|  |  |  |
| --- | --- | --- |
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**Annexure A**

**DOCUMENTS REQUIRED FOR PROJECT SANCTION**

Following documents will be required to be submitted for project sanction:

|  |  |  |  |
| --- | --- | --- | --- |
| **Check List**  **For issuance of Sanction Order** | | | |
| **S. No.** | **Documents** | **Yes / NO** | **Page No.** |
| 1. | Sanction Request letter on Letter head (**Annexure D**) |  |  |
| 2. | Copy of CAPEX Agreement |  |  |
| 3. | NOC/ Acknowledgement from DISCOM |  |  |
| 4. | Copy of Electricity Bill |  |  |
| 5. | Coloured Site Photos with Date & Time stamping |  |  |
| 6. | BOM & SLD |  |  |
| 7. | Solar PV Module Specs Sheet |  |  |
| 8. | Solar PV Module IEC Certificates |  |  |
| 9. | Inverter Specs Sheet |  |  |
| 10. | Inverter IEC Certificates |  |  |

**Signature**

**Annexure B**

**List of Banks**

|  |  |
| --- | --- |
| **1. SCHEDULED COMMERCIAL BANKS** | **2. OTHER PUBLIC SECTOR BANKS** |
| **SBI AND ASSOCIATES** | 1. IDBI Bank Ltd. |
| 1. State Bank of India | **3. FOREIGN BANKS** |
| 2. State Bank of Bikaner & Jaipur | 1. Bank of America NA |
| 3. State Bank of Hyderabad | 2. Bank of Tokyo Mitsubishi UFJ Ltd. |
| 4. State Bank of Indore | 3. BNP Paribas |
| 5. State Bank of Mysore | 4. Calyon Bank |
| 6. State Bank of Patiala | 5. Citi Bank N.A. |
| 7. State Bank of Travancore | 6. Deutsche Bank A.G |
| **NATIONALISED BANKS** | 7. The Hong Kong and Shanghai Banking  Corpn. Ltd. |
| 1. Allahabad Bank | 8. Standard Chartered Bank |
| 2. Andhra Bank | 9. Societe Generale |
| 3. Bank of India | 10. Barclays Bank |
| 4. Bank of Maharashtra | 11. Royal Bank of Scotland |
| 5. Canara Bank | 12. Bank of Nova Scotia |
| 6. Central Bank of India | 13. Development Bank of Singapore (DBS,  Bank Ltd.) |
| 7. Corporation Bank | 14. Credit Agricole Corporate and Investment  Bank |
| 8. Dena Bank | **4. SCHEDULED PRIVATE BANKS** |
| 9. Indian Bank | 1. Federal Bank Ltd. |
| 10. Indian Overseas Bank | 2. ING Vysya Bank Ltd. |
| 11. Oriental Bank of Commerce | 3. Axis Bank Ltd. |
| 12. Punjab National Bank | 4. ICICI Bank Ltd. |
| 13. Punjab & Sind Bank | 5. HDFC Bank Ltd. |
| 14. Syndicate Bank | 6. Yes Bank Ltd. |
| 15. Union Bank of India | 7. Kotak Mahindra Bank |
| 16. United Bank of India | 8. IndusInd Bank Ltd |
| 17. UCO Bank | 9. Karur Vysya Bank |
| 18. Vijaya Bank | 19. Bank of Baroda |

**Annexure C**

**Operation and Maintenance Guidelines of Grid Connected PV Plants for Part A & B, C & D**

1. For the optimal operation of a PV plant, maintenance must be carried out on a regular basis.

2. All the components should be kept clean. It should be ensured that all the components are fastened well at their due place.

3. Maintenance guidelines for various components viz. solar panels, inverter, wiring etc. are discussed below:

**SOLAR PANELS**

Although the cleaning frequency for the panels will vary from site to site depending on soiling, it is recommended that

1. The panels are cleaned at least once every fifteen days.
2. Any bird droppings or spots should be cleaned immediately.
3. Use water and a soft sponge or cloth for cleaning.
4. Do not use detergent or any abrasive material for panel cleaning.
5. Iso-propyl alcohol may be used to remove oil or grease stains.
6. Do not spray water on the panel if the panel glass is cracked or the back side is perforated.
7. Wipe water from module as soon as possible.
8. Use proper safety belts while cleaning modules at inclined roofs etc.
9. The modules should not be cleaned when they are excessively hot. Early morning is particularly good time for module cleaning.
10. Check if there are any shade problems due to vegetation or new building. If there are, make arrangements for removing the vegetation or moving the panels to a shade-free place.
11. Ensure that the module terminal connections are not exposed while cleaning; this poses a risk of electric shock.
12. Never use panels for any unintended use, e. g. drying clothes, chips etc.
13. Ensure that monkeys or other animals do not damage the panels.

**CABLES AND CONNECTION BOXES**

1. Check the connections for corrosion and tightness.
2. Check the connection box to make sure that the wires are tight, and the water seals are not damaged.
3. There should be no vermin inside the box.
4. Check the cable insulating sheath for cracks, breaks or burns. If the insulation is damaged, replace the wire
5. If the wire is outside the building, use wire with weather-resistant insulation.
6. Make sure that the wire is clamped properly and that it should not rub against any sharp edges or corners.
7. If some wire needs to be changed, make sure it is of proper rating and type.

**INVERTER**

1. The inverter should be installed in a clean, dry, and ventilated area which is separated from, and not directly above, the battery bank.
2. Remove any excess dust in heat sinks and ventilations. This should only be done with a dry cloth or brush.
3. Check that vermin have not infested the inverter. Typical signs of this include
4. Spider webs on ventilation grills or wasps’ nests in heat sinks.
5. Check functionality, e.g. automatic disconnection upon loss of grid power supply, at least once a month.
6. Verify the state of DC/AC surge arrestors, cable connections, and circuit breakers.

**SHUTTING DOWN THE SYSTEM**

1. Disconnect system from all power sources in accordance with instructions for all other components used in the system.
2. Completely cover system modules with an opaque material to prevent electricity from being generated while disconnecting conductors.
3. To the extent possible, system shutdown will not be done during daytime or peak generation.

