant

The following parameters were assessed but not limited to:

- An assessment of the implementation and operation of the registered project activity as per the registered PCN V1.0/9/.
- A review of information flows for generating, aggregating, and reporting the monitoring parameters;
- Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PCN V1.0/9/ and MR V1.0 /10/;

- A cross-check between information provided in the MR V1.0/10/ and data from other sources such as energy generation reports/13/, equipment details, or similar data sources;
- A cross-check of the monitoring equipment including calibration reports and observations of monitoring practices against the requirements of the PCN V1.0/9/ and MR V1.0/10/ and the applied methodology AMS I.D. version 18.0/04/;
- A review of calculations and assumptions made in determining the GHG emission reductions calculation/11/;
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

### 2.1.3 Interviews

No.	Interview			Date	Subject
	Last name	First name	Affiliation		
1.	Jain	Mr. Dharmendra Pukhraj	Director Dharamdeep Commodities Pvt. Ltd.	07/03/2025	Legal ownership of the project, Implementation of the project, start date and crediting period, Double counting of the carbon credits
2.	Jain	Mr. Sandip Pukhraj			
3.	Ghanchi	Mr. Suresh	Site In charge Dharamdeep Commodities Pvt. Ltd.	07/03/2025	Project boundary, Monitoring plan Electricity generation, meter reading, log book, meter calibration Installation and connection of the solar plant,  Solar panel and inverter specification,
4.	Trivedi	Kashyap	Senior Consultant – Creduce Technologies Pvt. Ltd.	07/03/2025	Project Overview, PCN, Monitoring Report, Methodology, eligibility criteria, Baseline emissions, Emission Reduction Calculation

## 2.1.4 Clarification request (CLs), corrective action request (CARs) and forward action request (FARs) raised

Areas of Project Verification findings	No. of CL	No. of CAR	No. of FAR
<b>Green House Gas (GHG)</b>			
Identification and Eligibility of project type	NIL	NIL	NIL
General description of project activity	NIL	NIL	NIL
Application and selection of methodologies and standardized baselines	NIL	NIL	NIL
<ul style="list-style-type: none"> <li>Application of methodologies and standardized baselines</li> </ul>	NIL	NIL	NIL
<ul style="list-style-type: none"> <li>Deviation from methodology and/or methodological tool</li> </ul>	NIL	NIL	NIL
<ul style="list-style-type: none"> <li>Clarification on applicability of methodology, tool and/or standardized baseline</li> </ul>	NIL	NIL	NIL
<ul style="list-style-type: none"> <li>Project boundary, sources and GHGs</li> </ul>	NIL	NIL	NIL
<ul style="list-style-type: none"> <li>Baseline scenario</li> </ul>	NIL	NIL	NIL
<ul style="list-style-type: none"> <li>Estimation of emission reductions or net anthropogenic removals</li> </ul>	NIL	NIL	NIL
<ul style="list-style-type: none"> <li>Monitoring Report</li> </ul>	NIL	NIL	NIL
Start date, crediting period and duration	NIL	NIL	NIL
Environmental impacts	NIL	NIL	NIL
Project Owner- Identification and communication	NIL	NIL	NIL
Positive social impact	NIL	NIL	NIL
Sustainable development aspect	NIL	NIL	NIL
Others (please specify)	01	NIL	NIL
<b>Total</b>	01	NIL	NIL

### 3 Project Verification findings

#### 3.1 Identification and eligibility of project type

<b>Means of Project Verification</b>	<p>The project is eligible as per UCR General project eligibility criteria and guidance Version 7.0/2/ which is acceptable since the project has not been registered under any other GHG program and the energy generation has begun on 30/09/2022 of M/s Dharamdeep Commodities Pvt. Ltd. The commissioning certificates/14/ of the ground mounted bundled solar power plants involved in the project activity has been verified in this regard.</p> <p>Prior to the commencement of the project activity, the project owner got approval for the installation and operation of ground mounted power plants from respective energy development agency in their building premises and PO has signed Power purchase agreement with M/s Dharamdeep Commodities Pvt. Ltd. and Uttar Gujarat Vij Company Limited to source the renewable energy generated through installed solar plant.</p> <p>The project delivered real, measurable and additional emission reduction of 19,060 tCO<sub>2</sub>e over the crediting period.</p> <p>Project applies an approved CDM monitoring and baseline methodology AMS-I.D Grid connected renewable electricity generation – Version 18.0/4/.</p>
<b>Findings</b>	No findings were raised
<b>Conclusion</b>	<p>The project is eligible as per the requirements of the UCR General project eligibility criteria and guidance Version 7.0/2/.</p> <p>Further project verification team cross checked the other GHG programmes like Clean Development Mechanism (CDM) Registry, VERRA Registry, Gold Standard (GS) Registry for the information regarding the consistency of the title of the project activity, GPS coordinates, legal Ownership of the Project activity and confirmed that the project was not submitted or registered under any other GHG programmes and non-voluntary non-GHG Programs.</p>

