

16.	Experience in Guarantee, Maintenance & After Sales Services (Years)	
17.	Accreditation	

Sr. No.	Particulars	
18.	List of ISI, ISO, Etc. certificate	
19.	Technical specification for solar photovoltaic cell / panel / module- Make	
20.	Technical specification for Battery- optional –quantity and make	
21.	Technical specification for Junction boxes- quantity and make	
22.	Technical specification for Inverter / Controller -quantity and make	
23.	Technical specification for Cables- quantity and make	
24.	Other Technical specification, if any	
20.	Has any Govt. / Under - taking ever debarred the company / firm from executing any work?	
26.	Special Remarks, if any	
27.	Attached are copies of the necessary original documents.	
I.		
II.		
III.		

It is certified that the information provided above is true to the best of my knowledge and belief. If any information found to be concealed, suppressed or incorrect at later date, our tender shall be liable to be rejected and our company may be debarred from executing any business with-----.

Date:

Signature of Bidder

Name: Designation:

APPENDIX- I(B)

Annual Turnover

Each Bidder must fill in this form including private/public limited company.

Annual Turnover Data for last 3 Years (FY, 2017-18 & 2018-19, 2019-20,)	
Year	Rs in Lac
2017-18	
2018-19	
2019-20	
Total	

The information supplied should be the Annual Turnover of the Bidder in terms of the amounts billed to clients for each year for work in progress or completed.

Signature of Applicant

Certified by Applicant's Auditor

(Affix Stamp)

APPENDIX- II

Experience for supply and Commissioning of Solar Power Plants

Sr. No.	Name of Project	Plant Capacity	Year of Work	Current Status of Project / Client's Certificate

*Self-attested copy of work order attached herewith

Signature of Bidder Name

Designation:

Company Name

Date

Annexur A
QUALITY CERTIFICATION, STANDARDS AND TESTING
FOR GRID- CONNECTED ROOFTOP SOLAR PV SYSTEMS/ POWER
PLANTS

Quality certification and standards for grid-connected rooftop or ground mounted solar PV systems are essential for the successful mass-scale implementation of this technology. It is also imperative to put in place an efficient and rigorous monitoring mechanism, adherence to these standards. Hence, all components of grid- connected rooftop solar PV system/ plant must conform to the relevant standards and certifications given below:

Solar PV Modules/Panels-	
IEC 61215/ IS 14286	Design Qualification and Type Approval for Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
IEC 61701	Salt Mist Corrosion Testing of Photovoltaic (PV) Modules
IEC 61853- Part 1 /IS 16170: Part 1	Photovoltaic (PV) module performance testing and energy rating –: Irradiance and temperature performance measurements, and power rating
IEC 62716	Photovoltaic (PV) Modules – Ammonia (NH ₃) Corrosion Testing (As per the site condition like dairies, toilets)
IEC 61730-1,2	Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, Part 2: Requirements for Testing
Solar PV Inverters	
IEC 62109-1, IEC 62109-2	Safety of power converters for use in photovoltaic power systems – Part 1: General requirements, and Safety of power converters for use in photovoltaic power systems Part 2: Particular requirements for inverters. Safety compliance (Protection degree IP 65 for outdoor mounting, IP 54 for indoor mounting)

IEC/IS 61683 (as applicable)	Photovoltaic Systems – Power conditioners: Procedure for Measuring Efficiency (10%, 20%, 50%, 75% & 90-100% Loading Conditions)
IEC 62116/ UL1741/ IEEE 1547 (as applicable)	Utility-interconnected Photovoltaic Inverters - Test Procedure of Islanding Prevention Measures
IEC 60205-27	Measuring relays and protection equipment – Part 27: Product safety requirements
IEC 60068- 2 /IEC 62093 (as applicable)	Environmental Testing of PV System – Power Conditioners and Inverters
Fuses	
IS/IEC 60947(Part 1, 2 & 3), EN50521	General safety requirements for connectors, switches, circuit breakers (AC/DC): a) Low-voltage Switchgear and Control-gear, Part 1: General rules b) Low-Voltage Switchgear and Control-gear, Part 2: Circuit Breakers c) Low-voltage switchgear and Control-gear, Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units d) EN50521: Connect or for photo voltaic systems–Safety requirements and tests
IEC 60269-6	Low-voltage fuses - Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems
Surge Arrestors	
BFC 17 -102: 2011	Lightening Protection Standard
IEC 60364-5-53/ IS 15086-5 (SPD)	Electrical installations of buildings - Part 5-53: Selection and erection of electrical equipment - Isolation, switching and control
IEC 61643- 11: 2011	Low-voltage surge protective devices - Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods
Cables	

IEC 60227 /IS694, IEC 60502 /IS1554 (Part 1 & 2) / IEC 69947 (as applicable)	General test and measuring method for PVC (Polyvinyl chloride) insulated cables (for working voltages up to and including 1100 V, and UV resistant for outdoor installation)
BS EN 50618	Electric cables for photovoltaic systems (BT(DE/NOT)208), mainly for DC Cables
Earthing /Lightning	
IEC 62061 Series (Chemical earthing) (as applicable)	IEC 62061-1 Lightning protection system components (LPSC) - Part 1: Requirements for connection components IEC 62061-2 Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes IEC 62061-7 Lightning protection system components (LPSC) - Part 7: Requirements for earthing enhancing compounds
Junction Boxes	
IEC 60529	Junction boxes and solar panel terminal boxes shall be of the thermo-plastic type with IP 65 protection for outdoor use, and IP 54 protection for indoor use
Energy Meter	
IS 16444 or as specified by the DISCOMs	A.C. Static direct connected watt-hour Smart Meter Class 1 and 2 — Specification (with Import & Export/Net energy measurements)
Solar PV Roof Mounting Structure	
IS 2062/ IS 4759	Material for the structure mounting

Note: Equivalent standards may be used for different system components of the plants.

END OF DOCUMENT