**INSPECTION AND MAINTENANCE SCHEDULE:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component** | **Activity** | **Description** | **Interval** | **By** |
| PV Module | Cleaning | Clean any bird  droppings/ dark spots on module | Immediately | Beneficiary |
| Cleaning | Clean PV modules with plain water or mild dishwashing detergent. Do not use brushes, any types of solvents, abrasives, or harsh detergents. | Fortnightly or as per the site conditions | Beneficiary |
| Inspection  (for plants > 100 kWp) | Use infrared camera to inspect for hot spots; bypass diode failure | Annual | Technician |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component** | **Activity** | **Description** | **Interval** | **By** |
| PV Array | Inspection | Check the PV  modules and rack for any damage. Note down location and serial number of damaged modules. | Annual | User/Technician |
| Inspection | Determine if any new objects, such as vegetation growth, are causing shading of the, array and move them if possible. | Annual | User/Technician |
| Vermin  Removal | Remove bird nests or Vermin from array and rack area. | Annual | User/Technician |
| Junction  Boxes | Inspection | Inspect electrical boxes for corrosion or intrusion of water or insects. Seal boxes if required. Check position of switches and breakers. Check operation of all protection devices. | Annual | Electrician |
| Wiring | Inspection | Inspect cabling for signs of cracks, defects, loose connections, overheating, arcing, short or open circuits, and ground faults. | Annual | Electrician |
| Inverter | Inspection | Observe | Quarterly | Electrician |
| Component | Activity | Description | Interval | By |
|  |  | Instantaneous operational indicators on the faceplate of the inverter to ensure that the amount of power being generated is typical of the conditions. Inspect Inverter housing or shelter for physical maintenance, if required. |  |  |
| Inverter | Service | Clean or replace any  air filters. | As needed | Electrician |
| Instruments | Validation | Spot-check monitoring instruments pyranometer etc.) with standard instruments to ensure that they are operational and within specifications. | Annual | PV Specialist |
| Transformer | Inspection | Inspect transformer  oil level, temperature gauges, breather, silica gel, meter, connections etc. | Annual | Electrician |
| Tracker  (if present) | Inspection | Inspect gears, gear boxes, bearings as required. | Annual | Technician |
|  | Service | Lubricate tracker mounting bearings, gearbox as required. | Bi-annual | Technician |
| Plant | Monitoring | Daily Operation and  Performance Monitoring | Daily | Beneficiary |
| Inverter | Inspection | Observe instantaneous operational indicators on the faceplate of the inverter to ensure that the amount of power being generated is typical of the conditions.  Inspect Inverter housing or shelter for physical maintenance, if required. | Quarterly | Electrician |
| Inverter | Service | Clean or replace any air filters. | As needed | Electrician |
| Instruments | Validation | Spot – check monitoring instruments(pyranometer etc.) with standard instruments to ensure that they are operational and within specifications. | Annual | PV Specialist |
| Transformer | Inspection | Inspect transformer  oil level, temperature gauges, breather, silica gel, meter, connections etc. | Annual | Electrician |
| Tracker  (if present) | Inspection | Inspect gears, gear boxes, bearings as required. | Annual | Technician |
| Service | Lubricate tracker mounting bearings, gearbox as required. | Bi-annual | Technician |
| Plant | Monitoring | Daily Operation and  Performance Monitoring | Daily | Beneficiary |
| Spare Parts | Management | Manage inventory of spare parts. | As needed | Site in charge |
| Logbook | Documentation | Document all O&M  activities in a workbook available to all service personnel | Continuous | Site in charge |

**Operation and Maintenance Guidelines of Grid Connected PV Plants**

1. Periodic cleaning of solar modules, preferably once every fortnight. As this task has to be done by the beneficiary, the vendors shall apprise the beneficiary on the importance and proper technique for cleaning.
2. O&M of Solar Power Plant shall be compliant with grid requirements to achieve committed energy generation.
3. Periodic checks of the Modules, PCUs and BoS shall be carried out as a part of routine preventive and breakdown maintenance.
4. Immediate replacement of defective Modules, Invertors/PCUs and other equipment as and when required.
5. Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for all associated equipment and materials as per manufacturer/ supplier’s recommendations.
6. All the equipment testing instrument required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by the Bidder. The testing equipment must be calibrated once every 2 years from NABL accredited labs and the certificate of calibration must be kept for reference as required.
7. If negligence/ mal operation on part of the Bidder's operator results in failure of equipment, such equipment should be repaired/ replaced by the Bidder free of cost.
8. If any jobs covered in O&M Scope as per RFP are not carried out by the contractor/ Bidders during the O&M period, the Engineer-In-Charge shall take appropriate action as deemed fit.
9. *Insert the name of State Implementing Agency* reserves the right to make surprise checks/ inspection visits at its own or through authorized representative to verify the O&M activities being carried out by the Bidder. Failure to adhere to above guidelines will result in penal action including debarring from participation in next tender

**Annexure D**

**Sanction Request Letter**

***(On Letterhead of the Vendor)***

Letter No. XX/XXX/2019-20/XXX Dated XX.XX.XXXX

**To,**

[*Insert the name of Implementing Agency*

**Address**

**Sub: Application for approval of project sanction for disbursement of CFA for Installation and Commissioning of Solar PV Plant under XXXX Model in Part X**

Ref: 1. Your Allocation Letter XXXX/XXX/XXX dated XX.XX.XXXX

2. Project Sanction documents received vide letter number XXX dated XX.XX.XXXX

Dear Sir,

In reference to the above allocation letter dated XX.XX.XXXX, allocating us an aggregate capacity of XX kWp (allocated capacity in the category) Solar PV Project under XXXX model under Part X, we request you to kindly issue this consent letter for installation and commissioning of solar PV projects in [*Insert the name of Implementing Agency*]area under the grid connected rooftop scheme as per the following details:

|  |  |  |  |
| --- | --- | --- | --- |
| Total allocated capacity | Project Cost (Rs/ kWp) | Capacity Sanctioned (kWp) | CFA Amount |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |

We shall complete the Installation & Commissioning of the sanctioned projects as per the terms and conditions of the RFP document and work order issued by the [*Insert the name of Implementing Agency*].

Please find the check list of documents attached for sanction of projects

|  |  |  |  |
| --- | --- | --- | --- |
| S.No | Documents | Yes/ No | Page No. |
| 1. | Covering letter on Letterhead |  |  |
| 2. | Copy of CAPEX Agreement/ RESCO Agreement (PPA) |  |  |
| 3. | NOC/ Acknowledgement from DISCOM |  |  |
| 4. | Copy of Electricity Bill |  |  |
| 5. | Coloured Site Photos with Date & Time Stamping and Geo-coordinates |  |  |
| 6. | BOM & SLD |  |  |
| 7. | Solar PV Module Specs Sheet |  |  |
| 8. | Solar PV Module IEC Certificates |  |  |
| 9. | Inverter Specs Sheet |  |  |
| 10. | Inverter IEC Certificates |  |  |
| 11. | DCR Undertaking (individually for each project) |  |  |

Thanking You

Yours Faithfully, (Name of Authorized signatory of the Vendor)

(Designation)

