

File No.: VIS (2023-24)-PL412-Q085-344-548

Dated: 19-10-2023

# LENDER'S INDEPENDENT ENGINEER'S REPORT

OF

## 10 ( $\pm$ 10%) MWp GRID CONNECTED ROOF- TOP SOLAR POWER PLANT

PROPOSED TO BE SET-UP AT  
RAJASTHAN, HARYANA & MADHYA PRADESH

DEVELOPER:  
M/S TRUERE SPV PRIVATE LIMITED

- Corporate Valuers
- Business/ Enterprise/ Equity Valuations
- Lender's Independent Engineers (LIE)
- Techno Economic Viability Consultants (TEV)
- Agency for Specialized Account Monitoring (ASM)
- Project Techno-Financial Advisers
- Chartered Engineers
- Industry/ Trade Rehabilitation Consultants
- NPA Management
- Panel Valuer & Techno Economic Consultants for PSU Banks

REPORT PREPARED FOR

STATE BANK OF INDIA, SME, SOUTH EXTENSION, SOUTH DELHI

**\*\*Important - In case of any query/ issue or escalation you may please contact Incident Manager  
at [info@rkassociates.org](mailto:info@rkassociates.org). We will appreciate your feedback in order to improve our services.**

**NOTE: As per IBA Guidelines please provide your feedback on the report within 15 days of its submission after which  
report will be considered to be correct.**

**CORPORATE OFFICE:**

D-39, 2nd floor, Sector 2, Noida-201301

Ph - +91-0120-4110117, 4324647, +91 - 9958632707

E-mail - [valuers@rkassociates.org](mailto:valuers@rkassociates.org) | Website: [www.rkassociates.org](http://www.rkassociates.org)

**IMPORTANT NOTICE**

**COPYRIGHT FORMAT:** *This report is prepared on the copyright format of R.K Associates to serve our clients with the best possible information and analysis to facilitate them to take rational business decisions. Legally no one can copy or distribute this format without prior approval from R.K Associates. It is meant only for the advisory/ reference purpose for the organization/s as mentioned on the cover page of this report. Distribution or use of this format by any organization or individual other than R.K Associates will be seen as an unlawful act and necessary legal action can be taken against the defaulters.*

*This report is intended for the sole use of the intended recipient/s and contains material that is STRICTLY CONFIDENTIAL AND PRIVATE.*

**DEFECT LIABILITY PERIOD:** *- In case of any query/ issue or escalation you may please contact Incident Manager at [le@rkassociates.org](mailto:le@rkassociates.org).*

*Though adequate care has been taken while preparing this report as per its scope, but still we can't rule out typing, human errors, over sightedness of any information or any other mistakes. Therefore, the concerned organization is advised to satisfy themselves that the report is complete & satisfactory in all respect. Intimation regarding any discrepancy shall be brought into our notice immediately. If no intimation is received within 15 (Fifteen) days in writing from the date of issuance of the report, to rectify these timely, then it shall be considered that the report is complete in all respect and has been accepted by the client upto their satisfaction & use and further to which R.K Associates shall not be held responsible in any manner.*





# LIE REPORT

10 (± 10%) MWp GRID CONNECTED  
SOLAR POWER PLANT

## TABLE OF CONTENTS

SECTIONS	PARTICULARS	PAGE NO.
Part A	REPORT SUMMARY	03
Part B	INTRODUCTION	04
	1. Name of the Project	04
	2. Project Overview	04
	3. Scope of the Report	06
	4. Purpose of the Report	06
	5. Methodology Adopted	06
Part C	PROJECT DETAILS AND KEY TECHNICAL PARAMETERS	07
Part D	ENERGY YIELD ASSESSMENT	16
Part E	POWER PURCHASE AGREEMENT TERMS	22
Part F	CURRENT STATUS OF WORK	26
Part G	PROJECT COST & EXPENDITURE	27
Part H	PHOTOGRAPHS	29
Part I	OTHER DOCUMENTS & REFERENCES	30
Part J	DISCLAIMER	62

*Adi*

*A*



# LIE REPORT

10 (± 10%) MWp GRID CONNECTED  
SOLAR POWER PLANT

## PART A

## REPORT SUMMARY

1.	Name of the Project	10 (±10%) MWp Grid Connected Solar Power Plant
2.	Project Location	Project are located majorly at 3 states of india i.e. Rajasthan, Haryana & Madhya Pradesh. (Please refer to the table attach below for address of the each project location)
3.	Seller Company	M/s TRUERE SPV Private Limited
4.	Prepared for Organization	State Bank of India, SME, South Extension, New Delhi
5.	LIE Consultant Firm	M/s. R.K. Associates Valuers & Techno Engineering Consultants (P) Ltd
6.	Date of Survey	NA (Desktop LIE)
7.	Date of Report	19-10-2023
8.	Details & documents provided by	Mr. Shubham Kr. Karn; Sr. Accounts Manager M/s Oriana Power Pvt. Ltd.
9.	Report Type	Lender's Independent Engineering Report
10.	Purpose of the Report	Review of Project cost, CUF and Irradiation Data to facilitate bankers to take business decision on the Project.
11.	Scope of the Report	To verify and review the Project cost, CUF and Irradiation Data of the Solar Power Plants set-up/ being set-up by M/s TRURE SPV Pvt. Ltd.
12.	Documents produced for Perusal	a. Copy of Power Purchase Agreements (PPAs) b. Copy of Techno-Commercial offer from OPWR to TRURE SPV Pvt. Ltd. c. Copy of Plant Layout d. Copy of PV Syst reports e. Detailed Project Report
13.	Annexure with the Report	<ul style="list-style-type: none"><li>Benchmark Cost by MNRE</li><li>Market Comparables</li><li>Global Solar Atlas by World Bank Group</li><li>Layout Plans</li></ul>





**PART B****INTRODUCTION**

- 1. NAME OF THE PROJECT:** 10 (± 10%) MWp Grid Connected Solar Power Plant based on RESCO Model to be installed at 15 locations by M/s TRURE SPV Pvt. Ltd.
- 2. PROJECT OVERVIEW:** M/s TRURE SPV Pvt. Ltd. is a SPV of M/s Oriana Power Private Limited (OPPL) which is an associate company of Trinix Impex & BCS Switchgear Industries. It is a MNRE approved channel partner and into the business of Solar EPC / Design & Supply of BoS (Balance of System – Module Mounting Structure, LT/ ACCB/ ACDB/ DCCB Panel, Weather Monitoring Sensors, LA, Earthing, Cable Tray, etc.) for PV Solar Plants in India.

M/s OPWR DEL SPV Private Limited. (hereinafter referred to as "Power Producer") in March, April, May, July & September 2023 and February 21 signed 15 nos. of Power Purchase Agreement (PPAs) with different purchaser for Design, Manufacture, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance of 13 roof-top & 2 ground mounted solar power plants at their respective locations having a total DC capacity of 10 (± 10%) MWp for 25 years of plant operation/ PPA tenure.

Further, M/s OPWR DEL SPV Private Limited (Tranferee) has signed Novation Agreement with M/s TRURE SPV Pvt. Ltd. (Transferee). As per Novation Agreement, the Transfree intends to accept the transfer by novation of all the rights, liabilities, duties and obligations of the Tranfereor under and in respect of Pringiple Agreement i.e. PAA. This novation agreement has been signed with all the parties with respect to each location.

As per Detailed Project Report with respect to all 15 nos. of location shared by the company which is submitted with State Bank of India, the total project cost for setting up 10,000 kWp solar plant is Rs. 55.73 Cr. However, no contract agreement has been signed.

M/s TRURE SPV Pvt. Ltd. has approached SBI for credit facility to construct these plants who have in turned appointed M/s R.K Associates Valuers & Techno Engineering Consultants Pvt. Ltd. as Lenders Independent Engineer for a specific scope of work.

**Since, presently no physical work has begun yet on the site and more so our scope of work includes only review & comment on total Project cost, CUF and Irradiation Data, therefore site visit has not been carried out.**



**RESCO Model: -**

MNRE had introduced the PPP/RESCO model policy setting tariff rates for solar to be arrived on transparent competitive bidding model through PPP route.

*The RESCO model is one of the methods of implementing rooftop solar installations. Under the RESCO model, a renewable energy service company ("**RESCO**"), (i.e., an energy service company that provides energy to consumers from renewable energy sources), develops, installs, finances, operates and owns the rooftop solar power project ("**Project**"), and supplies power generated from the Project to the consumer on whose premises the Project is set up ("**Customer**") or to the grid through net-metering.*

*'Build, Own, Operate and Transfer' (BOOT) is a special kind of RESCO model in which the RESCO constructs, owns, operates, and transfers the ownership of the Project to the Customer after the expiry of a predefined period. The RESCO and the Customer enter into a long-term power purchase agreement ("**PPA**") for an agreed tenure, which sets out, among others, the terms at which the power generated from the Project will be sold to the Customer and the tariff at which the power will be sold. Excess power from the Project (if any) could be sold by the Customer to the distribution utility through net metering system – the net metering regulations differ from state to state.*

*Under the PPA, the RESCO owns the Project and is responsible for its installation as well as its operation and maintenance of the Project throughout the tenure of the Project, and at the end of the PPA term, the ownership of the Project is transferred to the Customer. Thereafter, the Customer may either choose to retain the RESCO for operation and maintenance services or engage a third-party operator.*

*If the entity on whose premises the Project is located does not intend to buy the power generated from the Project and does not entered into a PPA with the RESCO, that entity can either lease the rooftop premises to the RESCO by means of a lease agreement or enter into a license agreement granting the RESCO the right to use the premises for the limited purpose of setting up and operating the Project. The RESCO then operates the Project and exports the energy generated to the local distribution utility at a predetermined feed-intariff (FiT) approved by the State Electricity Regulator under relevant schemes issued by the relevant state.*





**3. SCOPE OF THE REPORT:** To verify and review the Project cost, CUF and Irradiation Data of the Solar Power Plants set-up/ being set-up by M/s TRURE SPV Pvt. Ltd.

- *Industry/ sector research and demand & supply trend is out of scope of the report.*
- *Financial feasibility study of the Project is out of scope of the report.*
- *Providing any kind of design report or map is out-of-scope of the report.*
- *Scrutiny of contracts, Agreements and arrangement between the parties from legal perspective is out-of-scope of this report.*
- *Location feasibility is ascertained based on the PVSyst Report provided by the client.*
- *Any kind of technical & economic feasibility of the Project is out-of-scope of this Report.*

*All the assessment carried out for the Project is done based on the documents and information provided to us and various other discussions with the Project proponents and thus forming an opinion out of it.*

*Component wise verification is not carried out.*

**4. PURPOSE OF THE REPORT:** To provide fair detailed analysis report to the Bank based on the "in-scope points" mentioned above for facilitating them to take appropriate business decision on the Project.

**5. METHADODOLOGY ADOPTED:**

- To gather relevant data/ information/ documents related to Project planning, execution, current status.
- Study of copy of Project Planning documents/ Agreements to know the scope of work of the company.
- To procure, study and analysis of any additional information, data, and documents required/ provided by the company.
- Research about the Project/ sector from the sources in the public domain.
- Correlation of the provided information against Industry/ sector benchmarks/ trend.
- Information compilation, analysis and reporting.



**PART C****PROJECT DETAILS AND KEY TECHNICAL PARAMETERS**

- 1. SOLAR PLANT PROJECT LOCATIONS:** As per the information and copy of documents shared by the management of the company, details of the subject solar plant locations has been tabulated below:

S. No.	Purchaser	Capacity (kWp)		Address
		DC Power	AC Power	
1	Govt. Medical College, Chittorgarh	399.6	350	Rithola, Rajasthan GPS Coordinates- 24°50'35.3"N 74°35'18.1"E
2	Govt Medical College, Dungarpur	399.6	350	Dungarpur, Rajasthan GPS Coordinates- 23°50'30.8"N 73°39'32.2"E
3	Gurugram University, Gurugram	226.8	195	RAO TULA RAM COLLEGE, university, Mayfield Garden, Sector 51, Gurugram, Samaspur, Haryana 122003 GPS Coordinates- 28°25'25.4"N 77°03'56.5"E
4	Jhalwar Hospital And Medical College, Jhalwar	604.8	500	Vacant Land at 12-16, Kota Rd, Industrial Area, Jhalawar, Rajasthan 326001 GPS Coordinates- 24°35'33.9"N 76°09'03.7"E
5	Govt Mahila Evam Bal Chikitsalya, Chittorgarh	97.2	80	Near M.P.P.G. College, Main Road Sethi, Pratap Nagar, Chittorgarh, Rajasthan 312001 GPS Coordinates- 24°52'10.5"N 74°37'03.7"E
6	Paschimi Rajasthan Dugdh Utpadak Sahkari Sang Limited, Jodhpur	604.8	500	Chopasani Rd, Baldev Nagar, Jodhpur, Rajasthan 342003 GPS Coordinates- 26°16'43.8"N 72°59'57.2"E
7	Shree Haridev Joshi General Hospital, Dungarpur	486	400	Hospital Road, New Colony, Dungarpur, Rajasthan 314001 GPS Coordinates- 23°51'32.6"N 73°42'42.6"E
8	Shree Sanwaliya Ji Government General Hospital, Chittorgarh	183.6	150	Nehru Nagar, Chittorgarh, Rajasthan 312001 GPS Coordinates-24°52'12.8"N 74°37'05.4"E
9	Ravinder Nath Tagore Govt Medical College, Udaipur	194.4	180	Court Chowk, City's Prime Health Care Area, Udaipur, Rajasthan 313001 GPS Coordinates- 24°35'17.9"N 73°41'42.0"E
10	Maharana Bhupal Govt Hospital, Udaipur	194.4	180	New ahinsapuri, fatehpura, Udaipur, Rajasthan 313001 GPS Coordinates-24°35'18.6"N 73°41'33.5"E
11	Govt Medical College, Barmer	604.8	500	Barmer, Rajasthan 344001 GPS Coordinates- 25°49'38.0"N 71°24'02.8"E
12	Shrimati Hira Kuwar Ba Mahila Hospital, Jhalwar	205.2	180	H5P6+6CF, Medical College, Jhalawar GPS Coordinates- 24°35'08.2"N 76°09'39.8"E
13	Govt Medical College, Dholpur	604.8	500	MVQ5+C67, Bari Rd, Purani Chhawani, Dholpur, Rajasthan 328001 GPS Coordinates- 26°41'19.3"N 77°51'29.0"E
14	PMO Mch Unit MG Hospital, Bhilwara	200	200	Bhopal Ganj, Bhilwara, Rajasthan 311001 GPS Coordinates-25°20'53.2"N 74°38'27.7"E
15	Hindustan Copper Limited, Malanjkhand	5000	4500	Baihar, Madhya Pradesh 481051 GPS Coordinates- 22°01'21.6"N 80°42'24.5"E
<b>Total</b>		<b>10000</b>	<b>8,765</b>	<b>(± 10%)</b>

Adh  
A





S. No.	Purchaser	Transferor (PPA Holder)	Transferee	Capacity kWp (DC)
1	Govt Medical College - Chittorgarh	M/s. OPWR DEL SPV Pvt. Ltd.	TRUEERE SPV Pvt. Ltd.	399.6
2	Govt Medical College - Dungarpur			399.6
3	Gurugram University - Ggn			226.8
4	Jhalwar Hospital And Medical Colledge - Jhalwar			604.8
5	Govt Mahila Evam Bal Chikitsalya - Chittorgarh			97.2
6	Paschimi Rajasthan Dugdh Utpadak Sahkari Sang Limited - Jodhpur			604.8
7	Shree Haridev Joshi General Hospital - Dungarpur			486
8	Shree Sanwaliya Ji Government General Hospital - Chittorgarh			183.6
9	Ravinder Nath Tagore Govt Medical College - Udaipur			194.4
10	Maharan Bhupal Govt Hospital - Udaipur			194.4
11	Govt Medical College - Barmer			604.8
12	Shrimati Hira Kuwar Ba Mahila Hospital - Jhalwar			205.2
13	Govt Medical College - Dholpur			604.8
14	PMO Mch Unit Mg Hospital - Bhilwara			194.4
15	Hindustan Copper Limited - Malanjkhand	Rooftop Urja Pvt. Ltd.		5,000

**2. LOCATION WISE KEY TECHNICAL PARAMETERS:** As per the copy of module layout plans of both the sites, Key Technical Parameters & Configuration of the projects like Modules, Inverter, tilt angle, capacity, etc. are tabulated below:

S. No.	Location	Proposed capacity (in KWp)	No. of PV Module (in nos.)	PV Module Capacity (in Wp)	PV Module Mounting Orientation	Module Mounting Structure Angle
1	Govt Medical College - Chittorgarh	400	741	540	--	As per building
2	Govt Medical College - Dungarpur	400	741	540	--	As per building
3	Gurugram University - Ggn	226.8	420	540	--	As per building
4	Jhalwar Hospital And Medical Colledge - Jhalwar	640.8	1120	540	--	Vacant Land
5	Govt Mahila Evam Bal Chikitsalya - Chittorgarh	97.2	180	540	--	As per building

*(Signature)*  
rk ASSOCIATES  
VALUERS & TECHNO ENGINEERING CONSULTANTS (P) LTD.