#### 3.2 General description of project activity

<b>Means of Project Verification</b>	<p>The purpose of the project activity is to utilize clean energy to generate electricity which would be used to meet the electrical demand of the manufacturing facility of PP. The project owner having installed capacity of 6.6 MW DC Solar Photovoltaic (SPV) panels on ground mounted which consists of Monocrystalline Photovoltaic (PV) Plant. The project activity uses Monocrystalline Mono PERC solar photovoltaic technology to generate clean energy. Solar radiation is converted directly into electricity by solar cells (photovoltaic cells). In such cells, a small electric voltage is generated when light strikes the junction between a metal and a semiconductor (such as silicon) or</p>
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	<p>the junction between two different semiconductors. Thus, the project activity generated total 22,769.80 MWh electricity and displacing 19,060 tCO<sub>2</sub>e.</p> <p>In the absence of the project activity, PO was importing the required electricity from the NEWNE grid to meet its requirement of electrical energy. The NEWNE Indian grid which is dominated by fossil fuel grid connected power plants. The electricity generated from solar plant is consumed by manufacturing facility and injected to the grid of the distribution utility under the mechanism of net metering if any surplus electricity is available after meeting their own consumption. The Location details has been verified during the remote audit interview, site photos, Site videos and geo-coordinates verified through google earth/maps and found to be correct.</p> <p>The project activity installed Photovoltaic module consists of several photovoltaic cells connected by circuits and sealed in an environmentally protective laminate, which forms the fundamental building blocks of the complete PV generating unit. Several PV panels mounted on a frame are termed as PV Array.</p> <p>The technical details of solar panels and inverters provided in PCN V1.0/09/ and MR V 2.0 /17/ have been verified during the remote assessment technical specification document/15/.</p> <p>The project activity described and applied AMS-I. D: “Grid connected renewable electricity generation”, version 18 /4/ falls into the small-scale category as per CDM methodology.</p>
<b>Findings</b>	No findings were raised
<b>Conclusion</b>	The description of the project activity is verified to be true based on the review of PCN V1.0/09/, MR 2.0/17/, Commissioning Certificate/14/ of solar plants.

### 3.3 Application and selection of methodologies and standardized baselines

#### 3.3.1 Application of methodology and standardized baselines

<b>Means of Project Verification</b>	<p>The project activity applied AMS-I. D: “Grid connected renewable electricity generation”, version 18/4/ falls into the small-scale category as per CDM methodology.</p> <p>Standardized baseline is “In the absence of the project activity, the equivalent amount of electricity would have been imported from the grid (which is connected to the unified Indian Grid system (NEWNE Grid)), which is carbon intensive due to being predominantly sourced from fossil fuel-based power plants” which is as per the project activity and clearly mentioned in PCN V1.0/09/ and MR /10/17/.</p>
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<b>Findings</b>	No findings were raised
<b>Conclusion</b>	The methodology applied is appropriately meeting the requirements of UCR General project eligibility criteria and guidance/2/, standardized baseline. The methodology version is correct and valid. The referenced methodology is applicable to project activity.

### 3.3.2 Clarification on applicability of methodology, tool, and/or standardized baseline

Means of Project Verification	Applicability as per AMS I.D version 18.0	Verifier assessment
	<p>This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:</p> <p>a) Supplying electricity to a national or a regional grid; or</p> <p>b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.</p>	<p>The proposed project activity “Bundled Small Scale Solar Power Project by M/s Dharamdeep Commodities Pvt. Ltd. in Gujarat, India” which incorporates installation and operation of ground mounted solar photovoltaic power generation through Power purchase agreement.</p> <p>b) Is applicable as in the absence of the project activity the total electricity requirements by the manufacturing facility was drawn from grid and produced from fossil fuel fired power plant. This fact was confirmed during the remote</p>
	<p>2. This methodology is applicable to project activities that:</p> <p>a. Install a greenfield plant;</p> <p>b. Involve a capacity addition in (an) existing plant(s);</p> <p>c. Involve a retrofit of (an) existing plant(s);</p> <p>d. Involve a rehabilitation of (an) existing plant(s)/ unit(s); or</p> <p>e. Involve a replacement of (an) existing plant(s).</p>	<p>The project is installation of a greenfield plant. Hence the project activity meets the given applicability criterion.</p>
	<p>3. Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</p> <p>a. The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</p> <p>b. The project activity is implemented in an existing</p>	<p>This criterion is not applicable as the project activity is the installation and operation of ground mounted solar plants to generate electricity.</p>

