

CE/Comm/MNRE-RTS-Phase-II/No. **No 0 1 4 1 9**

Date: **19 JAN 2021**

**COMMERCIAL CIRCULAR No.- 331**

**SUB:** Implementation of MNRE's Phase-II of Grid Connected Rooftop Solar Program in MSEDCL.

**REF.:** (1) MNRE's Letter No. 318/331/2017-Grid Connected Rooftop Dated:-20.08.2019  
(2) MERC (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019  
(3) Commercial Circular No. 322 Dated: 22.01.2020  
(4) This office tender: MSEDCL/COMM/2020/PHASE-II RTS/T-01 Dated: 28.08.2020

**1. Preamble**

- 1.1 MNRE declared Phase-II Rooftop Solar Program for Residential consumers to achieve 4 GW Rooftop Solar in India through Residential sector and issued guidelines for implementation of this program vide ref.01.
- 1.2 MSEDCL participated in implementation of MNRE's Phase-II RTS Program with a target capacity of 25 MW and MNRE approved this target on 02.01.2020.
- 1.3 For implementation of this program in MSEDCL area, tender was floated for expression of interest of agencies for Design, Supply, Installation, testing & commissioning of Grid connected Rooftop Solar Photovoltaic Systems in Residential premises, aggregating to 25 MW, including five years warranty & comprehensive maintenance in MSEDCL jurisdiction in the State of Maharashtra. List of Empaneled agencies for the above program is available at [www.mahadiscom.in](http://www.mahadiscom.in).

The operational guidelines for implementation of MNRE's Phase-II of Grid Connected Rooftop Solar Program in MSEDCL are as under:

**2. Applicability**

The program provides for Central Financial Assistance (CFA) for the household owner and Group Housing Societies to set up Rooftop Solar in their residence/residential campus. Accordingly, Residential category consumers (Including Group Housing Society/ Residential Welfare Associations) only are eligible for CFA under this program under Net-Metering Arrangement as per GIRREGS Regulations 2019.

The pre dispatch inspection/testing of the Solar Cell/Modules & Inverter may be done at the manufacture's place if required.

MSEDCL reserves the right to do sample inspection checks for the projects commissioned by the Bidder.

The projects will be inspected for quality at any time during commissioning or after the completion of the project either by officer(s) from MSEDCL or its designated agency.

**The inspection as mentioned above by MSEDCL's representative shall not relieve the empanelled agencies from full responsibility of completing the work confirming quality of material as per the technical specifications and requirement of this contract.**

**3.9 COMPLETION OF CONTRACT:**

Unless otherwise terminated under the provisions of any other relevant clause, this contract shall be deemed to have been completed on the expiry of the warranty period & Comprehensive Maintenance.

**3.10 SERVICE CENTRES**

- a. Empanelled Agency has to undertake to establish one no. of Service centre with necessary spare parts and technicians in each selected Zones under MSEDCL Jurisdiction area.
- b. The Service Centre should have adequately trained staff available for repair and maintenance of Solar PV Systems, Inverters supplied and installed.
- c. The service centre should be open for at least 8 hours per day and 6 days week excluding bank holidays.
- d. Empanelled Agencies need to have a dedicated mobile number which should be readily available during its office hours and an e-mail ID for correspondence.
- e. Empanelled Agency shall ensure that necessary spares are always available with the service centres to provide necessary after sales service to the beneficiary during the warranty period.

**3.11 Resolving Complaints related to defects/ non-working / poor performance of the system:**

- a. For any problem/defect in system, Empanelled Agency shall have to replace/repair the defect of the system, resolve it and make the system operative as per the Technical specifications, within 48 (Forty eight) hours from the receipt of the complaint or receipt of notification/Alert/Message from the remote metering system.

b. While doing repairing or rectification work, the Empanelled Agency's technician or any person is not authorized to work on MSEDCL's electric line of 11 KV and LT having potential danger of electricity.

c. **Penalty on part of loss of Solar generation**

"The Performance Ratio (PR) of Grid Connected Solar Systems shall be more than 75% throughout the 5-year warranty & CMC period, and necessary efforts shall be made by the Bidder to achieve it. The PR shall be verified by MSEDCL or its authorized designated Agency at any time and any numbers of times during the 5-year maintenance period without any prior intimation to the Bidder. The PR shall be measured on an instantaneous-basis and shall be calculated on the nameplate DC capacity of the PV system (at STC). Further, the PR shall be calculated after cleaning the PV modules and during a time when there is no shadow being cast on the PV array from objects outside the beneficiary's/ consumer's premises."