# LIE REPORT

10 (± 10%) MWp GRID CONNECTED  
SOLAR POWER PLANT

6	Paschimi Rajasthan Dugdh Utpadak Sahkari Sang Limited - Jodhpur	604.8	1120	540	--	As per building
7	Shree Haridev Joshi General Hospital - Dungarpur	486	900	540	--	As per building
8	Shree Sanwaliya Ji Government General Hospital - Chittorgarh	183.6	340	540	--	As per building
9	Ravinder Nath Tagore Govt Medical College - Udaipur	194.4	360	540	--	As per building
10	Maharan Bhupal Govt Hospital - Udaipur	194.4	360	540	--	As per building
11	Govt Medical College - Barmer	604.8	1120	540	--	As per building
12	Shrimati Hira Kuwar Ba Mahila Hospital - Jhalwar	205.2	380	540	--	As per building
13	Govt Medical College - Dholpur	604.8	1120	540	--	As per building
14	PMO Mch Unit Mg Hospital - Bhilwara	194.4	360	540	--	As per building
15	Hindustan Copper Limited - Malanjkhand	5000	9091	5500	Portrait	20°





## 3. LOCATION MAPS: -



Govt. Medical College, Chittorgarh  
24°50'35.3"N 74°35'18.1"E



Govt Medical College, Dungarpur  
23°50'30.8"N 73°39'32.2"E



Gurugram University, Gurugram  
28°25'25.4"N 77°03'56.5"E



Jhalwar Hospital And Medical College, Jhalwar  
24°35'33.9"N 76°09'03.7"E



Govt Mahila Evam Bal Chikitsalya, Chittorgarh  
24°52'10.5"N 74°37'03.7"E



Paschimi Rajasthan Dugdh Utpadak Sahkari Sang  
Limited, Jodhpur  
26°16'43.8"N 72°59'57.2"E

*[Signature]*  
*[Circular Stamp: R.K. Associates Valuers & Techno Engineering Consultants Pvt. Ltd.]*



# LIE REPORT

10 (± 10%) MWp GRID CONNECTED  
SOLAR POWER PLANT



Shree Haridev Joshi General Hospital, Dungarpur  
23°51'32.6"N 73°42'42.6"E



Shree Sanwaliya Ji Government General Hospital,  
Chittorgarh  
24°52'12.8"N 74°37'05.4"E



Ravinder Nath Tagore Govt Medical College,  
Udaipur  
24°35'17.9"N 73°41'42.0"E



Maharana Bhupal Govt Hospital, Udaipur  
24°35'18.6"N 73°41'33.5"E



Govt Medical College, Barmer  
25°49'38.0"N 71°24'02.8"E



Shrimati Hira Kuwar Ba Mahila Hospital, Jhalwar  
24°35'08.2"N 76°09'39.8"E

*[Handwritten signature]*  
*[Handwritten signature]*



# LIE REPORT

10 (± 10%) MWp GRID CONNECTED  
SOLAR POWER PLANT



Govt Medical College, Dholpur  
26°41'19.3"N 77°51'29.0"E



Pmo Mch Unit Mg Hospital, Bhilwara  
25°20'53.2"N 74°38'27.7"E



Hindustan Copper Limited, Malanjkhand  
22°01'21.6"N 80°42'24.5"E



**4. CONSOLIDATED TECHNICAL PARAMETERS:**

S. No.	Location	Specifications
1.	No of Location	15
2.	Mounting Type	Fixed Tilt
3.	PV Module Type	Mono-Crystalline
4.	PV Module Make	Adani/Equivalent/Goldie
5.	PV Module Rating	335/535+Wp
6.	Total No. of Modules*	18,520 No's
7.	Inverter Type	String Inverter
8.	Inverter Make	Sungrow/Growatt
9.	Inverter Power	125 kW & 100 KW 33 KWP & 50KW
10.	Total no. of Inverters	88 No's

*Source: Detailed Project Report***5. SUMMARY OF PV POWER ENERGY YIELD AS PER PV SYST:**

S. No.	Location	Specifications
1.	First Year P50 Energy Yield (MWh/Annum)	801.1 MWh/year
2.	First Year P90 Energy Yield (MWh/Annum)	782.5 MWh/year

*Source: Detailed Project Report*



**PART D****ENERGY YIELD ASSESSMENT**

Company has used PVSyst V7.3.4 to assess energy yield calculation which is the standard Industry practice. Company had shared only nos. of PVSyst Report 1 for Gurugram University, 1 for Hindustan Copper and 1 for all locations in Rajasthan. The yearly average of main results of irradiation and energy yield from the provided PVSyst is as under:


S. No.	Plant Location	Annual production probability (MWh)		Specific Production (kWh/kWp/year)		Performance Ratio (%)
		P50	P90	As per PPA	As per PVSyst	
1	Gurugram University, Gurugram	358.8	350.5	1,386	1,582	76.33
2	Hindustan Copper Limited, Malanjkhand	8201	8011	---	1,640	81.71
3	REIL-3 – India (Rajasthan 13 nos. of locations)	7972	7761	1500	1670	83.25

**Analysis of Irradiation & PV Output data:** In respect to Irradiation & PV Output data, company has provided to us PVSyst report V7.3.4 in which key Irradiation components and PV Output data is given as enumerated in table below. We have analysed and compared it with other data source points also such as Solar Resource by Global Solar Atlas of World Bank and ISRO Solar Calculator to confirm its legitimacy as mentioned in table below:

Particulars	Gurugram University, Gurugram		Hindustan Copper Limited, Malanjkhand		REIL-3 – India (Rajasthan 13 nos. of locations)	
	As per Global Solar Atlas	As per PVSyst	As per Global Solar Atlas	As per PVSyst	As per Global Solar Atlas	As per PVSyst
Global horizontal Irradiation (kWh/m <sup>2</sup> )	1,735.5	1,845	1904.0	1833.0	2002.2	1849.4
Diffuse horizontal Irradiation (kWh/m <sup>2</sup> )	931.1	600.16	852.5	623.43	847.7	787.59
Direct Normal Irradiation (kWh/m <sup>2</sup> )	1187.0	-	1546.3	-	1762.7	-
Specific Photovoltaic Power Output	1486.9	-	1598.6	-	1738.3	-
Annual Global Insolation (ISRO Solar Calculator) (kWh/m <sup>2</sup> /year)	1347		1686		1691	

**Observations and Remarks:**

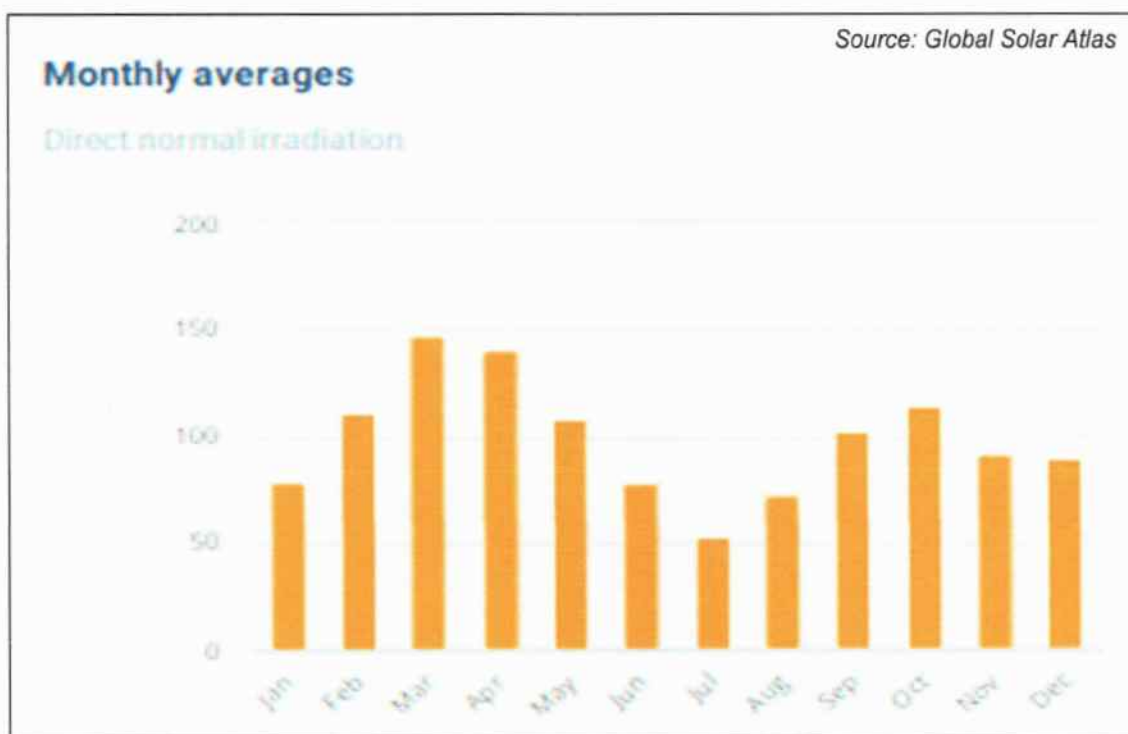
- As per the PVSyst - Simulation reports dated 15<sup>th</sup> September 2023, the estimated energy that can be produced by the subject plants and their respective performance ratio is almost similar as agreed in the PPA.
- As per comparative analysis, PVSyst Irradiation and PV Output data is in line to our analysis from Global Solar Atlas of World Bank and ISRO Solar Calculator.



3. As per the information provided by the management of the company, the estimated Plant Load Factor (CUF at P75) is 18.27%, 17.00% & 18.27% for REIL-3, Gurugram University & Hindustan Copper Limited respectively.

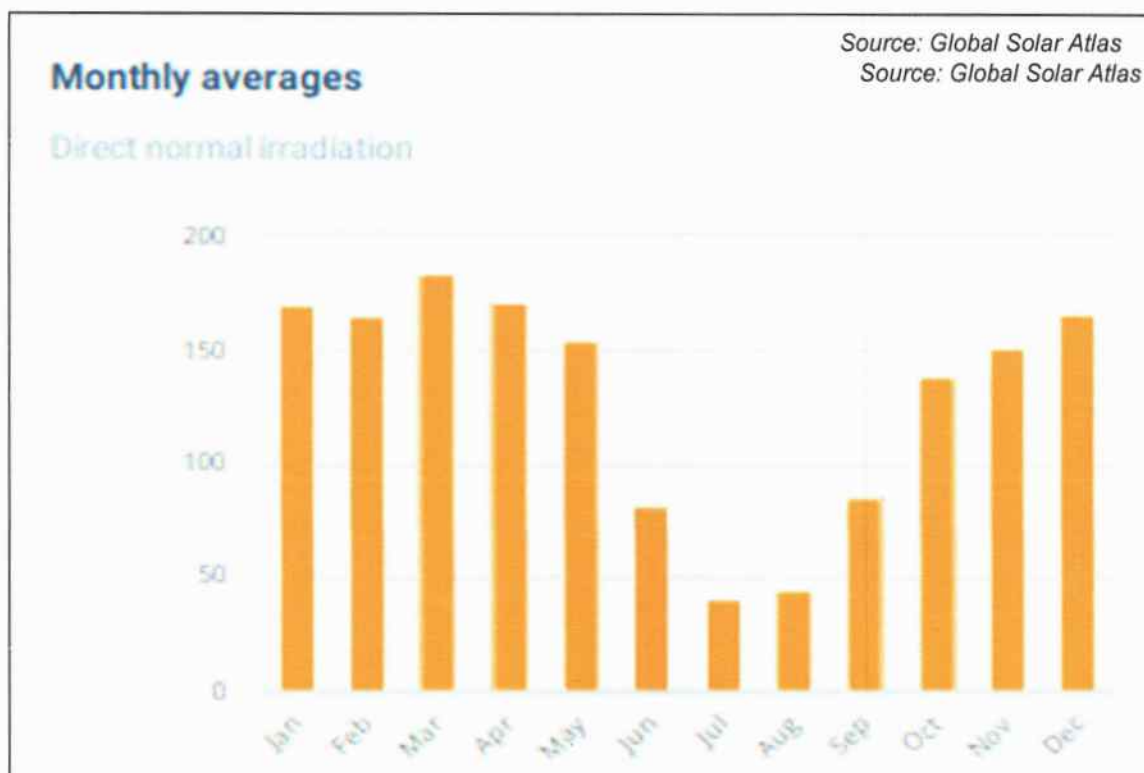
### Monthly averages- Direct normal irradiation (kWh/m<sup>2</sup>)