	<p>reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>.</p> <p>The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup></p>	
	<p>4. If the new unit has both renewable and non-renewable components (e.g., a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW</p>	<p>The project is 6.6 MW small scale ground mounted solar power plants i.e., only component is renewable power project below 15 MW, thus the criterion is not applicable to this project activity.</p>
	<p>5. Combined heat and power (co-generation) systems are not eligible under this category.</p>	<p>The project activity does not involve co-generation. Hence this criterion is not applicable.</p>
	<p>6. In the case of project activities that involve the capacity addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct<sup>6</sup> from the existing units.</p>	<p>No capacity addition in the existing renewable plant. This is new installation of ground mounted solar power plants which was verified and confirmed through document verification and interviews with project owner and their representatives. Hence this criterion is not applicable.</p>
	<p>7. In the case of retrofit or replacement, to qualify as a small-scale project, the total output of the retrofitted or replacement unit shall not exceed the limit of 15 MW.</p>	<p>There is no retrofit or replacement in the project activity, hence it is not applicable.</p>
	<p>8. In the case of landfill gas, waste gas, wastewater treatment and agro-industries projects, recovered methane emissions are eligible under a relevant Type III category. If the recovered methane is used for electricity generation for supply to a grid, then the baseline for the electricity component shall be in accordance with procedure prescribed under this</p>	<p>This criterion is not applicable as the project activity is the installation of solar PV panels to generate electricity.</p>

	methodology. If the recovered methane is used for heat generation or cogeneration other applicable Type-I methodologies such as “AMS-I.C.: Thermal energy production with or without electricity” shall be explored.	
	9. In case biomass is sourced from dedicate plantations, the applicability criteria in the tool “Project emissions from cultivation of biomass” shall apply.	The project activity is new greenfield activity of solar power plant and does not involve biomass, hence this criterion is not applicable.
<b>Findings</b>	No findings were raised	
<b>Conclusion</b>	The verification team confirms that all the applicability criteria set by the applied CDM methodology/4/ and its eligible tools are met. The relevant information against those criteria is also included in the PCN/9/ and MR/17/. The selected CDM methodology for the project activity is applicable.	

### 3.3.3 Project boundary, sources and GHGs

<b>Means of Project Verification</b>	<p>As per the applied methodology AMS-I. D version 18.0/4/, the spatial extent of the project boundary includes industrial, commercial facilities consuming energy generated by the system. The components of the project boundary mentioned in the section B.4 of PCN 1.0/9/ were found to be in compliance with para 18 of the applied methodology.</p> <p>The project verification team conducted desk review of the implemented project to confirm the appropriateness of the project boundary identified. The project verification team confirmed that all GHG sources required by the methodology have been included within the project boundary.</p> <p>It was assessed that no emission sources related to project activity will cause any deviation from the applicability of the methodology or accuracy of the emission reductions.</p> <p>The project location is clearly depicted with the help of a pictorial depiction in section A.3. of the PCN V1.0/09/ and duly verified by the project verification team via geographical coordinates, commissioning certificate/14/ of the project activity &amp; Power purchase agreement/12/ between M/s Dharamdeep Commodities Pvt. Ltd. and Uttar Gujarat Vij Company Limited.</p>
<b>Findings</b>	No findings were raised



<b>Conclusion</b>	<p>The project verification team has assessed complete information regarding the project boundary provided in PCN V1.0/09/ and MR V2.0/17/ and verified the evidence from the commissioning certificate/14/, geographical coordinates and Power purchase agreement/12/.</p> <p>The project verification team confirms that the identified boundary, and selected emissions sources are justified for the project activity.</p>
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### 3.3.4 Baseline scenario