In case the PV system fails to meet the minimum instantaneous Performance Ratio (PR) of 75%, then the empanelled agency shall be penalized at the rate of Rs. 1,000 per kW for each percentage shortfall in the PR for each instance of measurement. (For example, if a 3 kW system measures 73% PR during an inspection, then the Bidder shall be penalized Rs. 1,000 per kW per % x 3 kW x (75-73)% = Rs. 6,000/-) The Bidder shall be required to rectify the faults in the PV system within 1 week of such failure, after which, one more inspection shall be carried out to verify the rectification. This penalty shall be deducted from the PBG/FD of the Bidder, which shall be replenished immediately after such deduction.

3.12 **LOCATION OF INSTALLATION:**

The Grid Connected Solar PV system is required to be installed at various locations of Residential consumer's premises who apply for it in the jurisdiction of MSEDCL in the Maharashtra State.

3.13 **PACKING AND FORWARDING CHARGES:**

The prices shall be inclusive of packing & forwarding charges. The stores should be strongly and adequately packed to ensure safe arrival at destination. The materials dispatched from overseas by Air / Shipping should be packed in such a way that it can withstand rough handling and possible corrosion due to exposure to salt laden atmosphere, salt spray or open storage. All packing must be clearly marked with order Number and consignee's name and address.

**3.14 Insurance:**

The Bidder shall be responsible and take an Insurance Policy for transit-cum storage-cum erection for all the materials to cover all risks and liabilities for supply of materials on site basis, storage of materials at site, erection, testing and commissioning. The bidder shall also take appropriate insurance during O&M period.

The Bidder shall also take insurance for Third Party Liability covering loss of human life, engineers and workmen and also covering the risks of damage to the third party/material/equipment/properties during execution of the Contract. Before commencement of the work, the Bidder will ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or death arising out of the execution of the work or in carrying out the Contract. Liquidation, Death, Bankruptcy etc., shall be the responsibility of bidder.

**3.15 Illustration for CFA**

S.No.	Total Capacity of Rooftop Solar Installation	Applicable Subsidy
1.	Up to 3 KW	40%
2.	Above 3 KW and up to 10 KW	40% for the first 3 KW and 20% for balance capacity.
3.	Above 10 KW	40% for the first 3 KW and 20% for next 7 KW. No subsidy beyond 10 KW capacity.

#### 4. Zone-wise Allocation

Name of Region	Name of Zone	1 KW	Above 1 KW TO 2 KW	Above 2 KW TO 3 KW	Above 3KW TO 10KW	Above 10KW TO 100KW including GHS & RWA	Total Quantum
		Allocated Quantum	Allocated Quantum	Allocated Quantum	Allocated Quantum	Allocated Quantum	
AURANGABAD REGION	AURANGABAD ZONE	349	349	175	300	60	1233
	LATUR ZONE LATUR	180	180	90	100	50	600
	NANDED ZONE	160	160	80	100	50	550
KOKAN REGION	BHANDUP (U) ZONE	780	780	390	1400	1200	4551
	JALGAON ZONE	240	240	120	100	40	740
	KALYAN ZONE	757	757	378	400	250	2542
	KOKAN ZONE RATNAGIRI	180	180	90	100	60	610
	NASIK ZONE	613	613	306	400	120	2052
NAGPUR REGION	AKOLA ZONE	180	180	90	100	80	630
	AMARAVATI ZONE	168	168	84	100	80	600
	CHANDRAPUR ZONE	164	164	82	100	80	591
	GONDIA ZONE	120	120	60	150	60	510
	NAGPUR ZONE	520	520	260	500	200	2000
PUNE REGION	BARAMATI ZONE	440	440	220	200	100	1400
	KOLHAPUR ZONE	222	222	111	286	100	941
	PUNE ZONE	926	926	463	2164	970	5450
		<b>6000</b>	<b>6000</b>	<b>3000</b>	<b>6500</b>	<b>3500</b>	<b>25000</b>

- 4.1 Empaneled agencies will carry out the work in their preferred zones on first come first serve basis. After taking mid-term review if needed slab wise allocation of quantum may be transferred from one zone to another zone or slab wise quantum allocation within the zone may be reallocated taking into account the completion of the project within stipulated time.
- 4.2 The online registration of the applications of the beneficiaries under MNRE RTS Phase-II scheme will be stopped once the slab wise/zone wise/ aggregate capacity is reached / sanctioned on the online portal.
- 4.3 Slab wise quantum is allocated to Empaneled Agencies. However, the mid-term review after three (3) months will be taken and if it is observed that the allocated quantum is not met by the bidders, it will be open to all bidders to take up the balance quantum on first come first serve basis.