#### 1. Gurugram University, Gurugram

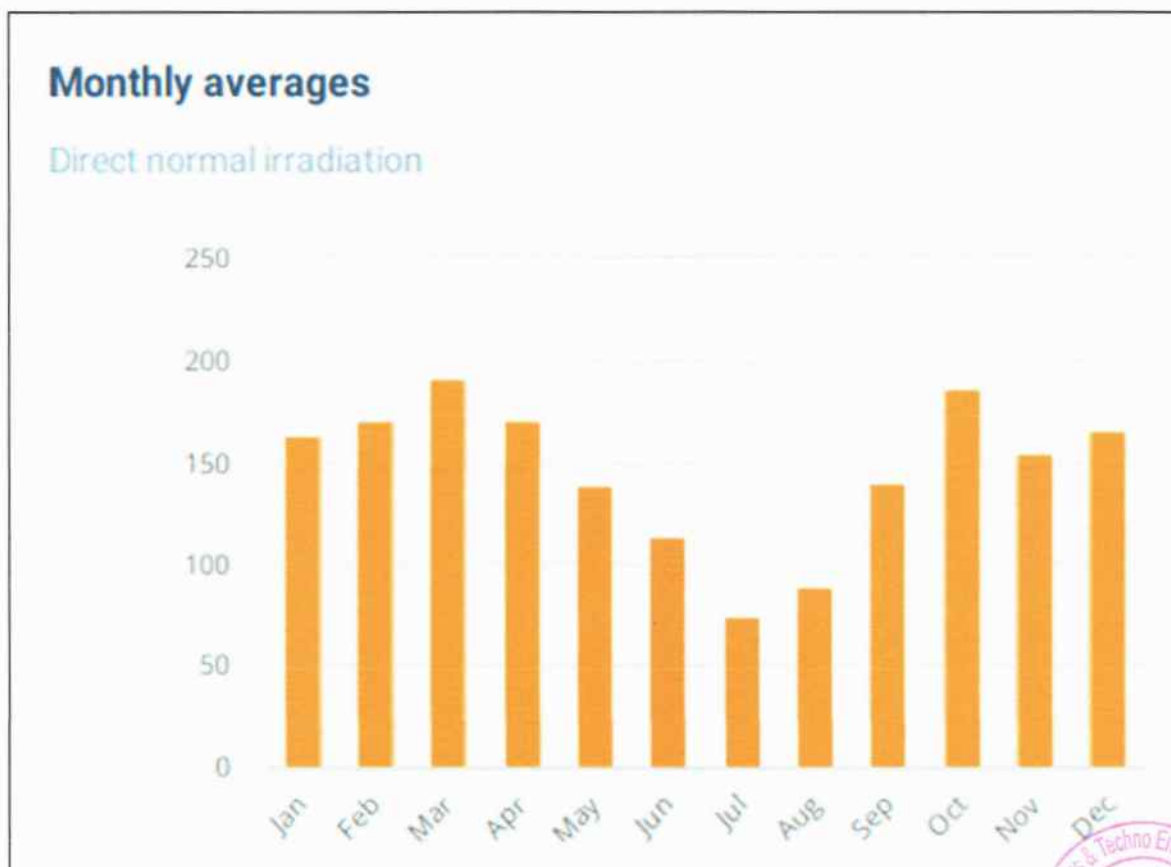


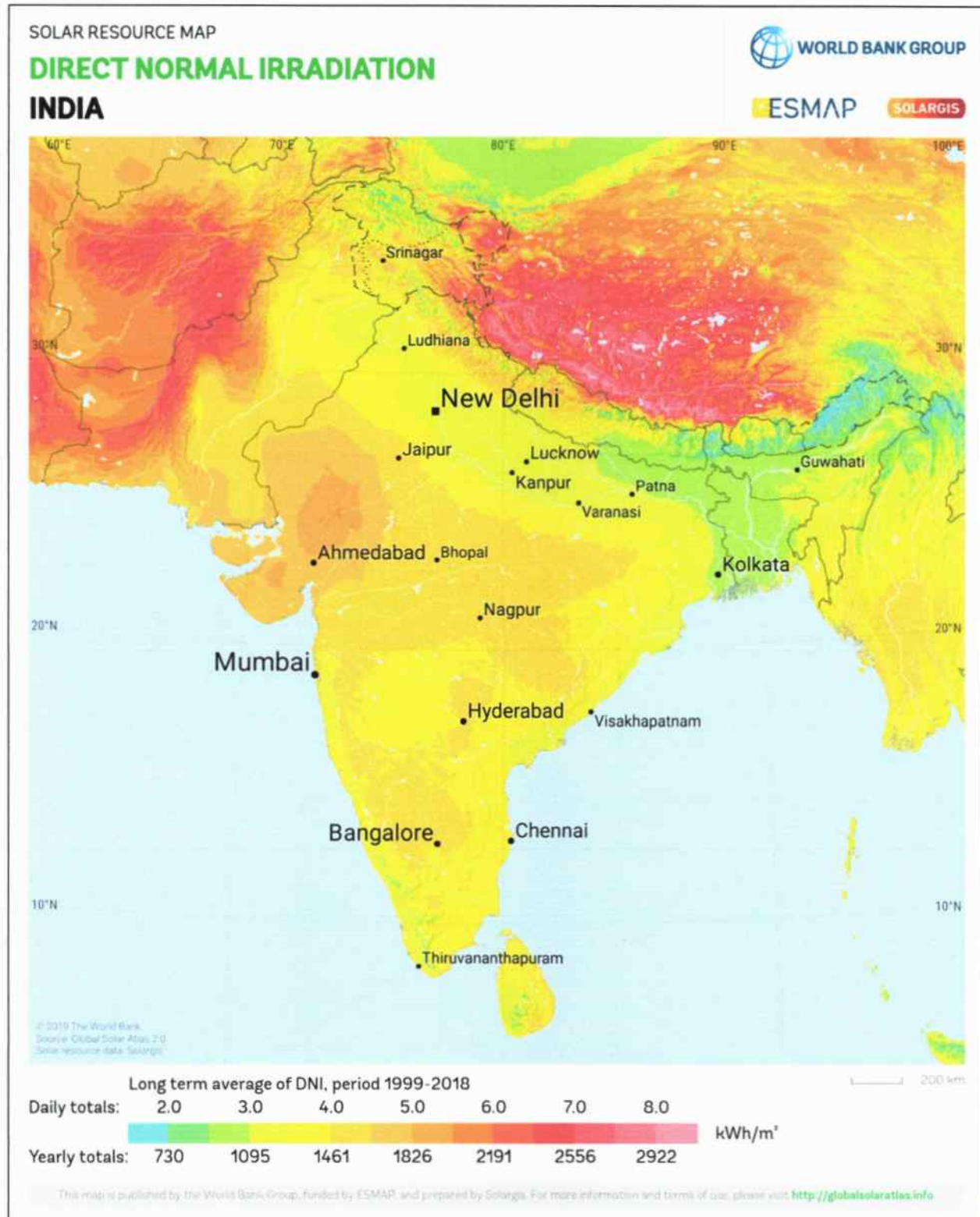


## 2. Hindustan Copper Limited, Malanjkhand



## 3. REIL-3, Rajasthan





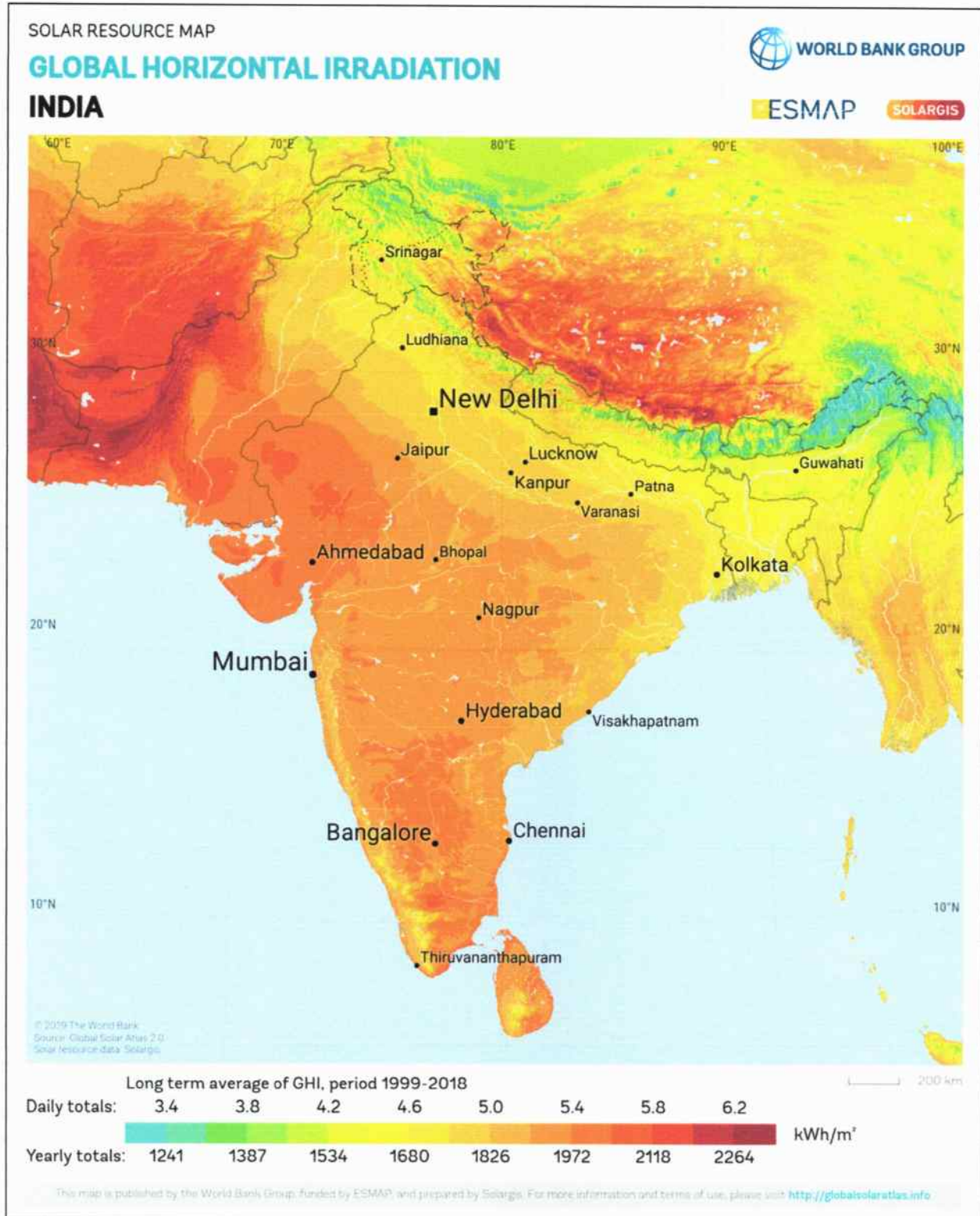
**Gurugram University, Gurugram lies above 3.0 daily (1095 annually) Kwh/m².**

**Hindustan Copper Limited, M.P. lies above 4.0 daily (1461 annually) Kwh/m².**

**REIL-3, Rajasthan lies below 5.0 daily (1826 annually) Kwh/m².**



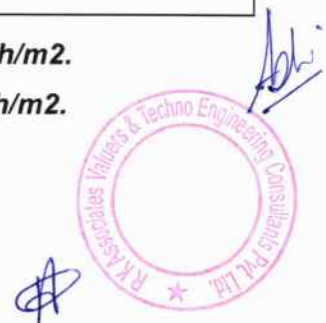


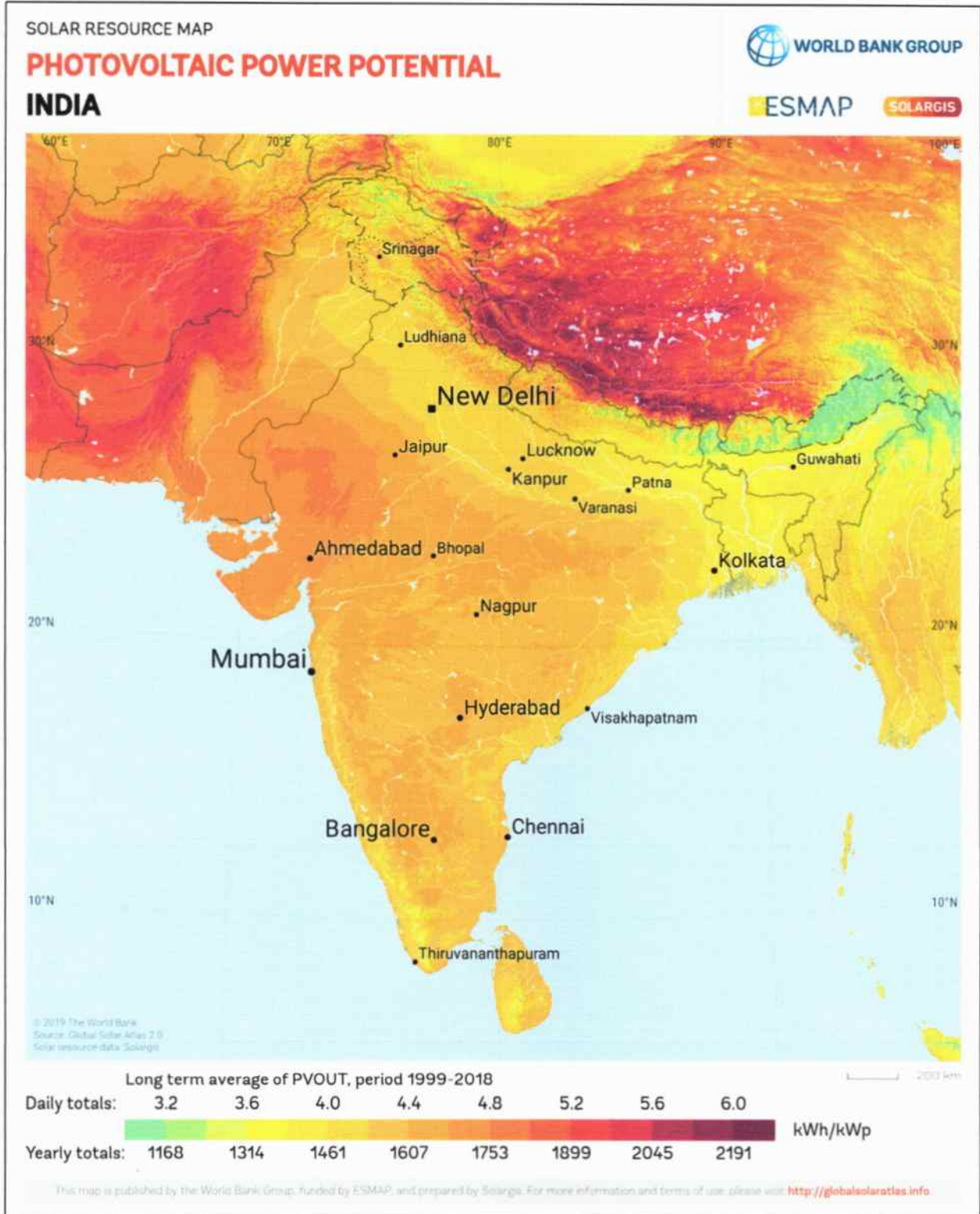


**Gurugram University, Gurugram lies below 5.0 daily (1826 annually) Kwh/m2.**

**Hindustan Copper Limited, M.P. lies above 5.0 daily (1826 annually) Kwh/m2.**

**REIL-3, Rajasthan lies above 5.0 daily (1826 annually) Kwh/m2.**





**Hindustan Copper Limited, M.P. lies above 4.0 daily (1461 annually) Kwh/m2.**

h/m2.  
h/m2.




**PART E****POWER PURCHASE AGREEMENT TERMS**

As per the information provided by the company, the total proposed capacity of the subject roof-top solar power plant is 10 MWp (± 10%). As on date, company has signed 15 no. of PPAs to install the power plant and supply power at both the project sites. Details of the same are tabulated below:

S. No.	Offtaker	DC Capacity (kWp)	Tariff (Rs./kWh)	PPA Date
1	Govt Medical College - Chittorgarh	399.6	4.05	29-04-2023
2	Govt Medical College - Dungarpur	399.6	4.05	12-05-2023
3	Gurugram University - Ggn	226.8	4.33	07-03-2023
4	Jhalwar Hospital And Medical Colledge - Jhalwar	604.8	4.05	01-05-2023
5	Govt Mahila Evam Bal Chikitsalya - Chittorgarh	97.2	4.05	19-04-2023
6	Paschimi Rajasthan Dugdh Utpadak Sahkari Sang Limited - Jodhpur	604.8	4.05	17-04-2023
7	Shree Haridev Joshi General Hospital - Dungarpur	486	4.05	01-05-2023
8	Shree Sanwaliya Ji Government General Hospital - Chittorgarh	183.6	4.05	19-04-2023
9	Ravinder Nath Tagore Govt Medical College - Udaipur	194.4	4.05	28-04-2023
10	Maharan Bhupal Govt Hospital - Udaipur	194.4	4.05	09-08-2023
11	Govt Medical College - Barmer	604.8	4.05	28-07-2023
12	Shrimati Hira Kuwar Ba Mahila Hospital - Jhalwar	205.2	4.05	01-05-2023
13	Govt Medical College - Dholpur	604.8	4.05	28-07-2023
14	Pmo Mch Unit Mg Hospital - Bhilwara	194.4	4.05	07-05-2023
15	Hindustan Copper Limited - Malanjkhand	5000	3.87	02-02-2021
<b>Total</b>		<b>10000.4</b>		

Source: PPAs





**Important Clauses:** All PPA's are signed for a period of 25 years with fixed tariff as stated above.

Some of the important clauses from the signed PPAs are as follows:-

### Clause-3: Terms and Termination

#### 3.1. Term

<b>Gurugram University, Gurugram</b>	The term of the Agreement shall commence on the Effective Date and shall continue for twenty-five (25) years from the start of the financial year starting immediately after Commercial Operation Date (the "Term"), unless and until terminated earlier pursuant to the provisions of the Agreement. (i.e. if Commercial Operation Date is any date between 01.04.2022 and 31.03.2023, then the 25- year term shall continue till 31.03.2048. After the term, the ownership of the system shall be transferred to the purchaser free of cost. Solar power project construction time shall not be part of commercial operation, PPA is valid of 25 years of commercial operation.
<b>Hindustan Copper Limited, M. P.</b>	The term of the Agreement shall commence on the Effective Date and shall continue for Twenty Five (25) years from the Commercial Operation Date (the "Term"), unless and until terminated earlier pursuant to the provisions of the Agreement. After the Term, the ownership of the System shall be transferred to the Purchaser at free of cost.
<b>REIL-3, Rajasthan</b>	The term of the Agreement shall commence on the Effective Date and shall continue for twenty-five (25) years from the start of the financial year starting immediately after Commercial Operation Date (the "Term"), unless and until terminated earlier pursuant to the provisions of the Agreement. i.e., if Commercial Operation Date is any date between 01.04.2023 and 31.03.2024, then the 25-year term shall continue till 31.03.2048. After the Term, the ownership of the System shall be transferred to the Purchaser free of cost at the discretion of Power Purchaser.