<b>Means of Project Verification</b>	<p>The baseline scenario as per paragraph 19 of the applied methodology, prescribed the baseline scenario of the project activity. In the absence of the project activity, the users would have been supplied electricity from the national grid. As per paragraph 19 Baseline emissions for other systems are the product of amount electricity displaced with the electricity produced by the renewable generating unit and an emission factor from the available options of calculation of emission factor as mentioned in AMS-I.D /4/.</p>
<b>Findings</b>	No findings were raised
<b>Conclusion</b>	<p>The project verification team concluded that the identified baseline scenario reasonably represents what would have occurred in the absence of the project activity.</p> <p>The calculated baseline emission for each vintage year of crediting period is rounded down as per UCR CoU verification standard /3/.</p>

### 3.3.5 Estimation of emission reductions or net anthropogenic removal

<b>Means of Project Verification</b>	<p>The project verification team checked whether the equations and parameters used to calculate GHG emission reductions or net anthropogenic GHG removals for PCN 1.0/9/ and MR /10/17/ is in accordance with applied methodology. Project Verification team checked section B.5 and C.5.1 of the PCN 1.0/9/ and MR/10/17/ respectively to confirm whether all formulae to calculate baseline emissions, project emission and leakage have been applied in line with the underlying methodology.</p> <p>The emission reduction calculation has been done as per the CDM SSC methodology AMS-I.D, Version 18.0/4/.</p> $BE_y = EG_{PJ,y} \times EF_{grid,y}$ <p>Where, BE<sub>y</sub>= Baseline Emissions in year y; tCO<sub>2</sub></p>
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	<p><math>EG_{Bly}</math>= Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)</p> <p><math>EF_{CO_2,y}</math>= Combined margin CO<sub>2</sub> emission factor for grid connected power generation in year y.</p> <p>Project emissions:</p> <p>As per paragraph 39 of the applied methodology, For most renewable energy project activities, <math>PE_y = 0</math>. Since Solar power is a GHG emission free source of energy project emission considered as Zero for the project activity</p> <p>Leakage Emissions:</p> <p>As per the paragraph 42 of the applied methodology AMS-I.D Version 18.0, there are no emissions related to leakage in this project.</p> <p>As per the general project eligibility criteria and guidance/2/; “The project owner has opted UCR recommended emission factor of 0.9 tCO<sub>2</sub>/MWh for the 2013-2020 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program”.</p> <p>Emission factors for the post 2020 period (2022-23) is to be selected as the most conservative estimate between the national electricity/power authority published data set and UCR default of 0.9 tCO<sub>2</sub>/MWh”.</p> <p>Also, for the vintage 2024, the combined margin emission factor of 0.757 tCO<sub>2</sub>/MWh, calculated from the CEA database in India, results in lower emissions than the default value. Hence, the same emission factor has been considered to calculate the emission reduction under a conservative approach.</p> <p>Emission reductions</p> <p>As per Paragraph 43, Equation 09 of the applied methodology, emission reductions are calculated as follows</p> $ER_y = BE_y - PE_y - LE_y$ <p>Where:</p> <p><math>ER_y</math> = Emission reductions in year y (tCO<sub>2</sub>)</p> <p><math>BE_y</math> = Baseline Emissions in year y (tCO<sub>2</sub>)</p> <p><math>PE_y</math> = Project emissions in year y (tCO<sub>2</sub>)</p> <p><math>LE_y</math> = Leakage emissions in year y (tCO<sub>2</sub>)</p> <table><tr><th>Year</th><th><math>EG_{py}</math> (MWh)</th><th><math>EF_{grid, y}</math></th><th><math>BE_y</math></th></tr><tr><td>2022</td><td>2,445.91</td><td>0.9</td><td>2,201</td></tr><tr><td>2023</td><td>10,318.63</td><td>0.9</td><td>9,286</td></tr><tr><td>2024</td><td>10,005.26</td><td>0.757</td><td>7,573</td></tr><tr><td colspan="3">BE (tCO<sub>2</sub>e) for the period from 2022 to 2024</td><td>19,060</td></tr></table>	Year	$EG_{py}$ (MWh)	$EF_{grid, y}$	$BE_y$	2022	2,445.91	0.9	2,201	2023	10,318.63	0.9	9,286	2024	10,005.26	0.757	7,573	BE (tCO <sub>2</sub> e) for the period from 2022 to 2024			19,060
Year	$EG_{py}$ (MWh)	$EF_{grid, y}$	$BE_y$																		
2022	2,445.91	0.9	2,201																		
2023	10,318.63	0.9	9,286																		
2024	10,005.26	0.757	7,573																		
BE (tCO <sub>2</sub> e) for the period from 2022 to 2024			19,060																		
Findings	No findings were raised																				

