

SOLAR POWER GENERATION - CHECK LIST
(Annexure to Circular No: B2 - 13958 / 2017 / CEI Dated 24 / 07 / 2018)

A	Installation Details	
1.	Name & Address of Installation	
2.	Contact Number	
3.	Classification (LT/MV/HT/EHT)	
4.	Date of receipt of completion report	
5.	Date of Inspection	
6.	Name of Inspecting Officer	
7.	Capacity of Solar System	
B	SPV Module	
1	Details of MNRE approval test for SPV Module	
2	Maximum output (20% Peak Power)	
3	Type of SPV module	Thin film or Polycrystalline
4	Degree of protection (IP)	
5	Orientation	Towards south
6	Inclination angle	
7	Total number of PV modules	
8	Wattage of each module	
9	Total installed capacity	
10	Type of system	Grid interactive system / Off grid system
C	Mounting Structures	
1	The mounting structures shall be designed and constructed as per IS 2062: 1992 and IS 4759.	
D	Whether DCDB provided If yes, details of switch board	Yes / No
E	Power and Control Cables	
1	Rating of Power cables for inter connection of Modules (panels with in array).	
2	(i) Array & charge controller.	
	(ii) Charge controller & battery.	
3	Type of Cable	
4	Size of Cable	
5	Whether the connection properly terminated, soldered in outdoor and indoor elements	
F	DC combiner box details (Verify with manufacture date sheet)	
1	I - V curve details submitted	Yes / No
2	Optimum power to be delivered by SPV panel (optimum power 2.25V/cell)	
3	Standard irradiance or light intensity of SPV panel : (1000W/m ² at 25°C and AM 1.5)	

4	Details of MNRE approval test for SPV Module	
G	Inverter	
1	Make	
2	Serial Number	
3	Specification	
4	Total number of inverter	
5	Power quality of inverter	
	(i) AC voltage	
	(ii) frequency	
6	Type of inverter	
7	Whether automatic synchronisation for inverter to output of grid done	
8	Details of over voltage protection provided	
9	Details of under voltage protection provided	
10	Maximum power output of the inverter system	
11	Type of installation - Indoor / out door	
12	Degree of protection for inverter panel.	
H	Batteries :-	
1	Type of battery	
2	Output voltage.	
I	Metering Parameter Provided	
1	DC Battery voltage.	
2	DC current.	
3	AC system voltages	
4	Current and	
5	Frequency	
6	Solar gross generation	
7	Consumer load consumption	
8	Export of energy to grid.	
9	Import of energy from grid	
J	Test result	
1	Earth resistance	
2	Insulation Resistance value	
3	Total voltage harmonic distortion	
4	Individual voltage harmonic distortion	
5	Total current harmonic distortion	
K	Earthing	
1	Details of earthing. Equipment earthing System earthing: (AC Supply - Neutral to be earthed and DC Supply - Negative to be earthed)	
2	No. of earth pits.	
3	Details of lightning protection if any	
L	Junction Boxes	
1	Whether FRP Junction boxes are provided	
	Rating of Fuses for solar arrays	

M	Parameters to be measured and monitored	
1	Solar system temperature.	
2	Ambient temperature.	
3	Solar irradiation/isolation.	
4	DC current and voltages.	
5	DC injection into the grid (One time measurement at the time of installation.)	
6	Efficiency of the inverter.	
7	Solar system efficiency.	
8	Display of I-V curve of the solar system.	
N	Protection and control	
1	Fuse rating on inverter input side (DC)	
2	Fuse rating on inverter output side (AC)	
3	Rating of Isolator provided for AC & DC	
4	Earth Fault protection details	
O	Remarks	

Signature of Inspecting Officer