#### 3.2. Purchase Option/Purchase Obligation

<b>Gurugram University, Gurugram</b>	<p><b>Purchase Option/Purchase Obligation</b></p> <p>So long as a Purchaser default shall not have occurred and be continuing, Purchaser has -the option to purchase the System by paying the Power Producer the Purchase price as per Schedule III to this Agreement. To exercise its purchase option, the Purchaser shall not less than Ninety (90) days prior to the proposed Purchase Date, provide written notice to the Power Producer, of Purchaser's intent to exercise its option to purchase the System on such purchase date. In the event Purchaser confirms its intention to exercise the purchase option in writing to the Power Producer, (i) Purchaser shall pay the applicable Purchase Price and any other unpaid dues that have accrued under this agreement to the Power Producer on the Purchase Date, and such payment shall be made in accordance with any written instructions Le. NEFT/RTGS delivered to Purchaser by the Power Producer for payments under the Agreement, and (ii) the Parties shall promptly execute all documents necessary to cause title to the System to pass to Purchaser on the Purchase Date, free and clear of all liens. Upon execution of the documents and payment of the applicable purchase price in each case as described in the preceding sentence, the agreement shall terminate automatically and the Purchaser shall become the owner of the System. Upon such termination, the power producer shall offer' its operations and maintenance ("O&amp;M") services to the purchaser and the parties may enter into a O&amp;M agreement in this regard. The terms and conditions of O&amp;M agreement will be negotiated as good faith between the parties.</p>
<b>Hindustan Copper Limited, M. P.</b>	<p><b>Purchase Option/Purchase Obligation</b></p> <p>So long as a Purchaser default shall not have occurred and be continuing, Purchaser has -the option to purchase the System by paying the Power Producer the Purchase price as per Schedule III to this Agreement. To exercise its purchase option, the Purchaser shall not less than Ninety (90) days prior to the proposed Purchase Date, provide written notice to the Power Producer, of Purchaser's intent to exercise its option to purchase the System on such purchase date. In the event Purchaser confirms its intention to exercise the purchase option in writing to the Power Producer, (i) Purchaser shall pay the applicable Purchase Price and any other unpaid dues that have accrued under this agreement to the Power Producer on the Purchase Date, and such payment shall be made in accordance with any written instructions Le. NEFT/RTGS delivered to Purchaser by the Power Producer for payments under the Agreement, and (ii) the Parties shall promptly execute all documents necessary to cause title to the System to pass to Purchaser on the Purchase Date, free and clear of all liens. Upon execution of the documents and payment of the applicable purchase price in each case as described in the preceding sentence, the agreement shall terminate automatically and the Purchaser shall become the owner of the System. Upon such termination, the</p>



	power producer shall offer its operations and maintenance ("O&M") services to the purchaser and the parties may enter into a O&M agreement in this regard. The terms and conditions of O&M agreement will be negotiated as good faith between the parties.
<b>REIL-3, Rajasthan</b>	<p><b>Purchase Option/Purchase Obligation</b></p> <p>So long as a Purchaser default shall not have occurred and be continuing, Purchaser has -the option to purchase the System by paying the Power Producer the Purchase price as per Schedule III to this Agreement. To exercise its purchase option, the Purchaser shall not less than Ninety (90) days prior to the proposed Purchase Date, provide written notice to the Power Producer, of Purchaser's intent to exercise its option to purchase the System on such purchase date. In the event Purchaser confirms its intention to exercise the purchase option in writing to the Power Producer, (i) Purchaser shall pay the applicable Purchase Price to the Power Producer on the Purchase Date, and such payment shall be made in accordance with any written instructions delivered to Purchaser by the Power Producer for payments under the Agreement, and (ii) the Parties shall promptly execute all documents necessary to (A) cause title to the System to pass to Purchaser on the Purchase Date, free and clear of all liens and (B) assign all vendor warranties for the System to Purchaser. Upon execution of the documents and payment of the applicable purchase price in each case as described in the preceding sentence, the agreement shall terminate automatically, and the Purchaser shall become the owner of the System. Upon such termination, the Power Producer shall offer its operations and maintenance ("O&amp;M") services to the Purchaser and the Parties may enter into an O&amp;M agreement in this regard. The terms and conditions of the O&amp;M agreement will be negotiated in good faith between the parties.</p>

### 3.3 Condition of the agreement prior to installation

<b>Gurugram University, Gurugram</b>	<p><b>Condition of the agreement prior to installation</b></p> <p>In the event that any of the following events or circumstances occur prior to thr commercial operation date, the Power producer may terminate the Agreement, in which case neither party shall have any liability to the other except for any such liabilities that may have occurred prior to such termination.</p> <p>(a) There has been a material adverse change in the rights of purchaser to occupy the premises or the power producer to install the system at the premises.</p> <p>(b) The power producer has determined that there are easements, Capacity Cost Recovery (CCRs) or other liens or encumbrances that would materially impaired or prevent the installation, operation , maintenance or removal of the system. If any dispute arises before commercial operation date, the same shall be resolved under the clause, 17.7 (c)</p>
<b>Hindustan Copper Limited, M. P.</b>	<p><b>Condition of the agreement prior to installation</b></p> <p>In the event that any of the following events or circumstances occur prior to thr commercial operation date, the Power producer may terminate the Agreement, in which case neither party shall have any liability to the other except for any such liabilities that may have occurred prior to such termination.</p> <p>(a) There has been a material adverse change in the rights of purchaser to occupy the premises or the power producer to install the system at the premises.</p> <p>(b) The power producer has determined that there are easements, Capacity Cost Recovery (CCRs) or other liens or encumbrances that would materially impaired or prevent the installation, operation , maintenance or removal of the system. If any dispute arises before commercial operation date, the same shall be resolved under the clause, 17.7 (c)</p>
<b>REIL-3, Rajasthan</b>	<p><b>Condition of the agreement prior to installation</b></p> <p>In the event that any of the following events or circumstances occur prior to thr commercial operation date, the Power producer may terminate the Agreement, in which case neither party shall have any liability to the other except for any such liabilities that may have occurred prior to such termination.</p> <p>(a) There has been a material adverse change in the rights of purchaser to occupy the premises or the power producer to install the system at the premises.</p> <p>(b) The power producer has determined that there are easements, Capacity Cost Recovery (CCRs) or other liens or encumbrances that would materially impaired or prevent the installation, operation , maintenance or removal of the system. If any dispute arises before commercial operation date, the same shall be resolved under the clause, 17.7 (c)</p>



#### 4.1 Installation Work

<b>Gurugram University, Gurugram</b>	a) The Power Producer will cause the Project to be designed, manufactured, supplied, engineered, erected, tested and commissioned, operated & maintained and constructed substantially in accordance with REIL RFS No REIL/BID/RTS(C)/2019-20/001 DATED 04.10.2019 and the sanction letter issued by REIL. The Power Producer shall provide to the Purchaser a bill of materials listing the major equipment constituting the System. Such a bill of materials shall be provided within 30 days of the Commercial Operation Date.
<b>Hindustan Copper Limited, M. P.</b>	a) The Power Producer will cause the Project to be designed, manufactured, supplied, engineered, erected, tested and commissioned, operated & maintained and constructed substantially in accordance with REIL RFS No REIL/BID/RTS(C)/2019-20/001 DATED 04.10.2019 and the sanction letter issued by REIL. The Power Producer shall provide to the Purchaser a bill of materials listing the major equipment constituting the System. Such a bill of materials shall be provided within 30 days of the Commercial Operation Date.
<b>REIL-3, Rajasthan</b>	a) The Power Producer will cause the Project to be designed, manufactured, supplied, engineered, erected, tested and commissioned, operated & maintained and constructed substantially in accordance with REIL RFS No REIL/BID/RTS(C)/2019-20/001 DATED 04.10.2019 and the sanction letter issued by REIL. The Power Producer shall provide to the Purchaser a bill of materials listing the major equipment constituting the System. Such a bill of materials shall be provided within 30 days of the Commercial Operation Date.

#### 7.1 Tariff and Payment

<b>Gurugram University, Gurugram</b>	Consideration Purchaser shall pay to the Power Producer a monthly payment (the "Solar Power Payment") for the Solar Power generated by the System as per the Metering clause 5.2 (b) above during each calendar month of the Term equal to the actual Monthly Production as recorded in Joint Meter Reading Report for the System for the relevant month multiplied by the Tariff irrespective of (i) whether any or all units of Solar Power has been drawn, consumed or utilized by Purchaser and / or (ii) whether any Solar Power has been injected, whether inadvertently or otherwise, into the grid of the Distribution Utility. The Power Producer will bill the Purchaser for each KWh metered as above at the Delivery Point, at the Tariff prevailing at that point of time as detailed in Schedule - II, the Tariff will be equal to <b>Rs.4.33 /kWh</b> levelized tariff as per REIL allocations. The 'year' considered shall be the financial year which April 1st to 31st March of every year as per REIL. Schedule II provides a detailed year on year tariff schedule.
<b>Hindustan Copper Limited, M. P.</b>	Consideration Purchaser shall pay to the Power Producer a monthly payment (the "Solar Power Payment") for the Solar Power generated by the System as per the Metering clause 5.2 (b) above during each calendar month of the Term equal to the actual Monthly Production as recorded in Joint Meter Reading Report for the System for the relevant month multiplied by the Tariff irrespective of (i) whether any or all units of Solar Power has been drawn, consumed or utilized by Purchaser and / or (ii) whether any Solar Power has been injected, whether inadvertently or otherwise, into the grid of the Distribution Utility. The Power Producer will bill the Purchaser for each KWh metered as above at the Delivery Point, at the Tariff prevailing at that point of time as detailed in Schedule - II, the Tariff will be equal to <b>Rs.3.87 /kWh + GST</b> levelized tariff as per REIL allocations and MOM dt. 15-01-2021. The 'year' considered shall be the financial year which April 1st to 31st March of every year as per REIL. Schedule II provides a detailed year on year tariff schedule.
<b>REIL-3, Rajasthan</b>	Consideration Purchaser shall pay to the Power Producer a monthly payment (the "Solar Power Payment") for the Solar Power generated by the System as per the Metering clause 5.2 (b) above during each calendar month of the Term equal to the actual Monthly Production as recorded in Joint Meter Reading Report for the System for the relevant month multiplied by the Tariff irrespective of (i) whether any or all units of Solar Power has been drawn, consumed or utilized by Purchaser and / or (ii) whether any Solar Power has been injected, whether inadvertently or otherwise, into the grid of the Distribution Utility. The Power Producer will bill the Purchaser for each KWh metered as above at the Delivery Point, at the Tariff prevailing at that point of time as detailed in Schedule - II, the Tariff will be equal to <b>Rs.4.05 /kWh</b> levelized tariff as per REIL allocations. The 'year' considered shall be the financial year which April 1st to 31st March of every year as per REIL. Schedule II provides a detailed year on year tariff schedule.

Please note that the above main clauses of PPA are mentioned only for illustration purpose of the convenience of the lenders to analyze the Project in terms of technicality. However, this shall not be construed as professional opinion on the contract legality which is out of scope of this report.



## PART F

## CURRENT STATUS OF WORK

As per information and documents shared by the company's representative, following are our observations and remarks on the current status of the project:

- a. As per the verbal information received from the management of the subject company, installation work is yet to be started.
- b. As per information shared by the company officials, the proposed COD of the entire project is scheduled in the month of January 2024 to March 2024 as the technical work for mounting of PV panels is started at the project locations.



A

**PART G****PROJECT COST & EXPENDITURE**

1. **PROJECT COST:** Project cost has been taken from the Copy of Detailed Project Report from M/s TRURE SPV Pvt. Ltd. for the installation of Roof Mounted Grid Tie Solar PV plant located at Haryana, Rajasthan & Madhya Pradesh. The terms of engagement are tabulated below:

S. No.	Description	Amount (in Cr.) (Including duties and taxes)
1	EPC Coost + GST	Rs. 44.50
2	Channel Partner Fee	Rs. 4.72
3	Pre-Operational Expenses	Rs. 0.50
4	Lander Charges	Rs. 0.51
5	IDC	Rs. 3.88
6	DSRA	Rs. 1.62
<b>Total</b>		<b>Rs. 55.73</b>

**Observations and Remarks:**

- a. Project cost calculated on the basis of the Benchmark Cost provided by the MNRE has been tabulated below:

S. No.	Particulars	Benchmark Cost (In Rs./kW)	Project Capacity (In MW)	Total Project Cost (Excluding GST) (In Rs.)	Total Project Cost (Including ~14% GST) (In Rs.)
1	As per Ministry of New & Renewable Energy	35,886*	10,000	35,88,60,000	40,91,00,400
			<b>10 MWp</b>		<b>Rs. 40.91 Cr.</b>

\*Benchmark cost for 2021-22





b. Project cost calculated on the basis of market comparable:

S. No.	Particulars	Excluding GST	Including GST	Remark
		Per KW Cost (In Rs.)	Per KW Cost (In Rs.)	
1	Subject project installation cost	-	44,500	as per Detailed Project Cost
<b>Market Research Details</b>				
2	MNRE Benchmark Cost	35,886	-	Refer Annexure-1
<b>Market Research</b>				
3	Quotation-1	48,700	55,400	Refer Annexure-2
4	Quotation-2	37,740	42,500	
5	Quotation-3	45,000	51,200	
6	Quotation-4 (Tata Solar)	60,000	68,300	

- c. As per our analysis and market research, the installation cost of Rooftop Mounted Solar Power Plant varies from Rs. 45,500/- per KW to Rs. 68,300/- per KW. For the smaller setups the price is higher and for large set-up, price is less.
- d. The project cost is solely depends upon the project location, contractors profit, type of module and its supporting structures, etc.
- e. Based upon the above mentioned details, the project cost amounting to Rs. 55.73 Cr. inclusive of GST and other cost for the installation of subject Solar Power Plant seems to be reasonable.
- f. As per the verbal information received from the management of the subject company, installation work is yet to be started.

**Note:**

- Project cost is analyzed based on lump sum cost only and not item wise.
- Project cost is assessed for the date of this report only and due to price fluctuations it may vary from time to time.

2. **EXPENDITURE:** As per information/details shared by the company, the installation work related to power plant is yet to start. Thus, the expenditure incurred till date on the project is NIL.



## PART H

## PHOTOGRAPHS

***Since the installation work related to solar panels is yet to start and this is just a Desktop LIE based upon documents provided. Thus, Photographs are not available.***





**PART I****OTHER DOCUMENTS & REFERENCES****Annexure-1: Benchmark Cost by MNRE:**

No. 32/24/2020-SPV Division  
 Government of India  
 Ministry of New & Renewable Energy

\*\*\*

Block No. 14, CGO Complex, Lodhi Road,  
 New Delhi, Dated 27<sup>th</sup> October 2021

**ORDER**

**Subject: Amendment in Benchmark costs for Grid-connected Rooftop Solar PV systems for the financial year 2021-22 -reg.**

Vide Order no.318/38/2018-GCRT dated 18.08.2021 dated 18.08.2021, benchmark costs including taxes, were issued for FY 2021-22 by the Ministry. Subsequently, applicable Goods & Services Tax (GST) rates have been revised by GST Council for identified renewable energy equipment. In order to address the recent changes in GST rates and also any further changes in GST rates in future, it has been decided to issue benchmark costs excluding GST. For the purpose of calculating CFA available under MNRE Scheme, applicable GST rates may be added to these benchmark costs. Accordingly, undersigned is directed to convey the approval of competent authority for issuing the benchmark costs, excluding GST, for Grid-connected Rooftop Solar PV systems applicable for MNRE Scheme for the year 2021-22. Rooftop solar system capacity-wise benchmark costs are given below:

(A) For General Category States/ UTs:

RTS System Capacity range	Up to 1 kW	> 1 kW upto 2 kW	>2kW Upto 3kW	> 3kW upto 10 kW	>10 kW upto 100 kW	>100 kW upto 500 kW
Benchmark cost (Rs./kW) excluding GST	46923	43140	42020	40991	38236	35886



# LIE REPORT

10 (± 10%) MWp GRID CONNECTED  
SOLAR POWER PLANT

## Market Comparables:

### Annexure-2

Particulars	Estimated Cost
Solar Panels	3 Cr.
Solar Inverter	1 Cr.
Combiners + Junction Boxes	20 Lakh
Protective Gears Arrangement	10 Lakh
SCADA & Data Logger System	7 Lakh
Land Bank	*5 Acre
Erection of Project	50 Lakh
Total Project Cost	4.87 Cr. (Approx.)

### Project Cost (Mono-Crystalline) included GST

S. No.	Description	On Tin Roof
1.	Turnkey EPC prices for Design, Supply, Erection, Testing & Commissioning of 250 KW Solar Power Generating System	94,35,000
2.	GST	11,90,000
<b>Total (GST Included)</b>		<b>1,06,25,000 /-</b>

➤ Discom Legal & Liasioning Fees included above.

Shubham Agarwal & Praveen Mehta  
SOLAR NATION

M- +91 9461846401,9829227948 Email – [solarnationbusiness@gmail.com](mailto:solarnationbusiness@gmail.com)







Homes

Housing Society

Commercial

About Us

Blog

## Cost of 1 MW solar plant

Now, let us discuss the cost of 1 MW solar plant. There is no fixed number for the final 1 MW solar plant cost. However, we have a tentative figure – between 4 to 5 crore.

This price range is subject to increase or decrease depending on various factors. Here are some factors affecting the overall 1 megawatt solar power plant cost.

- Type of solar panels selected – **monocrystalline or polycrystalline panels**
- Manufacturing technology and efficiency of the solar inverter selected
- Solar brand opted
- Type of solar power plant – on-Grid, off-grid, or hybrid

Concerning the 1 MW solar power plant subsidy 2020, the **government provides subsidies** on solar plants for residential setups and housing societies. No subsidy is offered for solar systems being installed for commercial purposes.