<b>Conclusion</b>	<p>The UCR recommends an emission factor of 0.9 tCO<sub>2</sub>/MWh for the 2013-2020 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program. However, the emission factor of 0.9 tCO<sub>2</sub>/MWh for the period 2022-2023 as the most conservative estimate between the national electricity/power authority published dataset and the UCR default of 0.9 tCO<sub>2</sub>/MWh 'as per the UCR standard version 7.0/2/.</p> <p>Also, for the vintage 2024, the combined margin emission factor calculated from CEA database in India results into emission factors of 0.757 as a fairly conservative estimate.</p> <p>Project Verification team confirms that the algorithms and formulae proposed to calculate project emissions, baseline emissions, leakage and emission reductions in the PCN V1.0/09/ and MR 2.0/17/, ER sheet 2.0/18/ is in line with the requirements of the selected methodology AMS-I.D version 18.0/4/.Monthly Electricity generation of electricity has been verified with the JMRs issued by the Uttar Gujrat Vij Company Limited for the current Monitoring period and found it correct.</p> <p>For emission reduction calculation, the assessment team confirms that all assumptions and data used by the project participants are listed in the PCN/7/ and MR Version 2.0/20/ including their references and sources.</p> <p>All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PCN/7/ and MR Version 2.0/20/.</p> <p>The baseline methodology and the applicable tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions.</p>
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### 3.3.6 Monitoring Report

<b>Means of Project Verification</b>	<p>The MR/10/17/ submitted by the PP has been verified thoroughly and is in compliance with the applicable methodology and UCR General project eligibility criteria and guidance/2/ for calculation of GHG emission reductions.</p> <p>The assessment team has reviewed all the parameters in the monitoring plan against the requirements of the applied methodology/4/ and confirmed that monitoring parameters are applied in line with the requirement of the methodology and relevant in the context of the program. The procedures have been reviewed by the assessment team through document review, interviews with the respective monitoring personnel and remote audit interview assessment.</p>
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	Monitoring methodology, data management and calibration of the energy meter were also discussed with project owner.
<b>Findings</b>	No findings were raised
<b>Conclusion</b>	<p>The project verification team confirms that, the MR 2.0/17/ is in compliance with the applicable methodology/4/ and UCR General project eligibility criteria and guidance/2/.</p> <p>The monitoring parameters reported in PCN V1.0/09/ and MR 2.0/17/ adequately represents the parameters relevant to emission reduction calculation.</p> <p>The number of CoUs generation is calculated based on accurately reported data. The calculation was done using an excel sheet where all the parameters were reported.</p> <p>UCR recommended emission factor for electricity generation is opted which is conservative.</p> <p>In the MR 2.0/17/ emission reduction calculations sheet/11/ are correctly calculated and reported. The MR 2.0/17/, meets the requirements of UCR project verification requirements /3/.</p>

### 3.4 Start date, crediting period and duration

<b>Means of Project Verification</b>	The Commissioning certificate/14/ of the installation of the project activity has been verified as per PCN V1.0/9/ and MR /10/17/.
<b>Findings</b>	No findings were raised.
<b>Conclusion</b>	Crediting period for the agreed verification is from 30/09/2022 to 31/12/2024 which is appropriate as per UCR General project eligibility criteria and guidance/2/.

### 3.5 Environmental impacts and safeguard assessment

<b>Means of Project Verification</b>	<p>As The guidelines on Environmental Impact Assessment have been published by Ministry of Environment, Forests and Climate Change (MoEF&amp;CC), Government of India (GOI) under Environmental Impact Assessment notification 11/07/2024/49/. Further amendments to the notification have been done, The Solar Power projects up to 25 MW are listed in white category, hence the No EIA required.</p> <p>The impact of the project activity on the environmental safeguards has been carried out.</p> <p>Out of all the safeguards no risks were identified to the environment due to the project implementation and operation.</p> <p>And the following have been indicated as positive impacts:</p> <p>Environment Air - CO<sub>2</sub> emissions: The project activity being renewable power generation avoids CO<sub>2</sub> emissions that would have</p>
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	<p>occurred in baseline scenario due to the electricity generation in thermal power plants.</p> <p>Environment - Natural Resources: Replacing fossil fuels with renewable sources of energy.</p> <p>Impacts identified as 'Harmless':</p> <p>Solid waste Pollution from E- waste: - Any E-waste including broken panels and batteries if generated from the plant shall be discarded in accordance with host country regulation.</p> <p>Land use: since the solar plant is ground-mounted in the PO premises; no land is harmed due to the project activity.</p> <p>Emission due to transportation of solar panels: The emissions associated with transport of the modules are insignificant compare to manufacturing facilities.</p> <p>Solid waste Pollution from end-of-life products equipment: - Waste generated from the plant.</p>
<b>Findings</b>	No findings were raised.
<b>Conclusion</b>	The project activity displaces fossil fuel consumption and provides affordable and clean energy. The project has also avoided total 19,060 tCO <sub>2</sub> e, hence it has positive impact.

