

**INITIAL INSPECTION REPORT ON ROOF-TOP SOLAR PV POWER PLANT
INSTALLATION**

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| 1. Report No | : | 124 | 2022-23 |
| 2. Date of inspection | : | Dt 06.06.2022 | |
| 3. Inspection fees paid | : | Rs.6300.00 | Deposited vide T.C. No. 292005202231053
Dt. 06.06.2022 |
| 4. Reference | | This inspection is based on relevant documents submitted by the owner. | |
| 5. Owner & address of installation | | The Dean
Orissa Veterinary College
OUAT,BBSR | |
| 6. Location | | As Above | |
| 7. Purpose of the installation | | Energy saving Solar Plant at
Orissa Veterinary College | |
| 8. Voltage & System of supply | | 3 Phase and neutral 415 Volt , 50 Hz | |
| 9. Person present during inspection | | Mr. D Debta | |
| 10. Name of the executing agency/Name of the electrical Contracor | | M/s Shivam Power ,Licence no.2728 HT | |
| 11. Inspection Conducted by | | Er. A Ch Sahu
S.E.-cum-Electrical Inspector,Bhubaneswar | |
| Official documents verified by | | Sri Simanchala Sarab | |
| 12. Brief descriptio of the installation | | Total Load -141.37 KW | |

13. DEFECTS AND DEFICIENCIES NOTICED DURING INSPECTION:

A. SOLAR PV INSTALLATIONS.

1. All Panels are to be doubly earthed with indication of voltage level.The hindged doors are to be earthed .Gland packing is to be provided at cable entry to the panel.
2. D.C. modules and A.C. modules are to be properly marked , labeled and earthed properly.
3. Properly sized equipment grounding conductor is to be routed with the circuit conductors.
4. AC and DC grounding electrode coducotors are to be properly connected to the system.
5. Grounded conductor is to be identified , secured , protected and do not contact with roof surface.
6. DC conductors inside a building are to be kept in metal enclosure having earth connectivity.

7. Aluminium material should not be placed with direct contact with concrete and those are to be insulated at the contact point .
8. PV circuit and premises wiring is to be separated .
9. PV system conductors shall be grouped and identified .
10. Overcurrent devices in the DC circuits are to be listed for DC operation .
11. Connectors are listed for the voltage of the system and have appropriate temperature and ampere ratings.
12. Disconnects and overcurrent protection are to be installed for all undergrounded conductors in undergrounded PV power systems.
13. The plastic barrier are to be re- installed between the AC , DC wiring and communication wires.
14. All interior and exterior DC conduit , enclosures, raceways, cable assemblies , junction boxes, combiner boxes and disconnects are to be marked .
15. Warning marking i.e. PHOTO VOLTAIC POWER SOURCE are to be marked on red background.
16. Rooftop mounted PV panels and modules should have proper fire classification rating.
17. The fault protections are to be properly monitored and recorded for production during inspections.
18. Adequate nos of lightening arrestors shall be installed to cover the P.V modules under protection zone.
19. Panel board shall be barricaded.

B. GENERAL & SAFETY PROVISIONS:

1. Only E.L.B.O. approved persons with required Workman Permit License are to be engaged for operation & maintenance work of the solar electrical installation. The list of such persons should be submitted to this office for reference and record.
2. The electric shock treatment chart written in Odia & English / Hindi should be displayed in conspicuous places.
3. Fire buckets filled with clean and dry sand and fire extinguishers suitable for electric fire should be provided at vital locations for use in case of fire hazards.
4. First Aid Box with medicines to be kept in the Control Room.

C. REMARKS

1. The Roof-top Solar PV power plant installation / equipments / accessories covered in this inspection report are to be enersised subject to rectification of defects and deficiencies. The compliance report to be furnished with in one month of issue of this report to this office for further necessary action.
2. This inspection has been carried out as per TPCODL permission of the A G M (Elect) BCDD-I,BBSR vide his letter no.904 dt.22.02.2022
3. The monthly return for unit generated as per prescribed format to be submitted to this office by 5th of the succeeding month through e mail- eibbsr-od@gov.in & Electricity duty leviable @ 55 paise per unit to be deposited through e chalan under the head of account “0043-00-101-0034-01006” in favour of S.E.-cum-Electrical Inspector,Bhubaneswar.(The generation meter reading –Export meter reading) will be leviable for Electricity Duty.
4. Energy Meter & CT to be tested at CESU MRT laboratory & test report to be submitted to this office after testing .
5. It is the responsibility of the owner of the installation to inform the Electrical Inspector about the date of charging of the solar panel and to facilitate conveyance to attend the premises on the date of synchronisation.
6. The D.G sets installed inside the premises shall be offered for inspection

SUPERINTENDING ENGINEER-CUM
ELECTRICAL INSPECTOR , BBSR