### Tata Solar Power Plants

₹ 60,000/ KW [Get Latest Price](#)

Country of Origin

Made in India

Minimum Order Quantity

10 KW

We Design, Supply and Erect Tata Solar Power Plants

[View Complete Details](#)

**Get Latest Price**

Request a quote



[View Similar Products](#)



**Data by Global Solar Atlas by World Bank Group****1. Gurugram University, Gurugram****GLOBAL SOLAR ATLAS**

BY WORLD BANK GROUP

**Gurugram District**

28.464615°, 077.029919°

unnamed road, Gurugram, Haryana, India

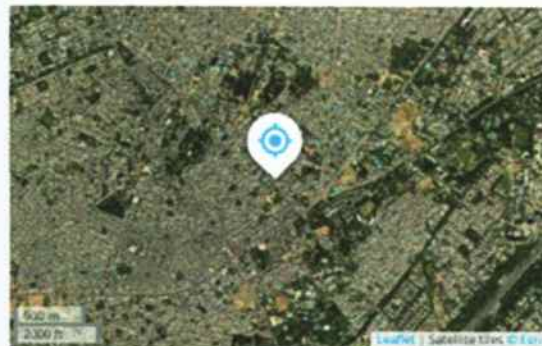
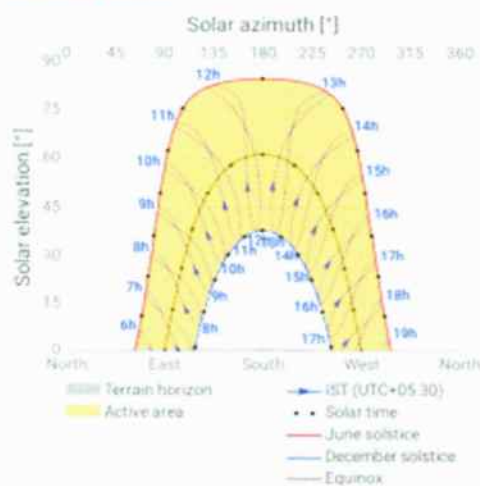
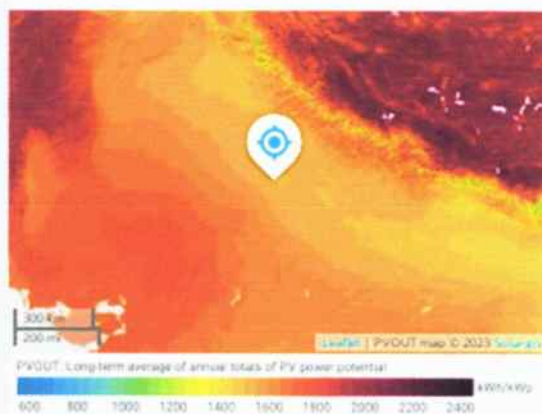
Time zone: UTC+05:30, Asia/Kolkata [IST]

Report generated: 19 Oct 2023

**SITE INFO****Map data**

Per year

Specific photovoltaic power output	PVOUT specific	1486.9	kWh/kWp
Direct normal irradiation	DNI	1187.0	Wh/m <sup>2</sup>
Global horizontal irradiation	GHI	1735.5	kWh/m <sup>2</sup>
Diffuse horizontal irradiation	DIF	931.1	kWh/m <sup>2</sup>
Global tilted irradiation at optimum angle	GTI opt	1890.1	kWh/m <sup>2</sup>
Optimum tilt of PV modules	OPTA	27 / 180	°
Air temperature	TEMP	25.1	°C
Terrain elevation	ELE	229	m

**Map****Horizon and sunpath****PVOUT map**



## GLOBAL SOLAR ATLAS

BY WORLD BANK GROUP

### PV ELECTRICITY AND SOLAR RADIATION

#### Annual averages

Direct normal irradiation

**1187.7**

kWh/m<sup>2</sup> per year

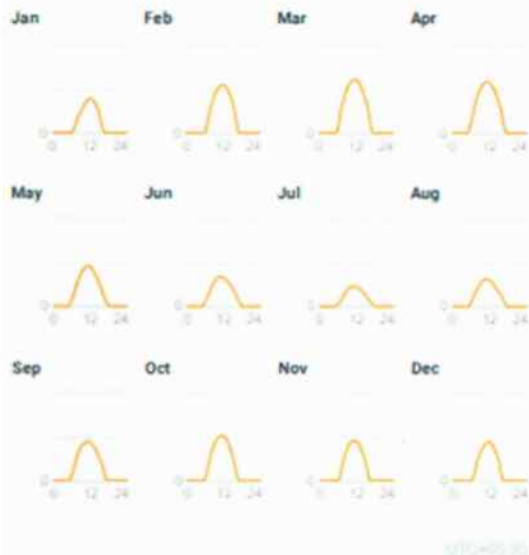
#### Monthly averages

Direct normal irradiation



#### Average hourly profiles

Direct normal irradiation (W/m<sup>2</sup>)

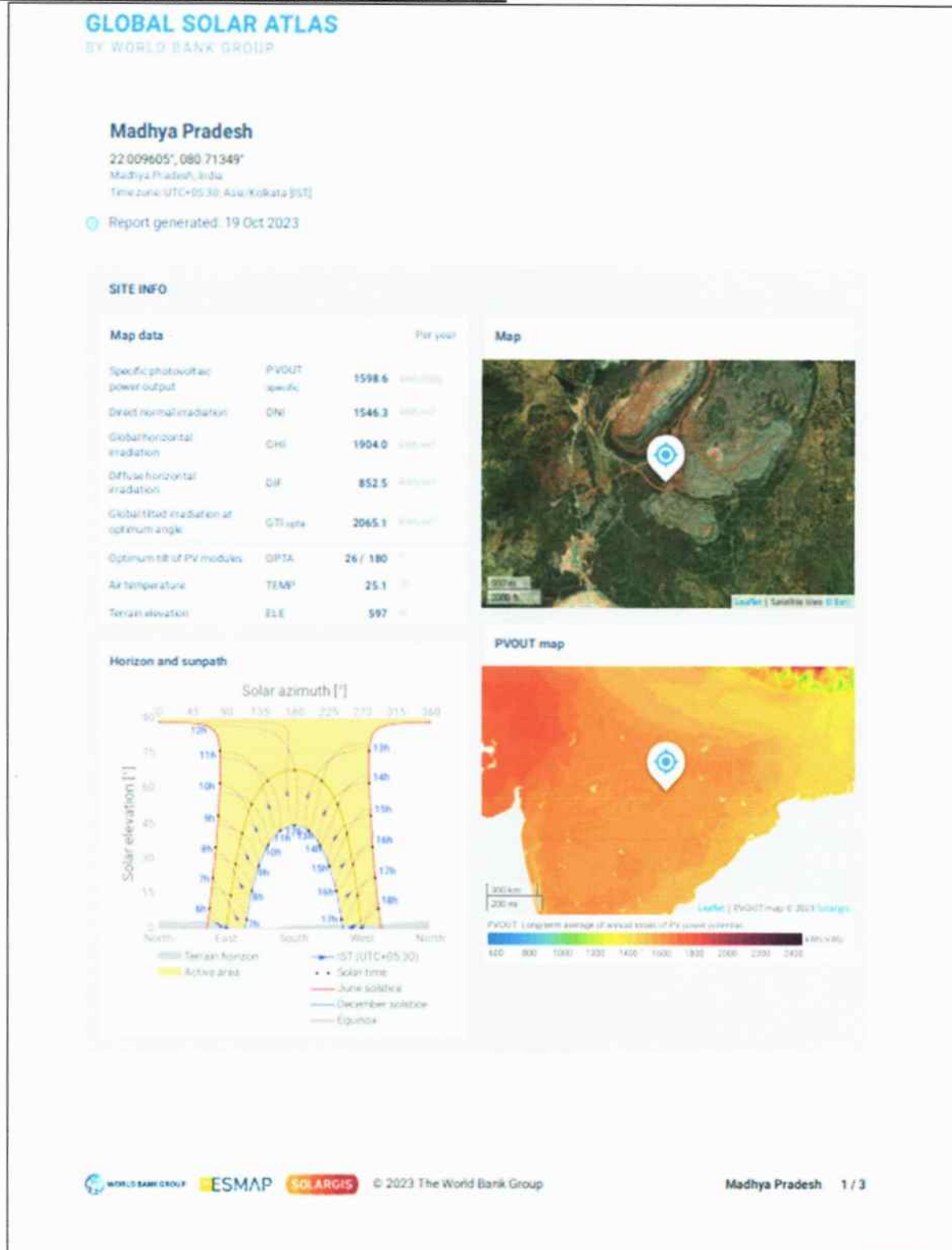


#### Average hourly profiles

Direct normal irradiation (W/m<sup>2</sup>)



## 2. Hindustan Copper Limited, Malanjkhand, M.P.



rk Associates Valuers & Techno Engineering Consultants (P) Ltd.



## GLOBAL SOLAR ATLAS

BY WORLD BANK GROUP

## PV ELECTRICITY AND SOLAR RADIATION

## Annual averages

Direct normal irradiance (DNI)

1549.4

kWh/m<sup>2</sup>/year

## Monthly averages

Direct normal irradiance (DNI)



## Average hourly profiles

Direct normal irradiance (DNI)



## Average hourly profiles

Direct normal irradiance (DNI)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0-1												
1-2												
2-3												
3-4												
4-5												
5-6												
6-7	76	87	128	155	195	46	30	90	156	118	62	
7-8	217	277	492	615	754	146	63	75	133	161	157	334
8-9	552	545	547	553	487	250	148	116	280	462	542	543
9-10	633	547	652	648	787	214	136	158	387	527	621	438
10-11	225	215	212	244	425	237	171	187	372	582	457	484
11-12	713	720	727	744	625	352	179	189	475	594	474	735
12-13	134	727	718	634	587	329	179	151	357	536	427	484
13-14	109	688	672	542	512	292	162	146	315	472	372	437
14-15	388	649	542	492	412	230	120	132	245	393	492	543
15-16	475	562	481	402	318	130	83	95	174	292	346	412
16-17	147	278	245	222	174	105	56	62	14	74	58	74
17-18		3	17	46	42	31	24	52	4			
18-19												
19-20												
20-21												
21-22												
22-23												
23-24												
Sun	1467	1474	1615	1701	1874	2042	1305	1475	2030	1437	1050	532

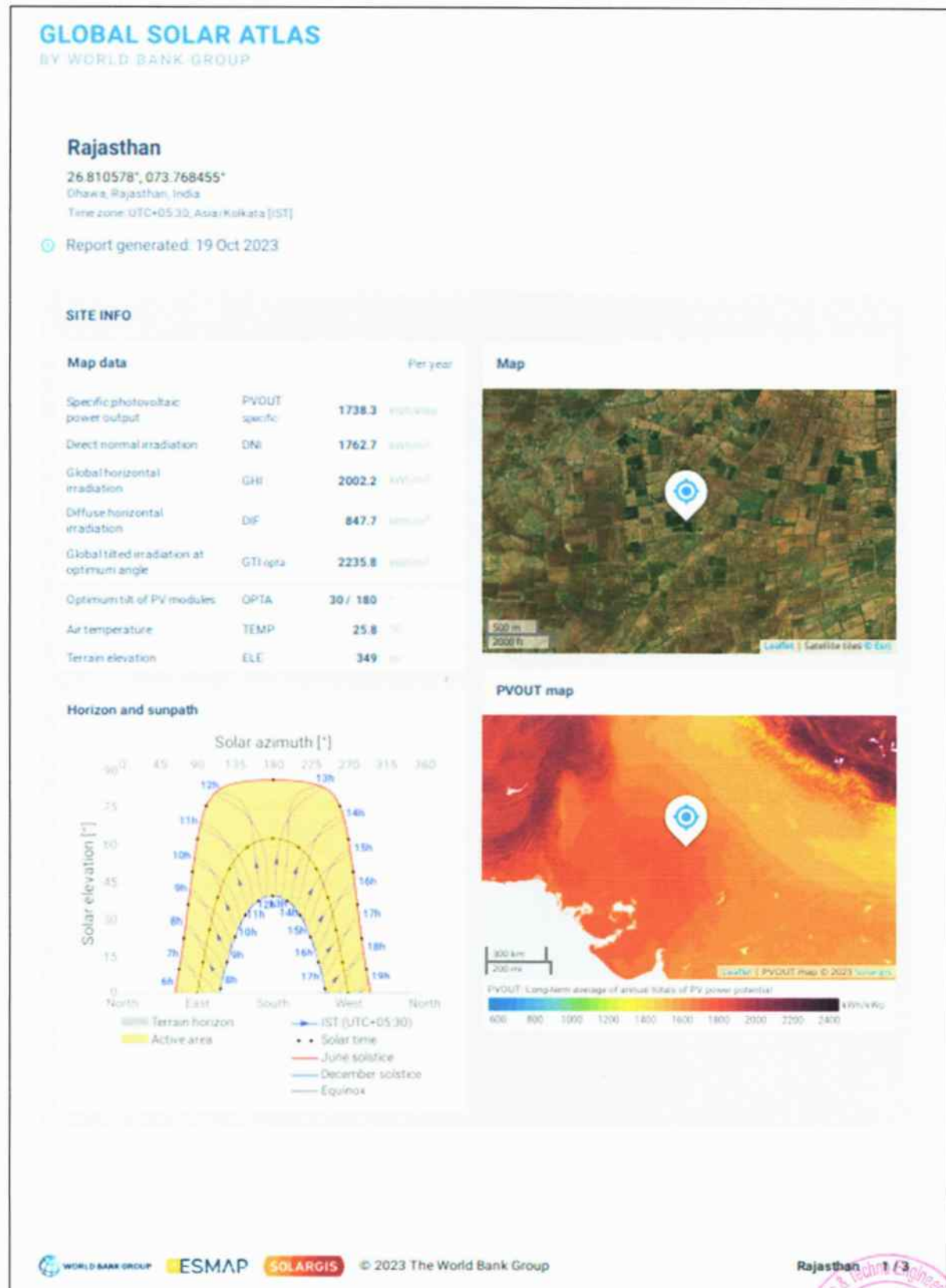


WORLD BANK GROUP



© 2023 The World Bank Group

Madhya Pradesh 2 / 3

2. REIL-3, Rajasthan



## GLOBAL SOLAR ATLAS

BY WORLD BANK GROUP

### PV ELECTRICITY AND SOLAR RADIATION

#### Annual averages

Direct normal irradiation

**1761.5**

kWh/m<sup>2</sup> per year

#### Monthly averages

Direct normal irradiation



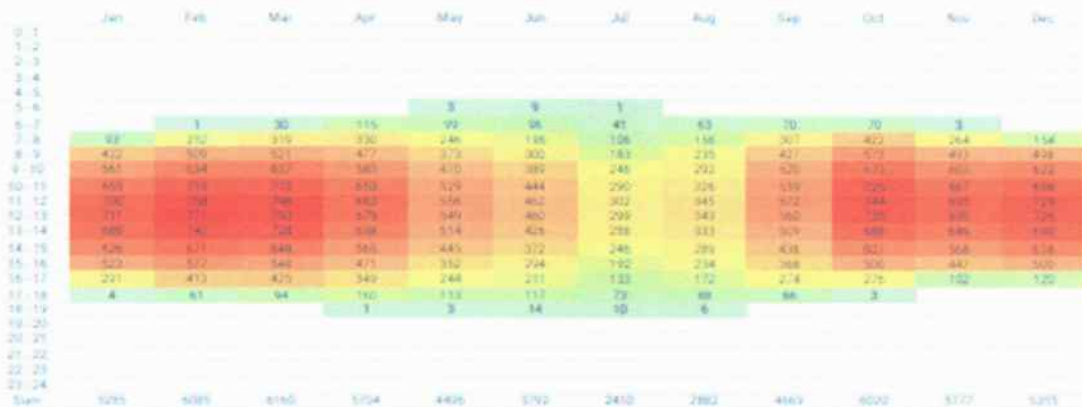
#### Average hourly profiles

Direct normal irradiation (kWh/m<sup>2</sup>)



