

All Pages to printed on Letter Head of Installer and Signed by Installer with Stamp & Consumer with Stamp (If Applicable)

## **Solar Plant Installation Certificate**

<b>Registered Consumer Name</b>			
<b>Address</b>			
<b>BYPL CA No</b>		<b>Net Metering Application No</b>	
<b>BYPL Sanctioned Load</b>		<b>Solar Capacity</b>	
<b>BYPL Supply Voltage</b>		<b>Solar Plant Connecting Voltage</b>	
<b>Consumer Email id</b>		<b>Warranty Period</b>	
<b>installer Email id</b>		<b>Installer Mobile No</b>	
<b>Total Cost of Solar Plant installation (Rs)</b>		<b>Financial Model (CAPEX/RESCO)</b>	

The System Has been installed with equivalent Standard which correspond to the required Technical & interconnectivity specifications as per **Annexure III (Important clauses related to the technical & interconnection Requirements of guidelines Under DERC (NET Metering for Renewable Energy ) Regulations,2014** as under:

<b>Parameter</b>	<b>Reference</b>	<b>Requirement</b>	<b>Installer Remarks</b>
Overall Condition Of service	State Distribution Supply Code	Reference to state Distribution Code	
Overall Grid Standard	Central Electricity Authority (Grid standard) Regulation 2010	Reference to regulations	
Equipments	BIS/IEC/IEEE	Reference to standards	
Meters	Central Electricity Authority (Installation and Operation Of Meters) Regulation 2006	Reference to regulation and additional condition issued by the commission	
Safety and Supply	Central Electricity Authority (Measure of safety & Electricity Supply)Regulations,2010	Reference to Regulation	
Harmonic Current	IEEE 519 CEA (Technical standard for connectivity of the DG Resources Regulations,2013	Harmonics current injections from a generating station shall not exceed the limit specified in IEEE519	
Synchronization	IEEE519 CEA (Technical Standards for connectivity of the DG Resources)Regulation 2013	Renewable energy System must be equipped with a grid Frequency synchronization device Every time the generating station is synchronized to the electricity system it shall not cause voltage fluctuation greater than - 5%at Point of connection	

Voltage	IEEE 519 CEA (Technical Standards for connectivity of the DG Resources) Regulation 2013	The Voltage-Operating Window Should Minimize nuisance tripping and should be under operating range of 80 % to 110 % of the nominal corrected voltage Beyond a Cleaning time of 2 Second, the Renewable energy system must isolate itself from the grid.	
Flicker	IEEE 519 CEA (Technical Standards for connectivity of the DG Resources) Regulation 2013	Operation of Renewable Energy System Should not cause voltage flicker in excess of the limits stated in IEC 61000 Standard or other Equivalent Indian Standard, If any.	
Frequency	IEEE 519 CEA (Technical Standards for connectivity of the DG Resources) Regulation 2013	When the Distribution system frequency deviates outside the specified conditions (SO.5Hz on the Upper side and 4T.5 Hz on the lower side),There should be over and under frequency trip functions with a cleaning time of 0.2 seconds	
DC Injection	IEEE 519 CEA (Technical Standards for connectivity of the DG Resources) Regulation 2013	Renewable energy 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.	
Power Factor	IEEE 519 CEA (Technical Standards for connectivity of the DG Resources) Regulation 2013	While the output of the inverter is greater than 50 % a lagging Power factor of > 0.9 operates	
Islanding and disconnection	IEEE 519 CEA (Technical Standards for connectivity of the DG Resources) Regulation 2013	The Renewable energy system in the event of fault voltage or frequency variations must Island/disconnect itself within IEC Standard on stipulated period	
Overload and Overheat	IEEE 519 CEA (Technical Standards for connectivity of the DG Resources) Regulation 2013	Inverter has the facility to automatically switch off in case of overload or overheating and restart when normal conditions are restored.	
Paralleling Device	IEEE 519 CEA (Technical Standards for connectivity of the DG Resources) Regulation 2013	Paralleling device of Renewable Energy system is capable of withstanding 220 % of the normal voltage at interconnection point.	

The system has been installed and tested for grid stability, grid protection and specified environmental influences and is found to have equivalent standards which correspond to the required technical & Interconnectivity specification as per **Annexure III (important clauses related to the technical & interconnection requirements ) of Guidelines under DERC (Net Metering for Renewable Energy) Regulations,2014** as under:

**Solar Installer Name, Signature with stamp**

**Consumer Name, Signature with stamp (If applicable)**