**Annexure E**

**Quality Certification, Standards and Testing for Grid-connected Rooftop Solar PV Systems/Power Plants**

Quality certification and standards for grid-connected rooftop 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 (NH3) 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 |
| IEC 62804 | Photovoltaic (PV) modules - Test methods for the detection of  potential-induced degradation. IEC TS 62804-1: Part 1: Crystalline silicon (mandatory for applications where the system voltage is > 600 VDC and advisory for installations where the system voltage is < 600 VDC) |
| IEC 62759-1 | Photovoltaic (PV) modules – Transportation testing, Part 1:  Transportation and shipping of module package units |
| **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%, 25%, 50%, 75% & 90-100% Loading Conditions) |
| BS EN 50530  (as applicable) | Overall efficiency of grid-connected photovoltaic inverters:  This European Standard provides a procedure for the measurement of the accuracy of the maximum power point tracking (MPPT) of inverters, which are used in grid- connected photovoltaic systems. In that case the inverter energizes a low voltage grid of stable AC voltage and constant frequency. Both the static and dynamic MPPT efficiency is considered. |
| IEC 62116/ UL  1741/ IEEE 1547 (as applicable) | Utility-interconnected Photovoltaic Inverters - Test Procedure  of Islanding Prevention Measures |
| IEC 60255-27 | Measuring relays and protection equipment – Part 27:  Product safety requirements |
| IEC 60068-2 (1, 2,  14, 27, 30 & 64) | Environmental Testing of PV System – Power Conditioners  and Inverters  a) IEC 60068-2-1: Environmental testing - Part 2-1: Tests - Test A: Cold  b) IEC 60068-2-2: Environmental testing - Part 2-2: Tests -  Test B: Dry heat  c) IEC 60068-2-14: Environmental testing - Part 2-14: Tests - Test N: Change of temperature  d) IEC 60068-2-27: Environmental testing - Part 2-27: Tests -  Test Ea and guidance: Shock  e) IEC 60068-2-30: Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)  f) IEC 60068-2-64: Environmental testing - Part 2-64: Tests -  Test Fh: Vibration, broadband random and guidance |
| IEC 61000 – 2,3,5  (as applicable) | Electromagnetic Interference (EMI) and Electromagnetic  Compatibility (EMC) testing of PV Inverters |
| **Fuse** | |
| IS/IEC 60947 (Part  1, 2 & 3), EN  50521 | 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) EN 50521: Connectors for photovoltaic 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** | |
| IEC 62305-4 | 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/IS 694,  IEC 60502/IS 1554 (Part 1 & 2)/ IEC69947 | 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)258),  mainly for DC Cables |
| **Earthing /Lightning** | |
| IEC 62561 Series  (Chemical earthing) | IEC 62561-1: Lightning protection system components (LPSC) - Part 1: Requirements for connection components  IEC 62561-2: Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes  IEC 62561-7: 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. In case of clarification following person/agencies may be contacted.

i. Ministry of New and Renewable Energy (Govt. of India)

ii. National Institute of Solar Energy

iii.The Energy & Resources Institute

iv. TUV

**Annexure F**

**PROJECT REPORT FORMAT**

**Format for Summary Project Report for**

**Grid Connected Rooftop Solar Plants**

1. Name of Bidder:
2. RFP no.
3. Project details (Site location & Address):
4. Brief about the Rooftop Solar Power Generation System:
5. Details of the beneficiary:
6. Specifications of the Components and Bill of Material/ Quantities:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Component** | **Specifications** | **Quantity** | **Make** |
| A | Solar PV module |  |  |  |
| A.1 | Aggregate Solar PV  capacity (kWp) |  |  |  |
| B | Grid Tie inverter (Type and Capacity) |  |  |  |
| B.1 | Aggregate Inverter capacity (kVA) |  |  |  |
| C | Module mounting structure |  |  |  |
| D | Array Junction Box |  |  |  |
| E | AC Distribution Board |  |  |  |
| F | Cable (All type) |  |  |  |
| G | Earthing Kit  (maintenance free) |  |  |  |
| H | Meters |  |  |  |
| I | Online monitoring system |  |  |  |
| J | Any other component |  |  |  |
| K | Transformer |  |  |  |

1. Unit cost of solar power generation:
2. Expected output/annum:
3. Respective drawings for layout, electrical wiring connections, earthing, components etc.
4. Connectivity details with grid and metering arrangement (with sketch diagram)
5. Copy of electricity bill of the beneficiary and consumer number
6. Any other information.
7. Documentary proof regarding beneficiary type as per of the RFP document.

**Annexure G**

**DECLARATION of AUTHORIZATION**

**(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)**

I/ We …………………. (name and address of the registered office of the Bidding Company as applicable) do hereby constitute, appoint and authorize Mr./Ms. …………………….. (name & residential address) who is presently employed with us and holding the position of ………… to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for implementation of grid connected Roof top solar projects in response to the RFP No ………………… dated ………….. issued by *Insert the name of State Implementing Agency*, including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which the *Insert the name of State Implementing Agency* may require us to submit.

The aforesaid undertaking is further authorized for making representations to the *Insert the name of State Implementing Agency* and providing information / responses to [*Insert the name of State*] representing us in all matters before *Insert the name of State Implementing Agency* and generally dealing with *Insert the name of State Implementing Agency* in all matters in connection with Bid till the completion of the bidding process as per the terms of the above mentioned RFP.

We hereby agree to ratify all acts, deeds and things done by our said undertaking pursuant to this undertaking and that all acts, deeds and things done by our aforesaid undertaking shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the RFP.

**Signed by ……………………………………………….. (Insert the name of the executants’ company) Name: Company:**

**Phone :**

**E-mail: Address :**

**Sincerely**

**Annexure H**

**Quarterly O&M report**

Month and year:

Name of the bidder:

RFP ref no.:

Project Capacity:

Address of the site:

**Part A**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Component** | **Activity** | **Description** | **Date** | **Name /**  **Signature** | **\*Remarks** |
| PV Module | Cleaning | Immediately clean any bird droppings/dark spots on module. |  |  |  |
| Cleaning | Clean PV modules with plain water or mild dishwashing detergent. |  |  |  |
| Inspection (for plants> 100 kWp) | Infrared camera inspection for hot spots; bypass diode failure. |  |  |  |
| PV Array | Inspection | Check the PV modules and rack for any damage. |  |  |  |
| Inspection | If any new objects, such as vegetation growth etc., are causing shading of the array. Remove if any. |  |  |  |
| Vermin Removal | Remove bird nests or vermin from array and rack area. |  |  |  |
| Junction  Boxes | Inspection | Inspect electrical boxes for corrosion, intrusion of water or vermin. Check position of switches and breakers. Check status of all protection devices. |  |  |  |
| Wiring | Inspection | Inspect cabling for signs of cracks, defects, lose connections, corrosion, overheating, arcing, short or open circuits, and ground faults. |  |  |  |
| Inverter | Inspection | Observe instantaneous operational indicators on the faceplate. Inspect Inverter housing or shelter for any physical maintenance. Check for connection tightness. |  |  |  |
| Inverter | Service | Clean or replace any air filters. |  |  |  |
| Instruments | Validation | Verify monitoring instruments (pyranometer etc.) with standard instruments to verify their operation within tolerance limits. |  |  |  |
| Transformer | Inspection | Inspect transformer oil level, temperature gauges, breather, silica gel, meter, connections etc. |  |  |  |
| Plant | Monitoring | Daily Operation and Performance Monitoring. |  |  |  |
| Spare Parts | Management | Manage inventory of spare parts. |  |  |  |
| Logbook | Documentation | Maintain daily log records. |  |  |  |
| Tracker (if any) | Inspection | Inspect gears, gear boxes, bearings, motors. |  |  |  |
| Service | Lubricate bearings, gear as required. |  |  |  |

**\***Provide details of any replacement of systems/components, damages, plant/inverter shut down (planned/forced), breakdown, etc under remarks.