#### Average hourly profiles

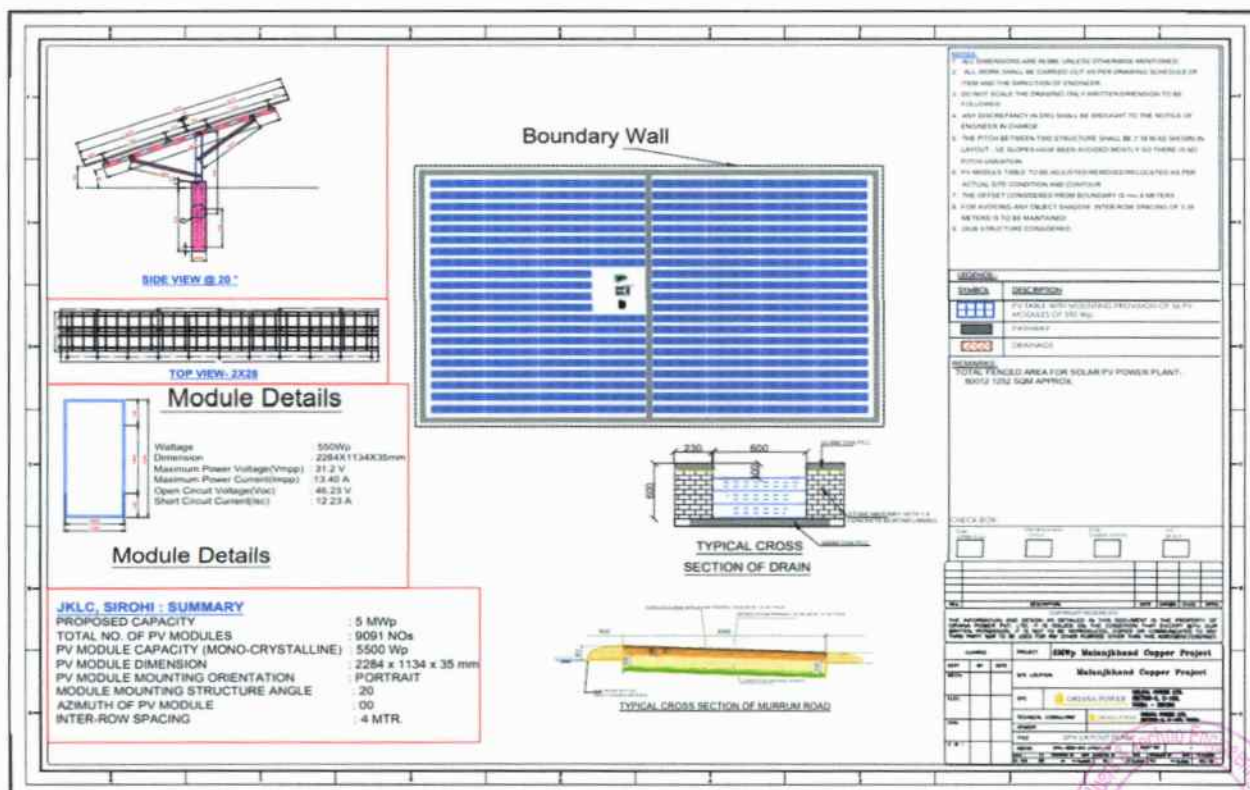
Direct normal irradiation (kWh/m<sup>2</sup>)



1. Gurugram University, Gurugram



**2. Hindustan Copper Limited, Malanjkhand, M.P.**





Site-GOVT MEDICAL COLLEGE - CHITTORGARH  
Modules-741Nos.  
Capacity-400 kWp

Government Medical College Durgapur

Module-741Nos.  
Capacity-400 kWp

GOVT MEDICAL COLLEGE - DUNGARPUR

Module-741Nos.  
Capacity-400 kWp

NOTE:  
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED  
2. MINIMUM CLEARANCE BETWEEN ROOF AND LOWER EDGE OF PV MODULE SHALL BE 300 MM CONSIDER  
3. ALL WORK SHALL BE CARRIED OUT AS PER DRAWING SCHEDULE OF ITEM AND THE DIRECTION OF ENGINEER  
4. DO NOT SCALE THE DRAWING ONLY DIMENSIONS TO BE FOLLOWED  
5. MODULE MOUNTING STRUCTURE OF ORGANIZATION CONSIDERED FOR ARRAY LAYOUT

NO.	REVISION	DATE	BY	CHKD
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

NO.	REVISION	DATE	BY	CHKD
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

NO.	REVISION	DATE	BY	CHKD
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

NO.	REVISION	DATE	BY	CHKD
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

NO.	REVISION	DATE	BY	CHKD
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

NO.	REVISION	DATE	BY	CHKD
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

NO.	REVISION	DATE	BY	CHKD
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

NO.	REVISION	DATE	BY	CHKD
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

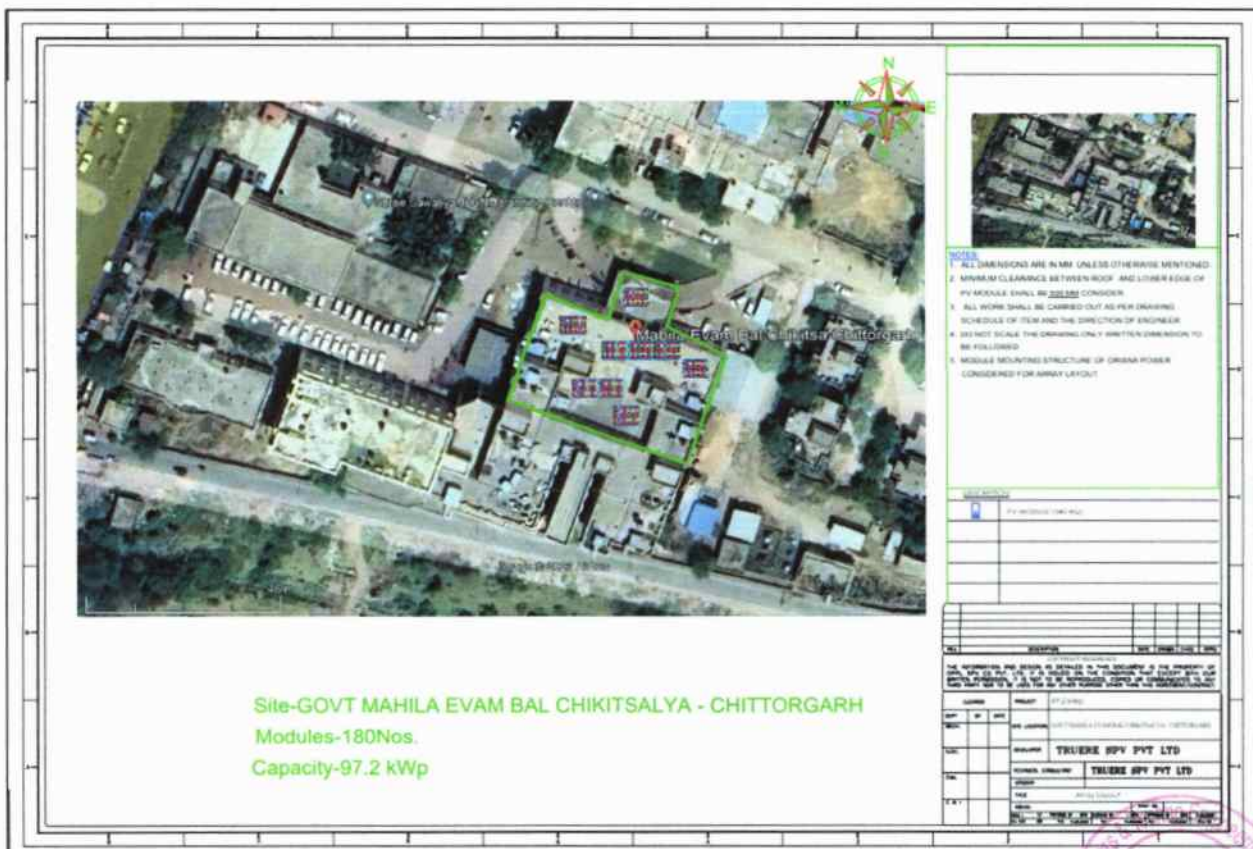
NO.	REVISION	DATE	BY	CHKD
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				



## 5. JHALWAR HOSPITAL AND MEDICAL COLLEDGE – JHALWAR



## 6. GOVT MAHILA EVAM BAL CHIKITSALYA - CHITTORGARH





Site-PASCHIMI RAJASTHAN DUGDH UTPADAK SAHKARI SANG LIMITED - JODHPUR  
Modules-1120 Nos.  
Capacity-604.80 kWp

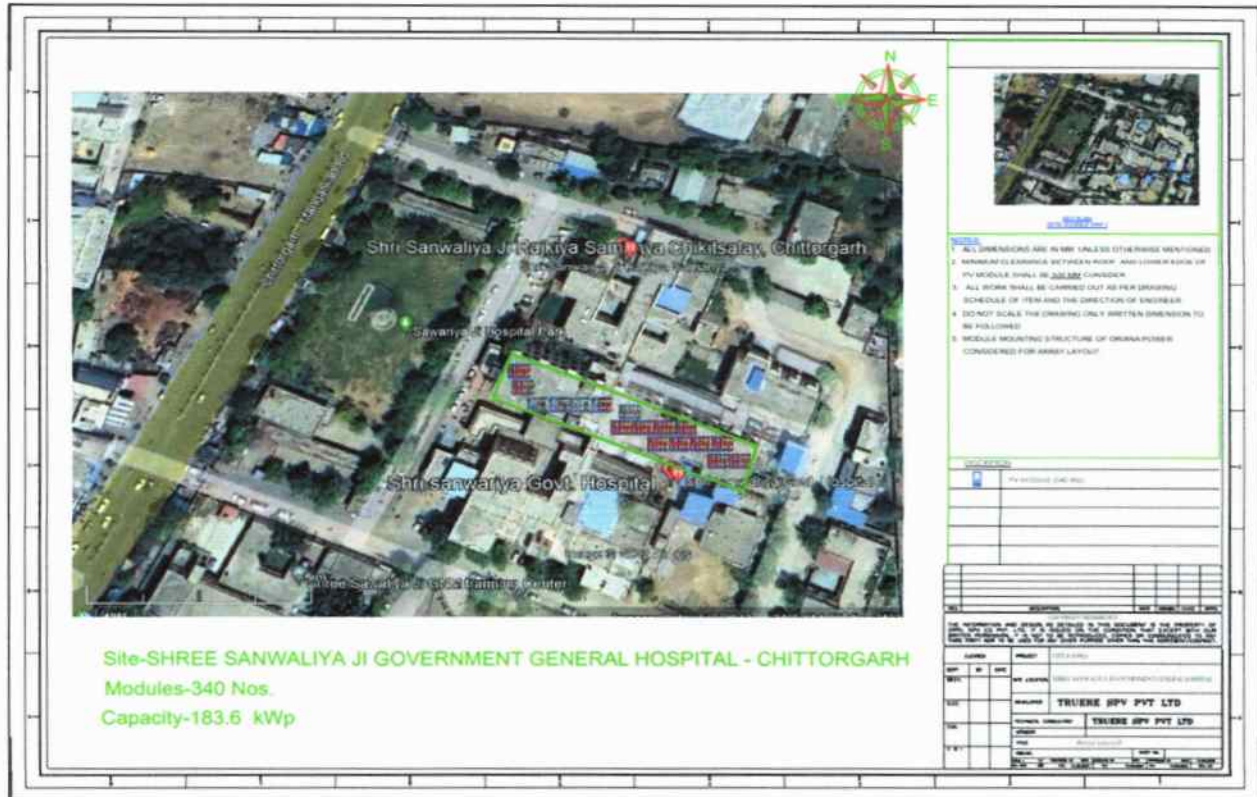
[illegible]

Site-SHREE HARIDEV JOSHI GENERAL HOSPITAL - DUNGARPUR  
Modules-900 Nos.  
Capacity-486 kWp

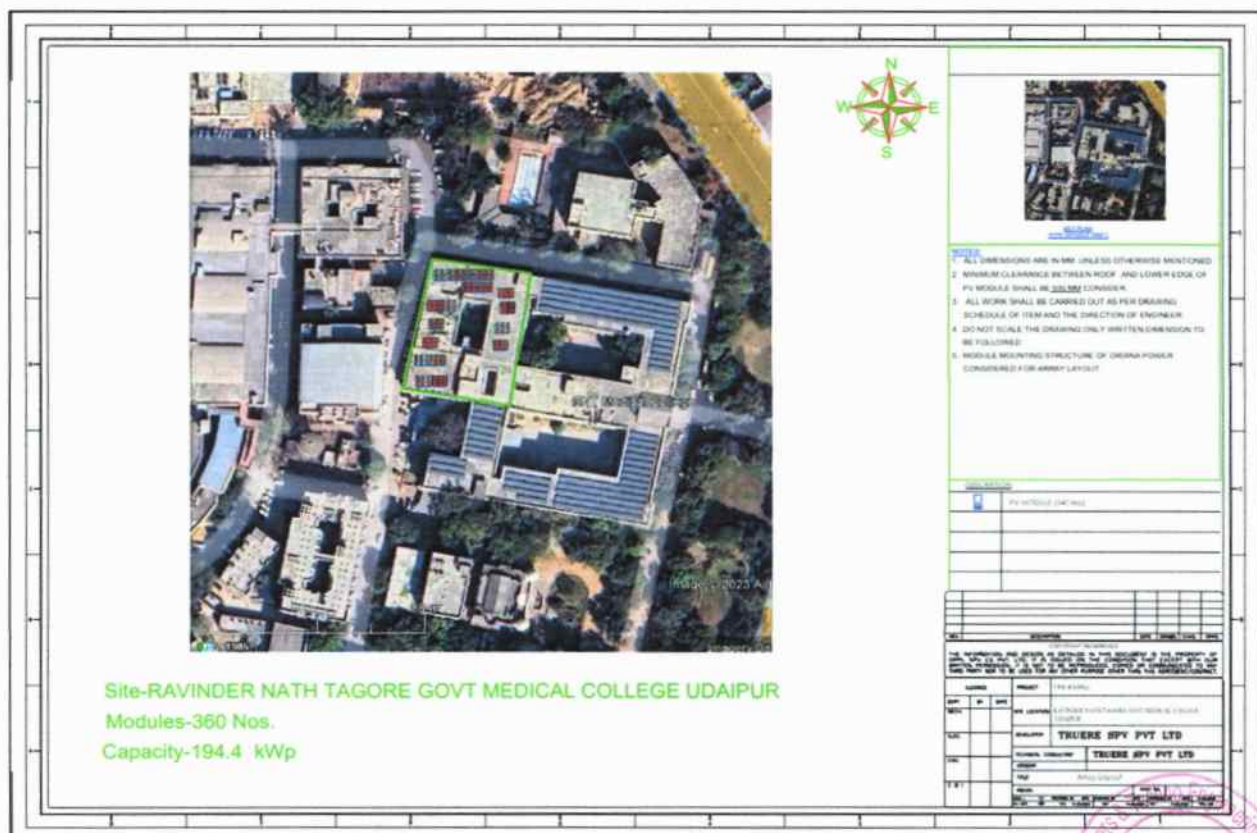
[illegible]