### 3.6 Project Owner- Identification and communication

<b>Means of Project Verification</b>	<p>The information and contact details of the project owner has been appropriately incorporated in the PCN/9/, MR/10/17/ which was checked.</p> <p>The legal owner of the project activity has been identified through the commissioning certificate/14/, Power purchase agreement/12/.</p>
<b>Findings</b>	No findings were raised
<b>Conclusion</b>	The project verification team confirms that the legal ownership of the project belongs to Dharamdeep Commodities Pvt. Ltd..

### 3.7 Positive Social Impact

<b>Means of Project Verification</b>	NA
<b>Findings</b>	--

<b>Conclusion</b>	--
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### 3.8 Sustainable development aspects (if any)

<b>Means of Project Verification</b>	Not Applicable
<b>Findings</b>	--
<b>Conclusion</b>	The Project has the capability to address SDG 7 Affordable and Clean Energy and SDG 13 Climate Action

### 3.9 Others (DAA)

<b>Means of Project Verification</b>	The verification team has referred other GHG program to avoid double counting of emission reduction
<b>Findings</b>	CL 01 was raised
<b>Conclusion</b>	It was verified that the project has not applied for registration and issuance in the other GHG programs and provided the agreement/8/ stating not taking benefits of double counting.

## 4 Internal quality control:

- Due professional care has been taken while reviewing the submitted document.
- There is no conflict of interest as the verifier has no other engagement with either the aggregator or project owner directly or indirectly.
- Verification team consists of experienced personnel.
- Technical review is performed by an independent person.

## 5 Project Verification opinion:

The project verification was conducted on the basis of UCR Program Manual/1/, UCR General project eligibility criteria and guidance/2/, UCR Verification standard /3/, AMS -I.D. -Grid connected renewable electricity generation version 18.0/4/, Project Concept Note (PCN)/9/, Power purchase agreement/12/, Commissioning Certificate/14/, Calibration Report/16/, Monitoring Report (MR)/17/ and documents mentioned in Appendix-2.

Verification team raised 01 Nos. of Clarification Requests (CLs) and it was closed satisfactorily.

It is hence certified with reasonable level of assurance that the emission reductions from the project Bundled Small Scale Solar Power Project by M/s Dharamdeep Commodities Pvt. Ltd. in Gujarat, India (UCR ID - 486) for the period 30/09/2022 to 31/12/2024 amounts to **19,060** CoUs (19,060 tCO<sub>2</sub>e) as per the UCR Verification standard /3/.

## 6 Competence of team members

No.	Last name	First name	Role and Affiliation	Technical Competence
1.	Joshi	Trapti	GHG Assessor - NSPL	Ms. Trapti Joshi is having M.Tech. In Environmental Engineering. She has experience in conducting environmental audits in CDM/VCS/GS registry. She has performed the Renewable sector and Waste handling projects. Also, she has done Master's thesis in Solid waste management project through LCA Gabi Software.
2.	Mandliya	Shyam	Technical Reviewer - NSPL	Mr. Shyam Mandliya holds master's degree in Chemical Engineering. He has expertise in environmental audits. He has performed environmental monitoring of different industries in Gujarat for air, water, and hazardous waste. He has also contributed to the community-based biogas project development.