The same may be inspected by *Insert the name of State Implementing Agency* or its authorized representative at any time 5 years of O&M period. The Register will have the information about the daily generation, Inverter downtime if any, Grid outages.

**Annexure I**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **(Tax Invoice on Company letter Head with GST No.)** | | | | | | | | | | | | | | |
| Invoice No.: | | | | | | | Place of Supply: | | | | | | | |
| Invoice Date: | | | | | | |
|  |  | | | | | |
| **Bill To** | | | | | | | | | | | | | | |
| Name, contact no. and Address of the consumers | | | | | | | | | | | | | | |
|
|
|
|  |  |  |  |  | |  |  |  |  |  |  |  |  |
| **Sl No** | **Item and Description** | | | | **HSN/SAC** | | **Qty** | **Rate** | **CGST** | | **SGST** | | **Amt** | |
| **%** | **Amt** | **%** | **Amt** |  |
|  |  | | | |  | |  |  |  |  |  |  |  |
| Total |  | | | |  | |  |  |  |  |  |  | x |
| Total in Words | | | | | | | | |  |  | Total amount | x | | |
|  | | | | | | | | |  |  | Admissible CFA @ 40% | y | | |
| Terms and Conditions | | | | | | | | |  |  | Amount billed to consumer, excluding CFA | Rs. (x-y) | | |
|  |  | Total |  | | |
|  | Authorized Signature | | | | |
|  |
|  |
|  | | | | | | | | |  |  | | | | |
|  | | | | | | | | |  |  | | | | |

**Annexure J**

**Project Completion Report for Grid-Connected Rooftop**

|  |  |  |  |
| --- | --- | --- | --- |
| Financial year \* : |  | | |
| Approval No. \* : |  | | |
| Proposal Title : |  | | |
| Installed by agency : |  | | |
|  |  |  |  |
| Title of the Project\* : |  | SPV Capacity (kWp)\*: |  |
| Category of the organization/ beneficiary\*: |  | Name of the  contact person\* : |  |
| Address of contact person\* : |  | | |
| State\* : |  | District/City\*: |  |
| Mobile\* : |  | Email\*: |  |
| Aadhaar Card Number (For Residential) Copy to be attached. |  | Latitude: |  |
|  |  | Longitude: |  |
| Other info |  |  |  |
| Electricity Distribution Company  Name : |  | Sanction Load |  |
| Electricity consumer account no. as per electricity bill : |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Technology Description & System Design /Specification** | | | | |
| **(Compliance to BIS/ IEC Standards is mandatory – Attach Copies)** | | | | |
| 1. Solar PV Module: | | | | |
| Power of each PV Module / Nos.(Wp)\* / Make |  | |  |  |
| Cumulative Capacity of Modules(kWp): |  | |  |  |
| Solar cell technology : |  | | Tilt Angle of Modules: |  |
| Module efficiency (in Percentage) : |  | | Azimuth |  |
| Indigenous or imported |  | | RFID passed inside or outside: |  |
| **2. Inverters:** | | | | |
| Type of inverter : |  | | | |
| Power of each PCU/ Nos. of inverters (kVA)\* / Make |  | |  |  |
| Capacity/Power of PCU/inverters  (kVA) : |  | | Type of Charge Controller / MPPT |  |
| Inverter efficiency (Full load) :  (in percentage) |  | |  |  |
| Grid connectivity level phase | Single Phase/  Three Phase | | Grid connectivity level Voltage | 230 V/ 415 V |
| **3. Mounting Structures** | | | | |
| Type |  | | Surface Finish |  |
| Material |  | | Wind Speed Tolerance |  |
| **4. Cables:** | | | | |
| DC Cable Make & Size |  | | Length: |  |
| AC Cable Make & Size  (Inverter to ACDB) |  | | Length: |  |
| AC Cable Make & Size  (ACDB to Electric Panel) |  | | Length: |  |
| Conductor | Multi strand high conductivity Copper | | Insulation/sheath | PVC /XLPE Insulated |
| **5. JUNCTION BOX & DISTRIBUTION BOARDS** | | | | |
| Type | weatherproof, dust & vermin proof | | Nos.: |  |
| Make |  | |  |  |
| **6. EARTHING & LIGHTNING PROTECTION** | | | | |
| EQUIPMENT EARTHING |  | |  |  |
| AC (Nos.) |  | | Earth Resistance |  |
| DC (Nos.) |  | | Earth Resistance |  |
| LIGHTNING ARRESTORS (LA) |  | |  |  |
| Type |  | |  |  |
| LA (Nos.) |  | | Earth Resistance |  |
|  | | **(Signature of Vendor)**  **With Stamp** | | |

**Annex:** Copy of System test & Earth test reports (annexed)

**Commissioning Test Report ……. kW**

**Inverter Testing (DC) Side: Nos. of Inverter: ………. Nos.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Inverter S. No.** | **Capacity** | **String 1: Voc** | **String 2: Voc** | **Remark** |
|  |  |  |  |  |
|  |  |  |  |  |

**Inverter Testing (AC) Side – Single / Three Phase**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Inverter S. No.** | **Capacity** | **R – Y/ P-N** | **Y – B** | **B - R** | **R – N** | **Y – N** | **B - N** | **Remark** |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

**ACDB & Meter Panel Testing – Single / Three Phase**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **R – Y/**  **P-N** | **Y – B** | **B - R** | **R – N** | **Y – N** | **B - N** | **Remark** |
| ACDB I/C (V) |  |  |  |  |  |  |  |
| ACDB O/G (V) |  |  |  |  |  |  |  |
| Meter Panel I/C |  |  |  |  |  |  |  |
| Meter Panel O/G |  |  |  |  |  |  |  |

**Earthing Pit Details: Nos. of Earth Pit: ………. Nos.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Earthing AC** | **Earthing DC** | **Earthing LA** | **Remark** |
| Earth Test Value (Ohm) |  |  |  |  |

**Sign …………………………**

**Site Engineer**

**Annexure K**

|  |  |  |  |
| --- | --- | --- | --- |
| **Check List**  **Documents against Completion of Project** | | | |
| **Name of Vendor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Allocated Capacity : \_\_\_\_\_ kWp**  **Allocation letter No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Consent letter No. : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Name of Beneficiary: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Installed Capacity: \_\_\_ kW** | | | |
| **S. No.** | **Documents** | **Yes / NO** | **Page No.** |
| 1. | Claim letter for CFA |  |  |
| 2. | Solar System Warrantee Certificate for 5 / 25 years |  |  |
| 3. | Copy of Inspection report |  |  |
| 4. | Copy of PR Test report |  |  |
| 5. | Copy of Completion report - Annexure J |  |  |
| 6. | Copy of Solar System (Electrical side) testing report |  |  |
| 7. | Copy of Joint Completion certificate (JCR) |  |  |
| 8. | Solar PV module & Solar Inverter Serial No. |  |  |
| 9. | Solar PV module & Solar Inverter test sheet |  |  |
| 10. | Solar PV module & Solar Inverter warranty certificates |  |  |
| 11. | Solar PV plant Insurance Cover |  |  |
| 12 | PV Syst, Stadd Pro, Final BOM, As built drawing |  |  |
| 13 | Net Metering Installation report |  |  |