## 9. SHREE SANWALIYA JI GOVERNMENT GENERAL HOSPITAL - CHITTORGARH



## 10. RAVINDER NATH TAGORE GOVT MEDICAL COLLEGE – UDAIPUR

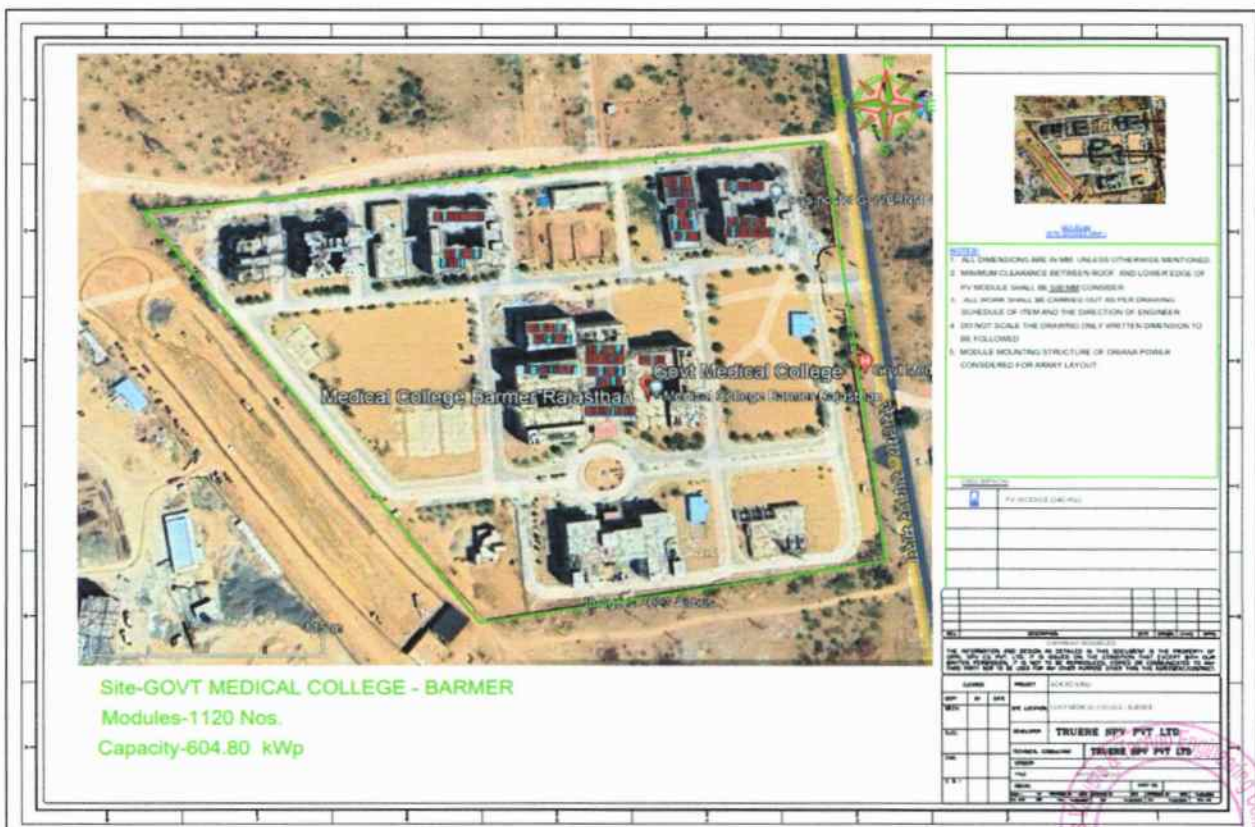




## 11. MAHARANA BHUPAL GOVT HOSPITAL - UDAIPUR

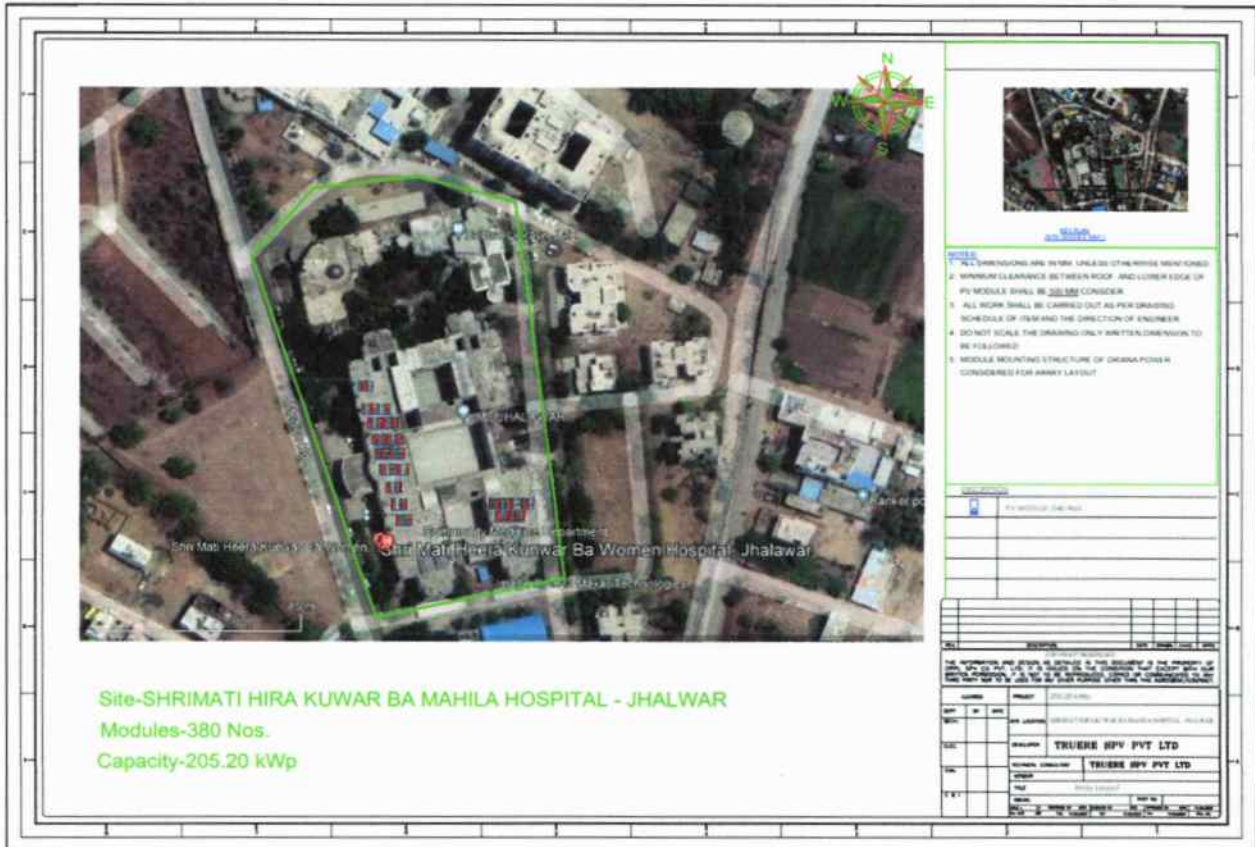


## 12. GOVT MEDICAL COLLEGE - BARMER

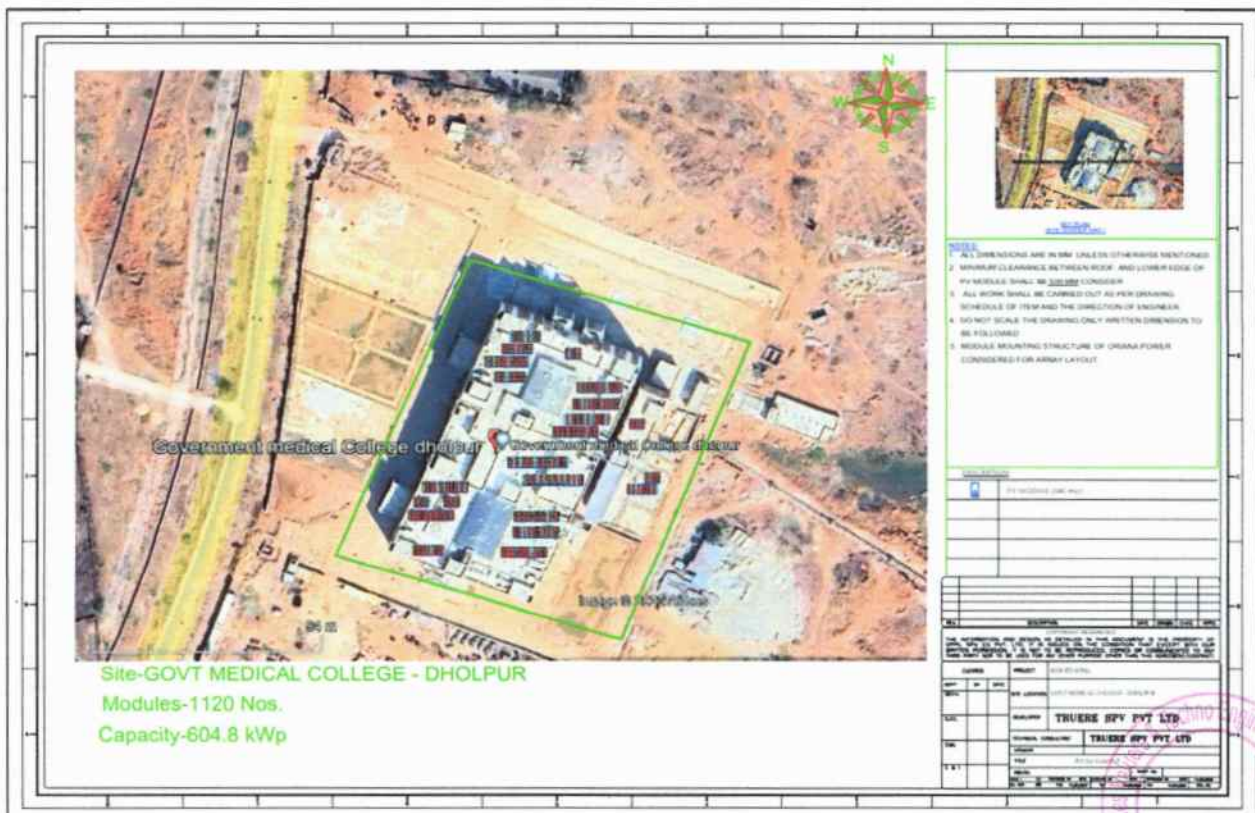




## 13. SHRIMATI HIRA KUWAR BA MAHILA HOSPITAL – JHALWAR

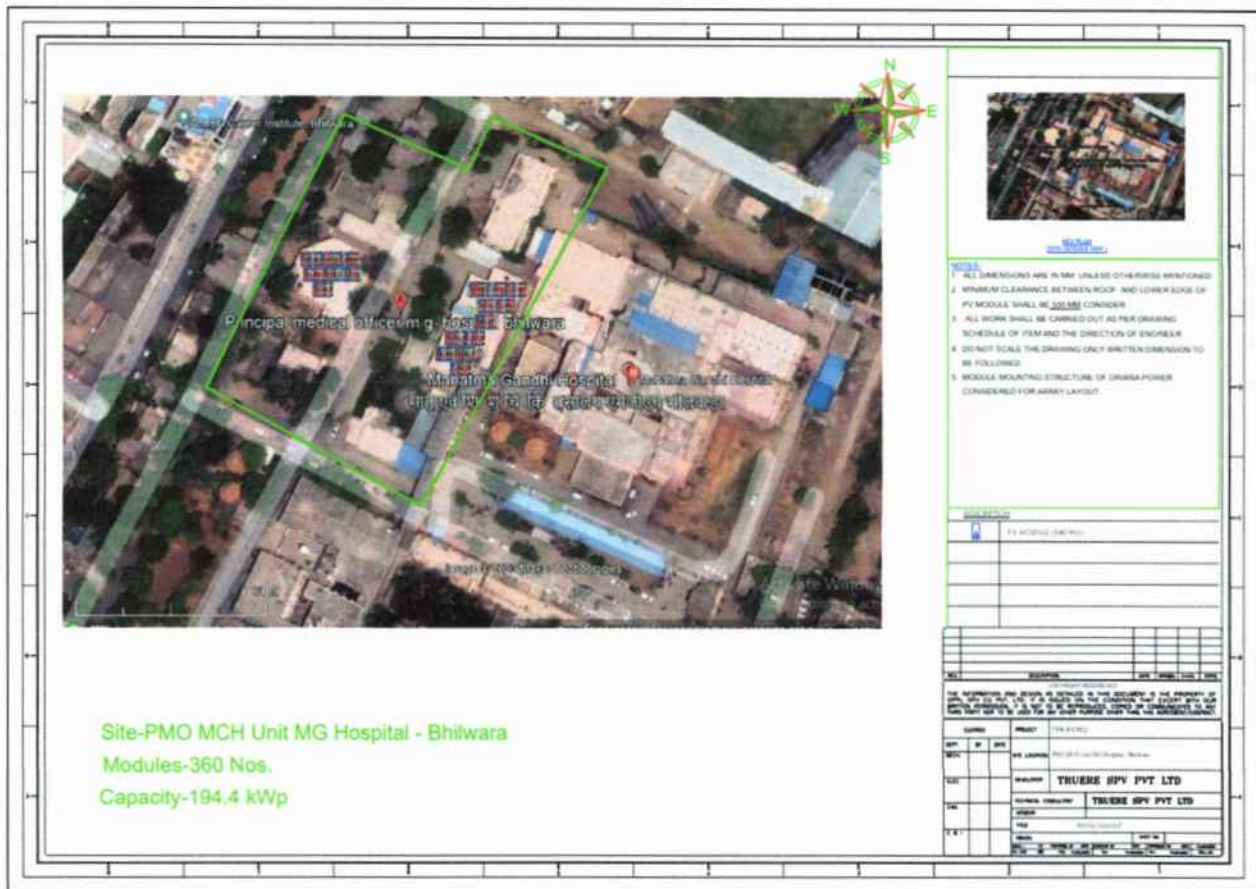


## 14. GOVT MEDICAL COLLEGE - DHOLPUR





## 15. PMO MCH UNIT MG HOSPITAL - BHILWARA



A



**Power Purchase Agreement**

**1. GOVT MEDICAL COLLEGE - CHITTORGARH**

**POWER PURCHASE AGREEMENT (PPA)**  
**BETWEEN**  
**OPWR DEL SPV PRIVATE LIMITED**  
**AND**  
**GOVERNMENT MEDICAL COLLEGE CHITTORGARH**  
**FOR**  
**DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND**  
**COMMISSIONING INCLUDING WARRANTY, OPERATION &**  
**MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR**  
**PHOTOVOLTAIC PLANTS IN RESCO MODEL**  
**AT**  
**RITHOLA, CHITTORGARH, RAJASTHAN 312025**

  
**PRINCIPAL**  
GOVERNMENT MEDICAL COLLEGE  
CHITTORGARH (RAJ.)

Page 1 of 28

For OPWR DEL SPV PVT. LTD.  
  
Power Producer  
Director/Auth. Sign



**2. GOVT MEDICAL COLLEGE – DUNGARPUR**

**POWER PURCHASE AGREEMENT (PPA)**

**BETWEEN**

**OPWR DEL SPV PRIVATE LIMITED**

**AND**

**GOVERNMENT MEDICAL COLLEGE, DUNGARPUR**

**FOR**

**DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND  
COMMISSIONING INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR  
PHOTOVOLTAIC PLANTS IN RESCO MODEL**

**AT**

**THANA, DUNGARPUR, RAJASTHAN, INDIA**

For OPWR DEL SPV PVT. LTD.

*Anilot Sola*  
Director/Auth. Sign.

Power Producer

Power Purchaser

*Dr. H. L. Purohit*  
छॉ. हल्ल गोहलल पुकर  
प्रदानाकार एवं निर्देशक  
राजकीय आधुनिकान महाविद्यालय  
दुंगरपुर (राजस्थान)

Page 1 of 28



**3. GURUGRAM UNIVERSITY - GURUGRAM**

**POWER PURCHASE AGREEMENT (PPA)**  
**BETWEEN**  
**M/s OPWR DEL SPV PRIVATE LIMITED**  
**AND**  
**GURUGRAM UNIVERSITY**  
**FOR**  
**DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND**  
**COMMISSIONING INCLUDING WARRANTY, OPERATION & MAINTENANCE OF**  
**GRID CONNECTED ROOFTOP SOLAR PHOTOVOLTAIC PLANT OF**  
**195KW IN RESCO MODEL**  
**AT**  
**GURUGRAM UNIVERSITY, HARYANA**

This Power Purchase Agreement (PPA) is executed on 7<sup>th</sup> day of March 2023 at Haryana between Gurugram University (hereinafter referred to as "Purchaser") AND M/S OPWR DEL SPV PRIVATE LIMITED (Company CIN U40108UP2020PTC135247), a Private Limited Company incorporated under the Companies Act, 2013 having its registered office at 202-203 Udyog Kendra Extn - II, Greater Noida, Gautam Buddha Nagar, U.P - 201306 IN (hereinafter referred to as "Power Producer" which expression shall, unless repugnant to the meaning or context hereof, be deemed to include its successors and assigns). The Purchaser and Power Producer are each individually referred to as a "Party" and collectively as the "Parties".

**WHEREAS:**

The Power Producer has been notified as Project Company for successful bidder by Rajasthan Electronics & Instruments Limited (hereinafter referred to as "REIL") for "Design, Manufacture, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance of Rooftop Solar PV System of 195 KW (± 10 %) at Gurugram University, Sec-51, Gurugram, Haryana (Project) and as per competitive bidding under REIL RFS No: REIL/BID/RTS(C)/2019-20/001 DATED 04.10.2019 and Letter of Allocation vide ref no. REIL/RTS/50MW RESCO(Haryana)/2019-20/7760 dated 11.03.2020.

The Power Producer is engaged in the business of design, supply, erection, testing, commissioning, operating and maintenance of power plants, including grid connected rooftop power projects.

The Power Producer has agreed to install and operate a solar photovoltaic power plant of capacity as per Schedule I at the Premises after due inspection of the Premises as defined hereinafter and supply the entire Solar Power of the Project to Purchaser on the terms and conditions contained in this Agreement.

  
Registrar  
Gurugram University  
Gurugram

OPWR DEL SPV PRIVATE LIMITED  


Director





**4. JHALWAR HOSPITAL AND MEDICAL COLLEDGE - JHALWAR**

**POWER PURCHASE AGREEMENT (PPA)**

**BETWEEN**

**OPWR DEL SPV PRIVATE LIMITED**

**AND**

**JHALAWAR HOSPITAL AND MEDICAL COLLEGE, JHALAWAR**

**FOR**

**DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND  
COMMISSIONING INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR  
PHOTOVOLTAIC PLANTS IN RESCO MODEL**

**AT**

**NH 52, KOTA ROAD, JHALAWAR, RAJASTHAN, 326001, INDIA**

*[Signature]*  
प्रधानाध्यक्ष एवं निबंधक  
मेडिकल कॉलेज, जालंधर (राज.)  
Power Producer

For OPWR DEL SPV PVT. LTD.  
*[Signature]*  
Director/Auth. Sign.

