INSPECTION REPORT

Report No. _____ dated _____

Sub: Inspection of _____ kWp Grid-Connected Rooftop Solar PV Power Plant and approval for Synchronization

Under Rule No. 47-A of I.E Rules-1956, approval is hereby accorded to commission the Rooftop Solar PV Power Plant with a capacity of _____ kWp (Single phase/Three phase) of Sri/ Smt. _____ (Name of Consumer) installed in the location _____ (Address of Consumer) under _____ Electrical Sub-Division bearing Consumer No. _____ and Application No. _____ dated _____ at Rodalee portal (www.rodalee.com)

Component Inspection Checklist:

Sl. No	Item type	Yes	No
1	Installation layout – is it as per drawing?		
2	Inverter IS/IEC standards qualified		
3	PV panel IS/IEC standards qualified		
4	PV isolators/PV cables IS/ IEC standards qualified		
5	AC disconnect manual switch provided		
6	Meter tested from T&C (as per meter regulations)		

Grid -Functional Safety Checklist:

Sl. No	Item type	Yes	No
1	Check-PV inverter anti islanding (utility side). Disconnect Grid and check whether PV generator seizes Generation immediately.		
2	Check Reconnect time. Reconnecting the Grid, PV generator reconnects minimum 60 seconds later (Single-phase) or minimum 300 seconds later(Three-phase connectivity)		
3	Bi-directional flow recorded on APDCL Meter		
4	PV inverter anti islanding tested at array side		
5	Solar Generation meter functional?		
6	Check all earthing provided at ACDB/DCDB/LA		

Power Quality Measurement Checklist:

Sl. No	Item type	Yes	No
1	Check – Harmonic current injections from a RTS plant shall not exceed the limits specified in IEEE 519		
2	Check – Photovoltaic system must be equipped with a grid frequency synchronization device		
3	Check – Voltage operating window should minimize nuisance tripping and should be under operating range of 80% to 110% of the nominal connected voltage. Beyond a clearing time of 2 seconds, the Photovoltaic system must be isolate itself from the grid		
4	Check – Operation of Photovoltaic system shouldn't cause voltage flicker in excess of the limits		
5	Check – When the RTS plant frequency deviates outside the specified conditions (50.5 Hz on upper side and 47.5 Hz on lower side), the photovoltaic system shouldn't energize the grid and should shift to island mode		
6	Check – Photovoltaic system should not inject DC power more than 0.5% of full rated output at the interconnection point or 1% of rated inverter output current into distribution system under any operating conditions		
7	Check – While output of the inverter is greater than 50%, a lagging power factor of greater than 0.9 should operate		
8	Check – The inverter should have the facility to automatically switch off in case of overload or overheating and should restart when normal conditions are restored		
9	Check – Parallel device of Photovoltaic system shall be capable of withstanding 220% of the nominal voltage at the interconnection point		

This approval is subject to the condition that the consumer at the installation site shall ensure that at any point of time the solar supply should not feed back into the grid when APDCL grid supply is off.

---------- Authorized Official
CEI, Government of Assam
(For the Plant capacity > 500 KVA)

_____ Authorized Official **SDE, _____ Electrical Sub-Division**
T&C Division, APDCL **APDCL**
(For the Plant capacity <= 500 KVA)