**Signature**

**Annexure L**

**INTIMATION TO DISCOM FOR IMPLEMENTATION OF GRID CONNECTED ROOFTOP SOLAR PV PLANT UNDER** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **SCHEME**

To, Date:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Designated Officer, DISCOM)

|  |  |  |
| --- | --- | --- |
| 1. | Name of SPD/Implementing Agency |  |
| 2 | Name of the Consumer\* |  |
| Site Details\* | | |
| 3 | Address of the Rooftop Project Site:\* | H No: |
| Street Name: |
| Village Name: |
| District Name: |
| State: |
| Pin Code: |
| 4 | Phone / Mobile no. \* |  |
| 5 | Email Id: |  |
| 6 | Electricity Consumer No. \* |  |
| 7 | Category (Please ) \* | * Residential |
| 8 | Installed Plant Capacity (kWp)\* |  |
| 9 | Connected load (kVA)\* |  |
| 10 | Voltage level at interconnection\* |  415 V  11 kV  above 11 kV |
| 11 | Nearest Transformer Details | Location: Capacity: |
| 12 | Details of Inverter with Anti-Islanding  Protection\*  Phase (Φ): (Please )  Galvanic Isolation (Please ) | Make: Capacity:   * Single phase  3-Phase * Inside Inverter  Outside Inverter |
| 14 | Both AC and DC components of the SPV power plants Earthed\*:  | |
| 15 | CEIG Inspection required\* | Yes  No |
| 16 | If, Yes, Inspection date \*  (Attach copy of CEIG Certificate) |  |
| 18 | Bank Account details | Account No.  Bank Branch |
| 19 | Date of Grid Synchronization\* |  |
| 20. | Net metering and grid connectivity  (Attach acknowledgment from  DISCOM, if received) | Applied on: |
| Fees Deposited On: |

\*to be provided mandatorily

It is certified that the information furnished above is true to the best of my knowledge.

Consumer /Authorised Signatory of Implementing Agency on behalf of consumer

**Annexure M**

**(CFA Claim Letter on Company letter Head)**

Ref No………………… Date: ……..

To,

[Name and Address of State Implementing Agency]

Sub: Claim Letter for release of CFA for Solar Power Plant of …… kWp capacity installed at ……….

Ref:

1. *Insert the name of State Implementing Agency* Allocation letter No. ………….
2. *Insert the name of State Implementing Agency* Consent letter No………………

Dear Sir,

This is in reference to *Insert the name of State Implementing Agency* allocation and consent letter, We, …………………….. (Name of Company) has successfully commissioned the ……… kWp capacity rooftop solar plant installed at …………………………….. (Name, CA No. & Address Site).

As per the sanction order, …………………….. (Name of Company) is entitled to CFA of Rs…………………., post successful installation, commissioning and inspection of the rooftop Solar Power Plant.

Therefore, kindly release the CFA of Rs. ……………………. (Rs. …. In words) at the earliest.

Thanks, and regards,

(Signature)

**Signed and Stamp**

**Annexure N**

***(On non-judicial stamp paper of appropriate value)***

**INDEMNITY BOND**

This Indemnity bond is made this \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ day \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_by M/s\_\_\_\_\_\_\_\_ having its registered office at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (herein after called as vendor which expression shall include its successors and permitted assigns) in favour of [*Name and Address of State Implementing Agency],* (hereinafter called *Insert the name of State Implementing Agency* which expression shall include its successor and assigns).

Whereas *Insert the name of State Implementing Agency* has sanctioned to the vendor following Solar projects vide its sanctions letters in terms of which *Insert the name of State Implementing Agency* is required to release CFA to the vendor for erection, operation and maintenance of Solar Power Plant:

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Name & Address of Consumers | CA No. | Capacity of Plant |
|  |  |  |  |

And whereas by virtue of clause No…….. of the said contract, the vendor is required to establish an Insurance Cover for third party liability, however same has not been established and therefore, executing an Indemnity bond in favour of *Insert the name of State Implementing Agency* for the purpose of performance of the contract ( hereinafter called the CFA)

Now, therefore, this indemnity bond witnesses this as follows:

1. The contractor undertakes to keep *Insert the name of State Implementing Agency* harmless against any past, future unforeseen loss or damage due to any event/act occurred up to the period of commissioning that may be caused due to non-establishment of Insurance Cover under the contract against which the CFA has been released by *Insert the name of State Implementing Agency*.
2. This indemnity bond is irrevocable. The vendor to execute the project in part / full as per the terms and conditions of the contract, shall be deemed to be a breach of contract and the vendor shall forthwith return the CFA with interest @ 18% upon demand from *Insert the name of State Implementing Agency* without demur, reservation or protest and without reference to any arbitrator / tribunal or any other authority whatsoever.
3. Now, the condition of this bond is that if the contractor shall duly and punctually comply with the terms and conditions of this bond to the satisfaction of *Insert the name of State Implementing Agency*, then the above bond shall be void, but otherwise, it shall remain in full force and virtue.

In witness where of the vendor has here–unto set its hand through its authorized representative under the common seal of the company, the day, month and year first above mentioned.

|  |  |
| --- | --- |
| **Witness I**  Authorized Representative  Signature  Name  Address | **For and on behalf of M/s**  Signature  Name  Address |
| **Witness II**  Authorized Representative  Signature  Name  Address |

**(Bond should be duly notarized)**

***Note:*** *\*Indemnity Bonds are to be executed by the authorized persons and (i) In case of contracting Company under common seal of the Company or (ii) having the power of attorney issued under common seal of the company with authority to execute Indemnity Bonds, (iii) In case, (ii) the original Power of Attorney if it is specifically for our contract or a Photostat copy of the Power of Attorney if it is a General Power of Attorney and such documents should be attached to Indemnity Bond.* **Annexure O**

**Joint Inspection Report**

It is to certify that a Grid Connected Solar PV Power Plant has been installed with following details:

1. Name of the beneficiary: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Address of installation with pin code: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Electricity consumer number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Solar PV module capacity (DC):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kWp
5. Inverter capacity (AC) (Nominal output power): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kW
6. Date of installation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Date of commissioning (after installation of net-meter):\_\_\_\_\_\_\_\_
8. Date of Joint inspection: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Metering arrangement: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Net meter/Gross meter/Net billing)

The above system is as per BIS/MNRE specifications and has been checked for its performance on \_\_\_\_\_\_\_\_\_\_\_\_ and it is working satisfactorily.