Power Producer

Page 1 of 28

**5. GOVT MAHILA EVAM BAL CHIKITSALYA - CHITTORGARH**

**POWER PURCHASE AGREEMENT (PPA)**

**BETWEEN**

**OPWR DEL SPV PRIVATE LIMITED**

**AND**

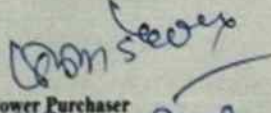
**GOVT. MAHILA EVAM BAL CHIKITSALAYA CHITTORGARH**

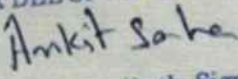
**FOR**

**DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND  
COMMISSIONING INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR  
PHOTOVOLTAIC PLANTS IN RESCO MODEL**

**AT**

**NEHRU NAGAR, CHITTORGARH, RAJASTHAN 312001**

  
Power Purchaser  
प्रमुख निविदा अधिकाारी  
सामान्य विविधता, चित्तौड़गढ़

For OPWR DEL SPV PVT. LTD.  
  
Director/Auth. Sign.

Power Producer

Page 1 of 28





**6. PASCHIMI RAJASTHAN DUGDH UTPADAK SAHKARI SANG LIMITED - JODHPUR**

राजस्थान RAJASTHAN

Z 479084

POWER PURCHASE AGREEMENT (PPA)

BETWEEN

OPWR DEL SPV PRIVATE LIMITED

AND

PASCHIMI RAJASTHAN DUGDH UTPADAK SAHKARI SANGH  
LIMITED, JODHPUR

FOR

DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING  
AND COMMISSIONING INCLUDING WARRANTY,  
OPERATION & MAINTENANCE OF GRID-CONNECTED ROOF-  
TOP SOLAR PHOTOVOLTAIC PLANTS IN RESCO MODEL

AT

35, HEAVY INDUSTRIAL AREA, JODHPUR, RAJASTHAN 342001

Power Purchaser

MANAGING DIRECTOR

Paschimi Rajasthan Dugdh Utpadak  
Sahkari Sangh Ltd. JODHPUR

For OPWR DEL SPV PVT. LTD.

Power Producer

Auth. Sign.

Page 1 of 28



**7. SHREE HARIDEV JOSHI GENERAL HOSPITAL – DUNGARPUR**

**POWER PURCHASE AGREEMENT (PPA)**

**BETWEEN**

**OPWR DEL SPV PRIVATE LIMITED**

**AND**

**SHREE HARIDEV JOSHI GENERAL HOSPITAL, DUNGARPUR**

**FOR**

**DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND  
COMMISSIONING INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR  
PHOTOVOLTAIC PLANTS IN RESCO MODEL**

**AT**

**NEW COLONY, DUNGARPUR, RAJASTHAN, 314001**

For OPWR DEL SPV PVT. LTD.

*Amit Sola*  
Director/Auth. Sign.

Power Producer

Power Purchaser

Page 1 of 28



**8. SHREE SANWALIYA JI GOVERNMENT GENERAL HOSPITAL - CHITTORGARH**

राजस्थान RAJASTHAN

Z 479096

**POWER PURCHASE AGREEMENT (PPA)****BETWEEN****OPWR DEL SPV PRIVATE LIMITED****AND****SHRI SANWALIYA JI GOVERNMENT GENERAL HOSPITAL****FOR****DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING  
AND COMMISSIONING INCLUDING WARRANTY,  
OPERATION & MAINTENANCE OF GRID-CONNECTED ROOF-  
TOP SOLAR PHOTOVOLTAIC PLANTS IN RESCO MODEL****AT****NEHRU NAGAR, CHITTORGARH, RAJASTHAN 312001**

  
Power Purchaser  
प्रमुख विद्युत अधिकारी  
सामान्य चिकित्सालय, चित्तौड़गढ़

For OPWR DEL SPV PVT. LTD.

  
Power Producer

Director/Auth. Sign.

Page 1 of 28



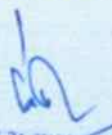
**9. RAVINDER NATH TAGORE GOVT MEDICAL COLLEGE – UDAIPUR****POWER PURCHASE AGREEMENT (PPA)****BETWEEN****OPWR DEL SPV PRIVATE LIMITED****AND****RAVINDRA NATH TAGORE GOVERNMENT MEDICAL  
COLLEGE UDAIPUR****FOR****DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND  
COMMISSIONING INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR  
PHOTOVOLTAIC PLANTS IN RESCO MODEL.****AT****RNT MEDICAL COLLEGE AND MB GOVERNMENT HOSPITAL  
CAMPUS, UDAIPUR, RAJASTHAN 313001**

" It is agreed that Power Producer shall submit Sample structure and shall take necessary no objection certificate (NOC) from PWD before start of actual work at site. In case PWD is not agreed with the used structure, the agreement shall stand cancelled."

For OPWR DEL SPV PVT. LTD.

  
Director/Auth. Sig

Power Purchaser

  
प्रधानाचार्य एवं निदेशक  
र. ना. ट. मेडिकल कॉलेज  
उदयपुर, राजस्थान  
Page 1 of 29

Power Producer





**10. MAHARANA BHUPAL GOVT HOSPITAL - UDAIPUR****POWER PURCHASE AGREEMENT (PPA)****BETWEEN****OPWR DEL SPV PRIVATE LIMITED****AND****MAHARANA BHUPAL GOVERNMENT HOSPITAL****FOR****DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND  
COMMISSIONING INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR  
PHOTOVOLTAIC PLANTS IN RESCO MODEL****AT****MAHARANA BHUPAL GOVT. HOSPITAL, UDAIPUR, RAJASTHAN  
313001**

Power producer shall submit sample structures  
and shall take necessary No objection certificate  
(NOC) from public works department (PWD), Udaipur,  
before start of actual work start at site.  
In case PWD is not agreed with the used structure  
the agreement shall stand cancelled.

प्रधानाचार्य एवं नियन्त्रक  
Power Purchaser  
र. ना. ट. मेडिकल कॉलेज  
उदयपुर (राज.)

Page 1 of 28

For OPWR DEL SPV PVT. LTD.  
Ankit Salia  
Director/Auth. Sign.

Power Producer



**11. GOVT. MEDICAL COLLEGE - BARMER**

POWER PURCHASE AGREEMENT (PPA)  
BETWEEN  
OPWR DEL SPV PRIVATE LIMITED  
AND  
GOVERNMENT MEDICAL COLLEGE BARMER  
FOR  
DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND  
COMMISSIONING INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR  
PHOTOVOLTAIC PLANTS IN RESCO MODEL  
AT  
JALIPA, BARMER, RAJASTHAN 344001

MOU

  
Power Purchaser  
प्रधानाचार्य एवं नियन्त्रक  
मेडिकल कॉलेज, बाड़मेर

Page 1 of 29

For OPWR DEL SPV PVT. LTD.

  
Director/Auth. Sign.

Power Producer





**12. SHRIMATI HIRA KUWAR BA MAHILA HOSPITAL – JHALWAR**

**POWER PURCHASE AGREEMENT (PPA)**

**BETWEEN**

**OPWR DEL SPV PRIVATE LIMITED**

**AND**

**SHRIMATI HIRA KUWAR BA MAHILA HOSPITAL JHALAWAR**

**FOR**

**DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND**

**COMMISSIONING INCLUDING WARRANTY, OPERATION &**

**MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR**

**PHOTOVOLTAIC PLANTS IN RESCO MODEL**

**AT**

**NH 52, KOTA ROAD, JHALAWAR, RAJASTHAN 326001, INDIA**

For OPWR DEL SPV PVT. LTD.

*Ankit Saha*

Director/Auth. Sign.

Power Producer

*[Signature]*  
Power Purchaser (PPA)

Page 1 of 28

**13. GOVT MEDICAL COLLEGE - DHOLPUR**

POWER PURCHASE AGREEMENT (PPA)  
BETWEEN  
OPWR DEL SPV PRIVATE LIMITED  
AND  
GOVERNMENT MEDICAL COLLEGE DHOLPUR  
FOR  
DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND  
COMMISSIONING INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR  
PHOTOVOLTAIC PLANTS IN RESCO MODEL  
AT  
BARI RD, PURANI CHHAWNI, DHOLPUR, RAJASTHAN 328001

प्रधानाचार्य एवं निबंधक  
राजकीय आयुर्विज्ञान महाविद्यालय एवं  
सेवायुग विद्यापीठ, धौलपुर

Power Purchaser

For OPWR DEL SPV PVT. LTD.

Ankit Saha

Director/Auth. Sign.

Power Producer

Page 1 of 29





**14. PMO MCH UNIT MG HOSPITAL - BHILWARA**

**POWER PURCHASE AGREEMENT (PPA)**

**BETWEEN**

**OPWR DEL SPV PRIVATE LIMITED**

**AND**

**MOTHER AND CHILD HOSPITAL, MAHATMA GANDHI  
GOVERNMENT HOSPITAL, BHILWARA**

**FOR**

**DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND  
COMMISSIONING INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF GRID-CONNECTED ROOF-TOP SOLAR  
PHOTOVOLTAIC PLANTS IN RESCO MODEL**

**AT**

**BHOPAL GANJ, BHILWARA, RAJASTHAN 311001**

चिकित्सा अधीक्षक  
संबद्ध महात्मा गांधी अस्पताल  
भीलवाड़ा

Page 1 of 28

Power Producer

For OPWR DEL SPV PVT. LTD.

Amit Saha  
Director/Auth. Sign.

**15. HINDUSTAN COPPER LIMITED – MALANJKHAND, M.P.**

**POWER PURCHASE AGREEMENT (PPA)**

**BETWEEN**

**ROOFTOP URJA PRIVATE LIMITED  
(DEVELOPER)**

**AND**

**HINDUSTAN COPPER LIMITED  
(CPSE UNDER MINISTRY OF MINES)**

**FOR**

**DESIGN, MANUFACTURING, SUPPLY,  
ERECTION, TESTING AND COMMISSIONING  
INCLUDING WARRANTY, OPERATION &  
MAINTENANCE OF 4500kWp GRID CONNECTED  
GROUND MOUNTED SOLAR POWER PLANT**

**IN**

**RESCO MODEL**

11/11/2023

For ROOFTOP URJA PVT LTD.

*isatua*  
Authorized Signatory



*Vinay Kumar Singh*

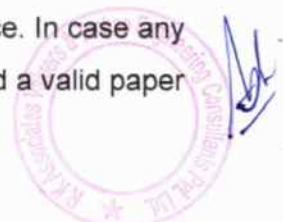
Vinay Kumar Singh  
General Manager  
Malanjkhand Copper Project  
Hindustan Copper Limited  
Malanjkhand - PO  
Dist. Balaghat (MP)-481116  
Page 1 of 38





**PART J****DISCLAIMER**

1. No employee or member of R.K Associates has any direct/ indirect interest in the Project.
2. This report is prepared based on the copies of the documents/ information which the Bank/ Company has provided to us out of the standard checklist of documents sought from them and further based on our assumptions and limiting conditions. All such information provided to us has been relied upon in good faith and we have assumed that it is true and correct in all respect. Verification or cross checking of the documents provided to us has not been done at our end from the originals. If at any time in future, it is found or came to our knowledge that misrepresentation of facts or incomplete or distorted information has been provided to us then this report shall automatically become null & void.
3. This report is a general analysis of the project based on the scope mentioned in the report. This is not an Audit report, Design document, DPR or Techno-financial feasibility study. All the information gathered is based on the facts seen on the site during survey, verbal discussion & documentary evidence provided by the client and is believed that information given by the company is true best of their knowledge.
4. All observations mentioned in the report is only based on the visual observation and the documents/ data/ information provided by the client. No mechanical/ technical tests, measurements or any design review have been performed or carried out from our side during Project assessment.
5. Bank/FII should ONLY take this report as an Advisory document from the Financial/ Chartered Engineering firm and it's specifically advised to the creditor to cross verify the original documents for the facts mentioned in the report which can be availed from the borrowing company directly.
6. In case of any default in loans or the credit facility extended to the borrowing company, R.K Associates shall not be held responsible for whatsoever reason may be and any request for seeking any explanation from the employee/s of R.K Associates will not be entertained at any instance or situation.
7. This Report is prepared by our competent technical team which includes Engineers and financial experts & analysts.
8. This is just an opinion report and doesn't hold any binding on anyone. It is requested from the concerned Financial Institution which is using this report for taking financial decision on the project that they should consider all the different associated relevant & related factors also before taking any business decision based on the content of this report.
9. All Pages of the report including annexures are signed and stamped from our office. In case any paper in the report is without stamp & signature then this should not be considered a valid paper issued from this office.



10. Though adequate care has been taken while preparing this report as per its scope, but still we can't rule out typing, human errors, over sightedness of any information or any other mistakes. Therefore, the concerned organization is advised to satisfy themselves that the report is complete & satisfactory in all respect. Intimation regarding any discrepancy shall be brought into our notice immediately. If no intimation is received within 15 (Fifteen) days in writing from the date of issuance of the report, to rectify these timely, then it shall be considered that the report is complete in all respect and has been accepted by the client upto their satisfaction & use and further to which R.K Associates shall not be held responsible in any manner.
11. Defect Liability Period is **15 DAYS**. We request the concerned authorized reader of this report to check the contents, data and calculations in the report within this period and intimate us in writing if any corrections are required or in case of any other concern with the contents or opinion mentioned in the report. Corrections only related to typographical, calculation, spelling mistakes, incorrect data/ figures/ statement will be entertained within the defect liability period. Any new changes for any additional information in already approved report will be regarded as additional work for which additional fees may be charged. No request for any illegitimate change in regard to any facts & figures will be entertained.
12. R.K Associates encourages its customers to give feedback or inform concerns over its services through proper channel at [le@rkassociates.org](mailto:le@rkassociates.org) in writing within 30 days of report delivery. After this period no concern/ complaint/ proceedings in connection with the Lender's Independent Engineering Services will be entertained due to possible change in situation and condition of the subject Project.
13. Our Data retention policy is of **ONE YEAR**. After this period, we remove all the concerned records related to the assignment from our repository. No clarification or query can be answered after this period due to unavailability of the data.
14. This Lender's Independent Engineering report is governed by our (1) Internal Policies, Processes & Standard Operating Procedures, (2) Information/ Data/ Inputs given to us by the client and (3) Information/ Data/ Facts given to us by our field/ office technical team. Management of R.K Associates never gives acceptance to any unethical or unprofessional practice which may affect fair, correct & impartial assessment and which is against any prevailing law. In case of any indication of any negligence, default, incorrect, misleading, misrepresentation or distortion of facts in the report then it is the responsibility of the user of this report to immediately or at least within the defect liability period bring all such act into notice of R.K Associates management so that corrective measures can be taken instantly.
15. R.K Associates never releases any report doing alterations or modifications from pen. In case any information/ figure of this report is found altered with pen then this report will automatically become null & void.





# LIE REPORT

10 (± 10%) MWp GRID CONNECTED  
SOLAR POWER PLANT

## FOR INTERNAL USE

Place : Noida

SURVEYED BY: NA as Desktop LIE

Date : 19.10.2023

PREPARED BY: Er. Amit Jaiswal

Note : This report contains 65 pages

REVIEWED BY: Er. Abhinav Chaturvedi



For R.K Associates Valuers & Techno Engineering Consultants (P) Ltd.

**DEFECT LIABILITY PERIOD** - In case of any query/ issue or escalation you may please contact Incident Manager by writing at [valuers@rkassociates.org](mailto:valuers@rkassociates.org). We ensure 100% accuracy in the Calculations done, Rates adopted and various other data points & information mentioned in the report but still can't rule out typing, human errors or any other mistakes. In case you find any mistake, variation, discrepancy or inaccuracy in any data point of the report, please help us by bringing all such points into our notice in writing at [valuers@rkassociates.org](mailto:valuers@rkassociates.org) within 30 days of the report delivery, to get these rectified timely, failing which R.K Associates Valuers Techno Engineering Consultants (P) Ltd. won't be held responsible for any inaccuracy in any manner. Also if we will not hear back anything from you within 30 days, we will assume that report is correct in all respect and no further claim of any sort will be entertained thereafter. We would welcome and appreciate your feedback & suggestions in order to improve our services.

**COPYRIGHT FORMAT** - This report is prepared on the copyright format of R.K Associates Valuers Techno Engineering Consultants (P) Ltd. to serve our clients in the best possible way. Legally no one can copy or distribute this format without prior approval from R.K Associates. It is meant only for the organization as mentioned on the cover page of this report. Distribution or use of this format other than R.K Associates will be seen as unlawful act and necessary legal action can be taken against the defaulter