Inspection Report for Solar PV Rooftop Project

Project Details

Report No. /GEDA/00001 **Date of Inspection:** 20-Mar-2019

	Report Prepared by	Checked by
Name	Jakes Sparow	Jakes Sparow
Signature		

Basic System Information

GEDA Registration Number: MG/RES/10001

Consumer Name : test

Installer Name : test

Registered Capacity (kW) : 2.500

Address : test

PV Module and Inverter Specification :

Sr	Equipment	Capacity/Power (Wp)	Make	No. of Modules	Type of Modules	Model No
1	PV Module	120		20	Thin Film	
2	PV Module	3		3	Thin Film	

Sr	Equipment	Capacity/Power (kW)	Make	No. of Inverters	Type of Inverters	Model No
1	Inverter	3	ABB India Limited	3	Hybrid Inverter	

Cumulative Capacity of PV Modules (kW) : 2.409

Capacity/Power of PCU/Inverters (kW) : 9.000

Details of Solar PV modules Installed

Sr.	Observation		Please Mark/ Enter Relevant Block	Remarks
1	Type of PV Module	Crystalline Technology	Ok	
2	Make of Solar PV Module	Domestic (Produced in India)	Not Ok	
3	PV Module complying IEC certificate	IEC 61215/ IS 14286, IEC 61853-I, IS 16170-I, IEC 61730, IEC 61701	Ok	
4	Capacity (Wp) of each PV module	More than 200Wp	Not Ok	
5	Module Protection	Min. IP 65	Ok	
6	Module Interconnection cable connectors are protected		Not Ok	
7	PV module are neat and clean		Ok	
8	PV Modules electrical connections are tight and secure		Not Ok	
9	Warranty of PV module	Min. 5 Years	Ok	

Weather : Cloudy

Time: 10 : 43

Strings	Polarity (OK / NOT OK)	V(Volts)	I(Amps)	Power (Watt)	Remarks
String1	Ok	1	2	3	
String2	Not Ok				
String3	Ok				
String4	-				

Note:

Details of Module Mounting Structure (MMS)

Sr.	Observation		Please Mark/ Enter Relevant Block	Remarks
1	Structure Material	Hot Dip Galvanized Iron		
2	Fasteners	Stainless Steel	Ok	
3	Structure Steel Thickness	Min. 2.5 MM	Not Ok	
4	Structure Properly Installed		Ok	
5	Structure Grouting/Foundation		Ok	
6	Clearance of the structure from the roof	Minimum 300 MM	Not Ok	

Note:

Details of DCDB

Sr.	Observation	Please Mark/ Enter Relevant Block	Remarks
1	DCDB as per approved Drawing		
2	DCDB Installation	Outdoor	
3	Fuse/MCB/ MCCB Protection	Not Ok	
4	Surge Protection device available	Ok	
5	DCDB Installed and mounted Properly	Not Ok	
6	Cables terminated properly through glands on gland plate	Ok	

Details of ACDB

Sr.	Observation	Please Mark/ Enter Relevant Block	Remarks
1	ACDB as per approved Drawing		
2	ACDB Installation	Outdoor	
3	MCB/ MCCB/RCCB Protection	Not Ok	
4	Surge Protection device available	Ok	
5	ACDB Installed Properly	Not Ok	
6	Cables terminated properly through glands on gland plate	Ok	

Voltage Measurement: 3 Phase

Phase to PhaseVoltage	**R-N**	**Y-N**	**B-N**
	1 V	2 V	3 V

Time 10 : 46

Other Electrical Parameters:

Particulars	R-Phase	Y-Phase	B-Phase	Total
Irms (A)	1	2	3	
Power (kW)				
Frequency (Hz)				
Power Factor (CosΦ)				

Performance Ratio of the System

1	Instantaneous AC Power in Watt at Inverter	1
2	Instantaneous Irradiance (kW/m^2)	200
3	Module Area (m^2)	5
4	Total number of modules	24
5	Module Efficiency in %	6
6	Performance Ratio of the System (Instantaneous)	69.44 %