**DISCOM EMPANELLED AGENCY CONSUMER**

Name \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

Designation \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

Sign \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

**Seal** \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

It is to certify that the above system has been purchased with following details:

1. Total project cost ₹ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. CFA amount ₹ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Amount paid by beneficiary ₹ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**EMPANELLED AGENCY CONSUMER**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

Designation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

Sign \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

**Seal** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Annexure P**

**MNRE PHASE II GRID CONNECTED ROOFTOP SOLAR PLANTS SCHEME**

AGREEMENT BETWEEN CONSUMER AND EMPANELLED VENDOR

FOR INSTALLATION OF GRID CONNECTED ROOFTOP SOLAR PLANTS

This agreement executed on …………………………………………2022 between

1. Sri/Smt ......................................................................(HESCOM Residential category consumer) having Account ID----------------- and RR No: ........................... located at ....................................................................... (Address of the residential building) (Herein after referred to as Consumer)

AND

1. M/s.......................................................................................................................................... (Name of the Empaneled vendor) (Herein after referred to as Empaneled Vendor).

Whereas Consumer wishes to install a Grid Connected Rooftop Solar Plant having a capacity ........ kWp on the rooftop of the residential building of the Consumer at the above mentioned address under MNRE PHASE II GRID CONNECTED ROOFTOP SOLAR PLANTS SCHEME through the HESCOM Empanelled Vendor and the Empanelled Vendor have examined the aforesaid rooftop and found it feasible to install ................ kWp of Grid Connected Roof Top Solar plant.

The Empanelled Vendor agrees to design, supply, install, test, commission and carry out Operation & Maintenance of the Rooftop Solar plant for 5 year period at an amount of Rs…………………. as per the Rate/kW discovered through the HESCOM tendering process. The consumer agrees to pay their investment portion (Amount exclusive of Central Financial Assistance / Subsidy Amount) of Rs………………………… to the Empanelled Vendor.

**TERMS & CONDITIONS:**

1. **The Consumer hereby undertakes to:**
2. Pay the consumer investment portion to the Empanelled Vendor directly and payments will be made only through online mode as per following methodology,
3. 20% payment in advance after signing of agreement.
4. 20% payment after installation of structure
5. 20% payment after installation of SPV modules and inverters at site
6. 20% payment after completing plant installation (including net-metering) and submission of written inspection request to the implementing agency
7. Final 20% payment after commissioning of the plant and injection of power to the grid.
8. Provide secure storage of the material of the RTS plant delivered at the premises.
9. Provide access to the Roof Top during installation of the plant, operation & maintenance, testing of the plant and equipment and for meter reading from solar meter, inverter etc.
10. Provide electricity during plant installation and water for cleaning of the panels.
11. Maintain the area shadow free.
12. Report any malfunctioning of the plant to the Empanelled Vendor during the warranty period.
13. Sign the Joint Inspection Report and allow the vendor to take the photograph of the Consumer along with the installed Solar Rooftop Plant.
14. Issue a certificate that the system is installed and commissioned in all respect with the date of commissioning, system and invertor capacity, etc., as per Annexure.
15. Pay the additional amount to the Empanelled Vendor for any additional work /customization required depending upon the building condition. If any additional work or customization is involved for the plant installation as per site condition and requirement of the consumer building, the Empanelled Vendor shall prepare an estimate and can raise separate invoice including GST in addition to the amount towards standard plant cost. The consumer shall pay the amount for such additional work directly to the Empanelled Vendor.
16. **The Empanelled Vendor hereby undertakes to:**
17. Survey of the rooftop of the Consumer for determination of the capacity of the Solar Rooftop Plant to be installed.
18. Design, Supply, Installation, test and commission the RTS plant within the time frame as per KERC Regulations and MNRE guidelines.
19. Maintain the installed Solar Rooftop Plant for a period of 5 years as per the O&M guidelines issued by MNRE/HESCOM.
20. Raise the Invoice of the System billed to the beneficiary.
21. Handover the warranty certificates to Consumers. Warranty of the plant will be invalid if the installation is tampered, modified, altered etc.
22. Prepare Project Completion Report and Joint Inspection Report as per the prescribed formats.
23. Submit all the required documents to HESCOM for CFA Claim as per tender terms and conditions and MNRE guidelines.
24. Provide training to the Consumer about maintenance aspects of the rooftop plant.
25. Co-ordinate with HESCOM & Consumer during all stages of implementation.
26. Handover the plant to the consumer in satisfactory condition upon completion of the O & M period.
27. Prepare an estimate and raise separate invoice including GST in addition to the amount towards standard plant cost for any additional work / customization requested by Consumer.

**Consumer Empanelled vendor**

**Witness:**

**Annexure Q**

***DASHBOARD COMPONENTS***

**SITE LIST**

|  |  |
| --- | --- |
| **Column** | **Description** |
| Site Name | Consumer Name or CA no. where solar rooftop PV plant is installed |
| Address, Zip code | Location and Division details |
| Peak Power | Displays the peak power from solar array |

**DASHBOARD**

|  |  |
| --- | --- |
| **Column** | **Description** |
| Site Selection Menu | Typically, a list of all the solar plants installed in the licensed area |
| Overview Bar | Displays the current power generated in AC from inverter/s, Energy today and Monthly total energy |
| Site Summary | Display the relevant details of the plant |
| Power & Energy | Displays the power and energy graphs which shows the power and energy over a period of time and enables the download of the graphs in all major formats, such as xls, png and jpg |
| Weather | Displays the local weather conditions, like minimum and maximum temperature, clouds conditions |
| Solar Radiation (Irradiation) | Displays the daily or monthly peak sun hours from NASA, IMD or MNRE database |

**PLANT DETAILS**

|  |  |
| --- | --- |
| **Column** | **Description** |
| Plant Capacity | Installed Capacity (in kWp) |
| Module details | Make and electrical Specification |
| Module Serial No. | RFID |
| Last Measured | 10-15 mins reading (data fetching frequency) |
| Current (Amp) | Module output current/Inverter input current |
| Voltage (V) | Module output voltage/Inverter AC voltage |
| V DC | Inverter DC voltage |
| Energy (Wh) | Inverter energy |

**Annexure R**

***Check list for offline documents:***

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Documents Details** | **Attached, (Yes/ No)** |
| 1. | Covering letter as per **Format-1**. |  |
| 2. | General Particulars as per **Format-2**. |  |
| 3. | Original copy of the Bid Bond as per **Format -3** in the form of a Bank Guarantee/ DD / FDR. Check list as per **Format-5** or in case of exemption copy of valid MSME/NSIC/ DIC/ DIPP registration. |  |
| 4. | DD/ Bankers cheque for an amount as per Bid Information Sheet**,** drawn in favour of [*Insert the name of Implementing Agency*] against payment of tender processing fee. |  |
| 5. | Original Power of Attorney supplemented with Board resolutions for **PART-A, B, C & D** (as per **Format-6**), if applicable. |  |
| 6. | Financial eligibility criterion (as per **Format -7**). |  |
| 7. | Certificate for certificate of relationship of Parent Company or Affiliate with the Bidding Company (as per **Format -8**), if required. |  |
| 8. | Undertaking from the Financially Evaluated Entity or its Parent Company/ Ultimate Parent Company (as per **Format -9**), if required. |  |
| 9. | Original copy of the Consortium Agreement as per Format-10, if any (for **PART- A, B, C & D)** |  |
| 10. | Share Holding certificate (**Format -11**). |  |
| 11. | Self-Declaration, **Annexure-G** for PART- A, B, C & D |  |
| 12. | The Passphrase to decrypt the relevant Bid-Part in a sealed envelope before the start date and time of the Tender Opening Event (TOE). |  |