## Appendix 1: Abbreviations

Abbreviations	Full texts
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CL	Clarification Request
COD	Commercial Operation Date
CoUs	Carbon offset Units
CPCB	Central Pollution Control Board
DAA	Avoidance of Double Accounting Agreement
ER	Emission Reduction
FAR	Forward Action Request
GEDA	Gujarat Energy Development Agency
GERC	Gujarat Electricity Regulatory Commission
GETCO	Gujarat Energy Transmission Corporation Limited
GHG	Green House Gas
kW	Kilo-Watt
kWh	Kilo-Watt Hour
MR	Monitoring report
MW	Mega-Watt
MWh	Mega-Watt Hour
NSPL	Naturelink Solutions Private Limited
PA/ PP	Project Aggregator / Project Proponent
PCN	Project Concept Note
PO	Project Owner
PPA	Power Purchase Agreement
SDG	Sustainable Development Goal
tCO <sub>2</sub> e	Tons of Carbon Dioxide Equivalent
UCR	Universal Carbon Registry
UGVCL	Uttar Gujarat Vij Company Limited
VR	Verification Report
VS	Verification Statement



## Appendix 2: Document reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	UCR	UCR Program Manual	Version 6.1, August 2024	UCR website
2.	UCR	UCR General project eligibility criteria and guidance (UCR CoU Standard)	Version 7.0, August 2024	UCR website
3.	UCR	UCR Program Verification standard	Version 2.0, August 2022	UCR website
4.	CDM	AMS-I. D – “Grid connected renewable electricity generation”	Version 18.0	CDM website
5.	CEA	Central Electricity Authority (Installation and Operation of Meters) (Amendment) Regulations, 2022	Dated 28/02/2022	-
6.	CEA	CO <sub>2</sub> baseline database for the Indian Power sector	Version 20.0 dated December 2024	-
7.	PA	Communication agreement between PP and PO	Dated 19/11/2024	PA
8.	Creduce	Assurance to avoid double accounting by project owners	Double accounting agreement signed on 04/03/2025	PA
9.	Creduce	PCN V 1.0	Dated 24/01/2025	PA
10.	Creduce	MR V 1.0	Dated 06/03/2025	PA
11.	Creduce	Emission reduction excel – “Bundled Small Scale Solar Power Project by M/s Dharamdeep Commodities Pvt. Ltd. in Gujarat, India”	Version 1.0 dated 06/03/2025	PA
12.	PO	Power purchase agreement between M/s Dharamdeep Commodities Pvt. Ltd. and Uttar Gujarat Vij Company Limited,	Dated 15/05/2021	PA
13.	PO	Monthly Generation reports issued by the Gujrat Energy Transmission Corporation Limited, Vadodara	-	PO
14.	Gujarat Energy	Commissioning certificate for 6.6 MW (DC) capacity Solar	Dated 23/01/2023	PA

No.	Author	Title	References to the document	Provider
	development Agency	power plant commissioned on 30/09/2022		
15.	PO	Technical specification	-	PA
16.	-	Meter test reports	-	PA
17.	Creduce	MR V 2.0	Dated 10/03/2025	PA
18.	Creduce	Emission reduction excel – “Bundled Small Scale Solar Power Project by M/s Dharamdeep Commodities Pvt. Ltd. in Gujarat, India” V 2.0	Dated 10/03/2025	PA

## Appendix 3: Clarification request, corrective action request and forward action request

**Table 1. CLs from this Project Verification**

<b>CL ID</b>	01	<b>Section no.:</b> 3.3.6	Monitoring Report	<b>Date:</b> 07/03/2025
<b>Description of CL</b>				
Document stating that the project activity will not cause double counting is not available as per requirement of clause 1.8, Universal Carbon Registry Program Manual (v. 6.1, August 2024)				
<b>Project Owner's response</b>				<b>Date:</b> 10/03/2025
Double accounting agreement is provided				
<b>Documentation provided by Project Owner</b>				
Double accounting agreement				
<b>UCR Project Verifier assessment</b>				<b>Date:</b> 13/03/2025
Double accounting agreement is checked and found to be confirming the UCR program manual (v. 6.1, August 2024), hence CL 01 stands closed.				