Details of Inverter

Sr.	Observation		Please Mark/ Enter Relevant Block	Remarks
1	Inverter Capacity	+/- 10% capacity Tolerance of Plant	Ok	
2	Inverter Output Capacity	kW	Not Ok	
3	Type Of Inverter		Single Phase	
4	Inverter Installation		Indoor	
5	Inverter Efficiency	Minimum >95%	Ok	
6	Automatic Operation Including Wake-up, Synchronization And Shut Down		Not Ok	
7	Anti-islanding Protection		Ok	
8	Built-in Meter And Data Logger	Monitoring plant performance through external computer	Not Ok	
9	Marking Of Inverter Capacity, Rating, Technical Specification	IEC 61727, IEC 61730, IEC 61683, IEC 60068-II (1,2,14,30)/ Equivalent BIS standard	Ok	
10	Inverter Properly Installed		Not Ok	
11	Cables Terminated Properly (Crimping And Lugging)		Ok	
12	DC Disconnect Available		Not Ok	
13	Terminal Earthing Effectively Earthed		Ok	

Details of Earthing Provided

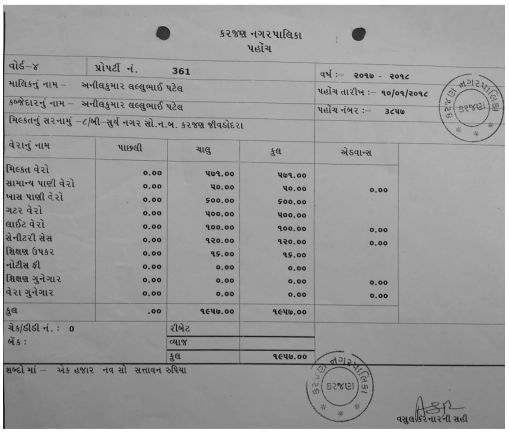
Earth Conductor Material	Copper
Total Nos. of Earthing	12
Earthing Conductor	As per IS 3043/IEEE80
Earthpit Construction	Chemical
Lightning Arrester (LA)	ES
Lightning Arrester (IEC 62305)	Ok
LA height from Installation (in m)	2

Building	Earth Pit	Earth Strip Connection
Building-1	Body Earthing Pit-1 (R < 0.5Ohm)	Ok
	Body Earthing Pit-2 1 (R < 0.5Ohm)	Not Ok
	Lightning Earthing Pit-1(R < 0.5Ohm)	Ok
	Lightning Earthing Pit-21(R < 0.5Ohm)	Not Ok
Building-2	Body Earthing Pit-1 (R < 0.5Ohm)	-
	Body Earthing Pit-2 1 (R < 0.5Ohm)	-
	Lightning Earthing Pit-1(R < 0.5Ohm)	-
	Lightning Earthing Pit-21(R < 0.5Ohm)	-
Building-3	Body Earthing Pit-1 (R < 0.5Ohm)	-
	Body Earthing Pit-2 1 (R < 0.5Ohm)	-
	Lightning Earthing Pit-1(R < 0.5Ohm)	-
	Lightning Earthing Pit-21(R < 0.5Ohm)	-

Details of Cables Used

Sr.	Observation	Please Mark/ Enter Relevant Block	Remarks
1	Solar DC Cable	UV Protected	Ok
2	Solar DC Cable	Multi stranded Tined Copper	Not Ok
3	Voltage Grade	600/ 1000 V	Ok
4	AC cable Insulation		XLPE
5	String Cable Size (mm2)		1
6	AC Cable Sizes (mm2)		2

Site Image 1 (PV Plant Photo):