**Annexure S**

***Check list for online documents:***

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Documents Details** | **Attached, (Yes/ No)** |
| 1. | Certificate of incorporation and  Updated Memorandum of Association (MoA). |  |
| 2. | Scanned copy of DIPP/MSME/NSIC registration certificate. |  |
| 3. | Declaration on bidder’s letterhead for Non blacklisting from any Government Department/ PSU/ SEB’s. |  |
| 4. | PAN registration.  GST registration. |  |
| 5. | For meeting technical eligibility criterion:  Scanned copy of the Commissioning certificate and Work order/ Contract/ Agreement/ from the Client/ Owner. |  |
| 6. | For meeting financial eligibility criterion:  scanned copy Balance showing Annual Turnover or Net worth. |  |
| 7. | Acceptance of RFP terms and conditions including amendments & clarification on letter head of the bidder. |  |

**Annexure T**

***Reference Bidders’ Declaration Format associated with Implementation of ALMM Order***

(on the letter head of the bidder)

Declaration

**To Whomsoever this may concern**

Reference: (RFP no. and description)

* 1. We hereby declare that we are fully aware of the binding provisions of the ALMM order and the Lists thereunder, while quoting the rate in the tender no. [*tender number*] floated by [name if tendering authority]
  2. We understand that the List – I (Solar PV Modules) of ALMM Order, Annexure – I of the O M, issued by MNRE on 10th March 2021 will be updated by MNRE from time to time. We also understand that the Modules to be procured for this project, shall be from the List – I of the ALMM order applicable on the date of invoicing of such modules.
  3. We further understand and accept that we shall be liable for penal action, including but not limited to blacklisting and invocation of Performance Bank Guarantee, if we are found not complying with the provisions of ALMM Order, including those mentioned above.

Name:

Designation:

Organization:

Date:

(Signature and Stamp)

**Annexure U**

***Standard Operating Procedure (SOP) for Installation and Metering Connection of Grid Connected Solar Rooftop PV Systems by DISCOMs***

|  |  |  |
| --- | --- | --- |
| **ACTIVITY** | **RESPONSIBILITY** | **TIMELINE (Max Working Days)** |
| Submission of Application | CONSUMER | ***Zero Date*** |
| Acknowledgment of Application by DISCOM | DISCOM | 02 |
| Site Verification / Technical Feasibility & issuance of Letter of Approval (LOA) / Termination | DISCOM | 10 |
| In-Principle Approval for CFA | DISCOM | 10 |
| Execution of Metering Agreement | DISCOM & CONSUMER | 15-20 |
| Installation of Rooftop Solar System | DISCOM, Empanelled Vendor & CONSUMER | 90-180 |
| Meter Procurement Intimation | CONSUMER | 15  (prior intimating DISCOM on system readiness) |
| Submit Work Completion Report / Certificate | CONSUMER & Empanelled Vendor | 90-180  (from LOA) (depending upon capacity) |
| Inspection by CEIG (if applicable) | CEIG | 15 -20 |
| Issuance of Safety Certificate | CEIG (if applicable) | 5-10 |
| Intimation to Install Meter | CONSUMER | 7-10 |
| Inspection by DISCOM, Installation of Meter [2] and Commissioning of the System | DISCOM [3] | 15 – 20  (after CEIG approval) |
| Inspection for Release of CFA [4 | DISCOM | 07-10 |
| Release of CFA | DISCOM | 05-10 |
| Billing Process | DISCOM | 30  (After synchronization with Grid) |

**Annexure V**

**Format for Bid Security Declaration**

(To be submitted separately for each Project Group)

*(To be stamped on non – judicial stamp paper as per the stamp act of the state where the document is made)*

Ref: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Declaration No.: (Insert Name of Project Group)

Date: \_\_\_\_\_\_\_\_\_\_\_

**Subject: Declaration of bid security requirement.**

We, \_\_\_\_\_\_\_(insert name of the Bidder) hereby provide this undertaking to [*Insert the name of Implementing Agency*], in respect to our response to RfP vide RfP No. \_\_\_\_\_\_\_\_\_\_\_\_\_dated\_\_\_\_\_\_\_\_\_\_\_. We undertake that we will abide by the provisions of the RfP for the activities pertaining to submission of response to RfP, during the bid validity period. We undertake not to withdraw or modify our bid during the bid validity period, in line with provisions of the RfP. In case we withdraw or modify our response to the RfS during the bid validity period, or violate other provisions of the RfP which make the bid non-responsive under Clause 4.2 of the RfP, we, \_\_\_\_\_\_\_\_\_\_\_ (insert name of the bidder) including our Parent, Ultimate Parent, and our Affiliates shall be suspended/debarred from participating in upcoming tenders issued by any department of [*Insert the name of State*] Government for a period of 5 years from the date of default as notified by [*Insert the name of Implementing Agency*.

(Name and Signature of the Authorized Signatory

**Annexure W**

**Undertaking/Self- Declaration for domestic content requirement fulfilment**

(**On a plain Paper**)

This is to certify that M/S…………………………………………..[Company Name] has installed ……………KW [Capacity] Grid Connected Rooftop Solar PV Power Plant for………………………………………………………………. [Consumer Name] at ………………………. [Address] under sanction number…………………….dated………………………………….…….[sanction date] issued by…………………………[DISCOM Name].

It is hereby undertaken that the PV modules installed for the above-mentioned project are domestically manufactured using domestic manufactured solar cells. The details of installed PV Modules are follows:

1. PV Module Capacity:
2. Number of PV Modules:
3. Sr No of PV Module
4. PV Module Make:
5. Purchase Order Number:
6. Purchase Order Date:
7. Cell manufacturer’s name
8. Cell GST invoice No

The above undertaking is based on the certificate issued by PV Module manufacturer/supplier while supplying the above-mentioned order.

I, ………………………on behalf of M/S………………………………………[Company Name] further declare that the information given above is true and correct and nothing has been concealed therein. If anything is found incorrect at any stage then the due Central Financial Assistance (CFA) that I have not charged from the consumer can be withheld and appropriate criminal action may be taken against me and my company, as per law, for wrong declaration. Supporting documents and proof of the above information will be provided as and when requested by MNRE/state implementing agency.

(Signature With official Seal)

For M/S…………….……………………………...

Name…..……………………………………

Designation……..…………………………..