**Table 2. CARs from this Project Verification**

<b>CAR ID</b>	--	<b>Section no.</b>		<b>Date:</b>
<b>Description of CAR</b>				
<b>Project Owner's response</b>				<b>Date:</b>
<b>Documentation provided by Project Owner</b>				

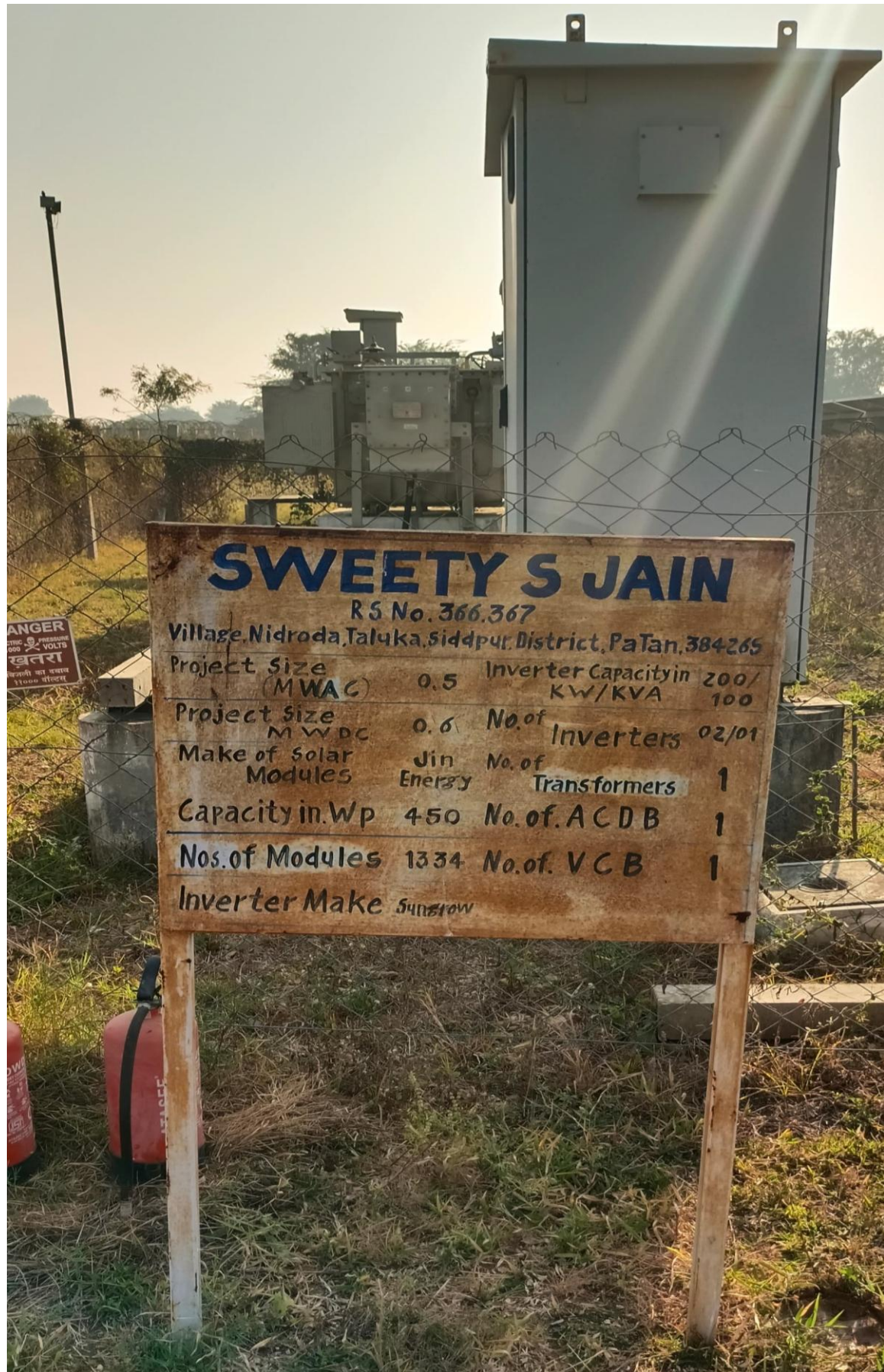
**Table 3. FARs from this Project Verification**

<b>FAR ID</b>	--	<b>Section no.</b>		<b>Date:</b>
<b>Description of FAR</b>				
<b>Project Owner's response</b>				<b>Date:</b>
<b>Documentation provided by Project Owner</b>				

**Photographs of the remote inspection conducted of the project activity**







# SWEETY S JAIN

RS No. 366.367

Village Nidroda, Taluka, Siddpur, District, Pa Tan, 384265

Project Size (MWAC)	0.5	Inverter Capacity in KW/KVA	200/100
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Project Size MWDC	0.6	No. of Inverters	02/01
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Make of Solar Modules	Jin Energy	No. of Transformers	1
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Capacity in Wp	450	No. of ACDB	1
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Nos. of Modules	1334	No. of VCB	1
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Inverter Make *SUNSROW*