કરજણ નગરપાલિકા
પહોંચ

ચોર્ડ–૪ | પ્રોપર્ટી નં. 361 | વર્ષ :– ૨૦૧૭ - ૨૦૧૮

માલિકનું નામ – અનીલકુમાર વલ્લુભાઈ પટેલ | પહોંચ તારીખ :– ૧૦/૦૧/૨૦૧૮

કબ્જેદારનું નામ – અનીલકુમાર વલ્લુભાઈ પટેલ | પહોંચ નંબર :– ૩૮૫૬

મિલ્કતનું સરનામું –૮/બી–સુર્ય નગર સો.ન.બ. કરજણ જીવડોદરા

વેરાનું નામ	પાછલી	ચાલુ	કુલ	એડવાન્સ
મિલ્કત વેરો	૦.૦૦	૫૬૧.૦૦	૫૬૧.૦૦	
સામાન્ય પાણી વેરો	૦.૦૦	૫૦.૦૦	૫૦.૦૦	૦.૦૦
ખાસ પાણી વેરો	૦.૦૦	૬૦૦.૦૦	૬૦૦.૦૦	
ગટર વેરો	૦.૦૦	૫૦૦.૦૦	૫૦૦.૦૦	
લાઈટ વેરો	૦.૦૦	૧૦૦.૦૦	૧૦૦.૦૦	૦.૦૦
સેનીટરી સેસ	૦.૦૦	૧૨૦.૦૦	૧૨૦.૦૦	૦.૦૦
શિક્ષણ ઉપકર	૦.૦૦	૧૬.૦૦	૧૬.૦૦	
નોટીસ ફી	૦.૦૦	૦.૦૦	૦.૦૦	
શિક્ષણ ગુનેગાર	૦.૦૦	૦.૦૦	૦.૦૦	૦.૦૦
વેરા ગુનેગાર	૦.૦૦	૦.૦૦	૦.૦૦	૦.૦૦
કુલ	.૦૦	૧૦૫૭.૦૦	૧૦૫૭.૦૦	

ચેક/ડીડી નં. : ૦ | રીબેટ

બેંક : | વ્યાજ

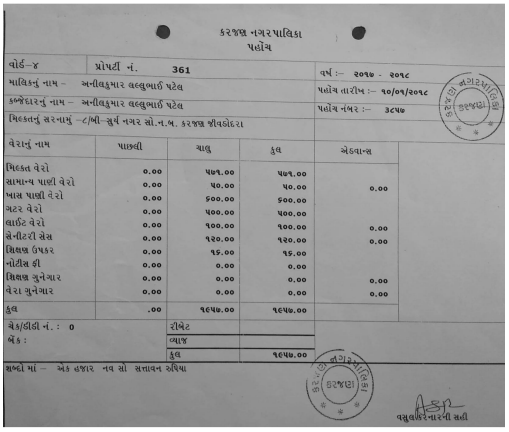
કુલ ૧૦૫૭.૦૦

શબ્દો માં – એક હજાર નવ સો સત્તાવન રુપિયા

કરજણ

વસુલાતદારની સહી

Site Image 2 (With Consumer):



કરજણ નગરપાલિકા
પહોંચ

વોર્ડ–૪	પ્રોપર્ટી નં. 361	વર્ષ :– ૨૦૧૭ - ૨૦૧૮	
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ગટર વેરો	૦.૦૦	૫૦૦.૦૦	૫૦૦.૦૦	
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નોટીસ ફી	૦.૦૦	૦.૦૦	૦.૦૦	
શિક્ષણ ઝુનેગાર	૦.૦૦	૦.૦૦	૦.૦૦	૦.૦૦
વેરા ઝુનેગાર	૦.૦૦	૦.૦૦	૦.૦૦	૦.૦૦
કુલ	.૦૦	૧૦૫૭.૦૦	૧૦૫૭.૦૦	

ચેક/ડીડી નં. : ૦	રીબેટ	
બેંક :	વ્યાજ	
	કુલ	૧૦૫૭.૦૦

શબ્દો માં – એક હજાર નવ સો સત્તાવન રુપિયા

વસુલાતદાર/તલાટી શ્રી

Note:

Observation and Conclusion

Sr.	Title	Remarks
1	Make of Solar PV Module - Domestic (Produced in India)	
2	Capacity (Wp) of each PV module - More than 200Wp	
3	Module Interconnection cable connectors are protected	
4	PV Modules electrical connections are tight and secure	
5	String2	
6	Structure Steel Thickness - Min. 2.5 MM	
7	Clearance of the structure from the roof - Minimum 300 MM	
8	Fuse/MCB/ MCCB Protection	
9	DCDB Installed and mounted Properly	
10	MCB/ MCCB/RCCB Protection	
11	ACDB Installed Properly	
12	Inverter Output Capacity - kW	
13	Automatic Operation Including Wake-up, Synchronization And Shut Down	
14	Built-in Meter And Data Logger - Monitoring plant performance through external computer	
15	Inverter Properly Installed	
16	DC Disconnect Available	
17	Building-1 - Body Earthing Pit-2 1 (R < 0.5Ohm)	
18	Building-1 - Lightning Earthing Pit-21(R < 0.5Ohm)	
19	Solar DC Cable - Multi stranded Tined Copper	

Note:

It is certified the system is installed / not installed satisfactory and is found to be as per / not as per the specification of GEDA.