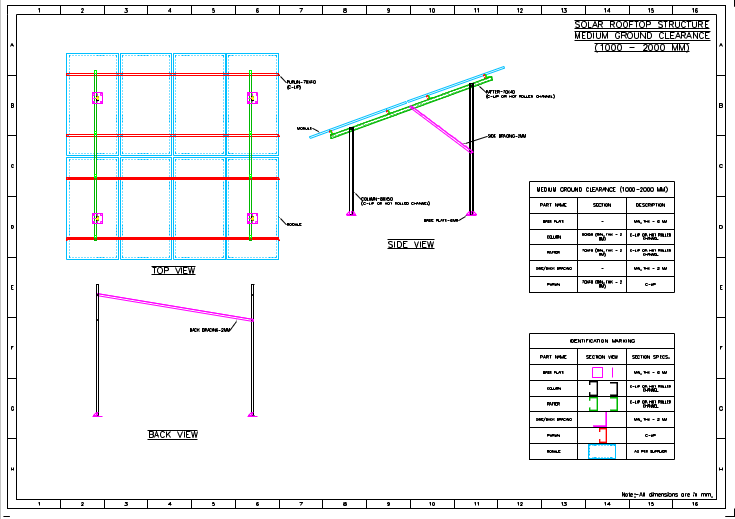
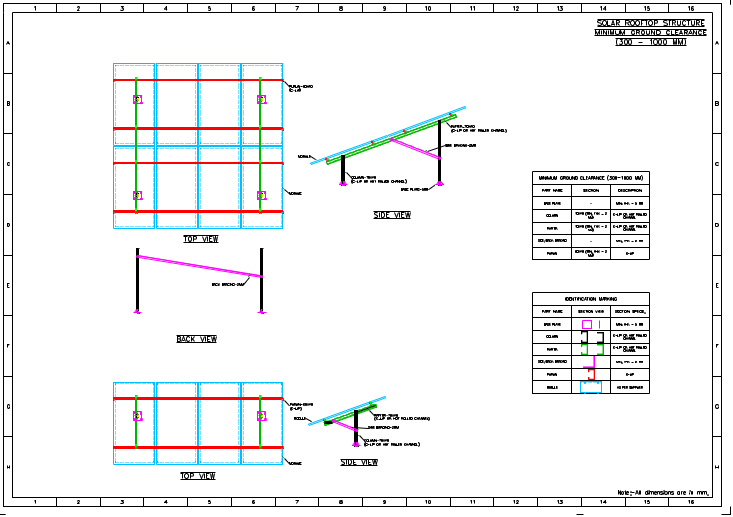
Phone………………………………….…………

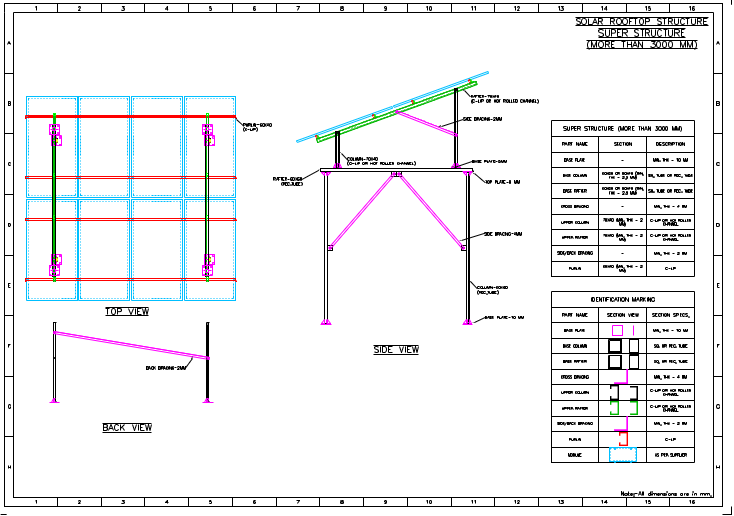
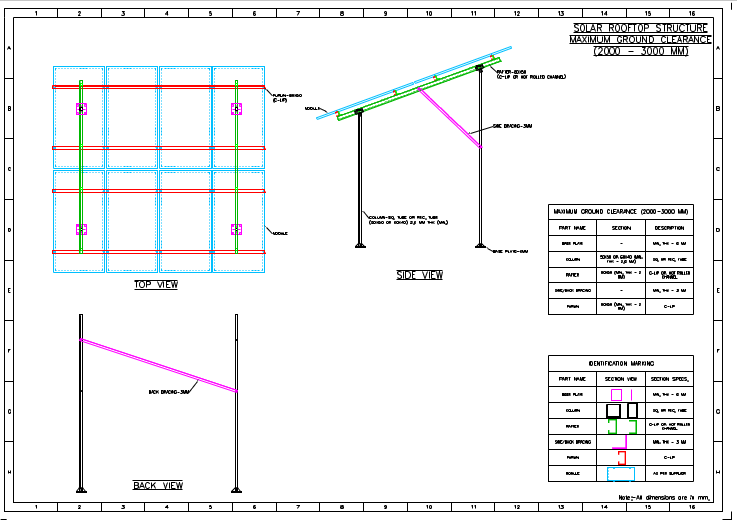
Email………….………………………………

**Annexure X**

**Rooftop Structure Drawing**







**Annexure Y**

**Agreement between Vendor and beneficiary for additional cost**

This agreement is signed between two parties i.e., M/s (Name of Vendor) registered at address, who is an empanelled vendors in the tender floated by Name of Implementing agency for implementation of grid connected rooftop solar (GCRTS) PV projects in the state/operational area of name of state/Name of Discom, hereby referred to in as the ‘Vendor’ or ‘first party’ AND (Name of Consumer, residing at…….) , hereby referred to in as the ‘customer’ or ‘second party’.

Both the parties mentioned above, by mutual consent, are entering into an agreement for installation of grid connected rooftop solar project under Phase-II of grid connected rooftop solar programme of MNRE, being implemented by Name of implementing agency in the state/operational area of name of state. The second party has satisfied itself that the first party is an empanelled vendor in the tender floated by Name of Implementing agency and rooftop solar project of ….kW capacity will be installed by first party at the residence of second party, under the tender floated by Name of Implementing agency.

Both the parties referred above, do hereby declare that they are aware of the fact that the L-1 price discovered in the tender floated by Name of Implementing agency is Rs. /kW. However, the second party has agreed to pay additional cost to the first party for desired customization in the project which is in the form of (mention the customizations). Due to these customizations, the per KW cost of the rooftop project comes out to be (Rs. ).

The first party hereby declares that the invoice raised to the second party for amount mentioned above, is on actual basis after taking into account the cost of any customization and no other extra/hidden charges are being charged to the second party. The second party hereby declares that they are aware of the provisions of the scheme and do hereby consent to pay the additional cost of customization to the first party for the desired customizations. MNRE and the implementing agency shall not be, in any case, be held responsible for any dispute arising out of this agreement/financial transactions.

This agreement is entered into ……..day of the month of ……….in year……

For First Party For Second Party

(Name of Company) (Name of Consumer)