## 5. Procedure

- 5.1 Respective Sub-Divisional Officer shall act as nodal officer for implementation of RTS projects in his operational area.
- 5.2 Interested consumers of Residential category will apply through online application portal at [www.mahadiscom.in](http://www.mahadiscom.in) → Consumer Portal → Quick Access → Rooftop RE Applications → Apply for RE Rooftop.
  - 5.2.1 Requisite Registration fees to be paid online. Registration fees is to be paid by Empanelled Agency.
  - 5.2.2 Applicant will select the Empanelled Agency available in their MSEDCL zones to carry out the work of installation of Rooftop Solar System.
- 5.3 Empanelled Agency will confirm the request of applicant within 3 days through their login ID through portal. Technical Feasibility to be carried out by field officers through Mobile App as soon as the application is submitted by applicant and system will sanction the application. Message about sanction will be communicated to the consumer. Sanction copy will be available for download to consumer and employee enclosed herewith as **Annexure-B**.
- 5.4 Empanelled Agency will have to carry out the work in time bound manner as to install and commission the SPV System within 2(TWO) months for system capacity upto 10 kW and 03 (three) months for system capacity above 10 kW from the date of sanctioned of individual beneficiary application by MSEDCL.
- 5.5 Cost of Net Meter & Generation Meter
  - 5.5.1 Net meter shall be provided by the Empanelled Agency as per MSEDCL technical specifications and the cost of the same along with testing fees shall be borne by the beneficiary.
  - 5.5.2 Generation meter shall be provided by the Empanelled Agency as per MSEDCL technical specifications and the cost of the same along with testing fees shall be borne by the Empanelled Agency.
  - 5.5.3 The testing facility of the meters shall be made available by MSEDCL by accepting the meter testing fees as per circular No. CE(Dist.)/M-III/Schedule of Charges/09078 dated 07.4.2020.
- 5.6 After testing of meters, the entry of the same shall be taken by field officer in ERP.
- 5.7 After installation of the Rooftop Solar Generating system, Agency will upload all the relevant documents through the online portal/Mobile App for Agencies.

- 5.7.1 Proforma A (As per MNRE)- COMMISSIONING REPORT (PROVISIONAL) FOR GRID CONNECTED SOLAR PHOTOVOLTAIC POWER PLANT (with Net-metering facility)
- 5.7.2 Proforma B (As per MNRE)- Undertaking/Self- Declaration for domestic content requirement fulfilment.
- 5.7.3 Proforma C (As per MNRE)- Joint Undertaking for Grid Connectivity of Rooftop Solar Power Plant through a Common Energy Meter.
- 5.7.4 Annexure-C (MSEDCL)-Commissioning Report of Rooftop RE Generating System.
- 5.7.5 Photo of Rooftop RE Generating System.
- 5.7.6 Photo of beneficiary.
- 5.7.7 CSV file for details of RTS system with meter, MODEM details.
- 5.7.8 Self-certification of safety of the installation of the RTS system along with the test report of the Licensed Electrical Contractor.
- 5.7.9 CFA Invoice from Agency.
- 5.8 Installation of meters & Commissioning of the Rooftop Solar Generating System shall be carried out by field officer and the entries shall be done through Mobile App.
- 5.9 Meter assignment to be done through NC module for further billing process.

#### **6. Disbursement of CFA**

- 6.1 After meter assignment is completed, the RTS data of consumer will be linked with MNRE SPIN Portal.
- 6.2 MNRE will approve the subsidy of beneficiary (Consumer).
- 6.3 After approval from MNRE, MSEDCL will release the subsidy amount to the bidder through online portal.
- 6.4 Consumer has to pay balance amount to the bidder excluding eligible CFA Amount approved by MNRE.

PPT's for reference are also available at below mentioned link for reference.

<https://www.mahadiscom.in/consumer/grid-interactive-rooftop-renewable-energy-generating-system-regulation-2019/>


7. E-mail ID & Contact Nos of RTS Cell at Corporate Office

For Consumers	support_solarrf@mahadiscom.in
For Field Officer, Empaneled Agencies	msedclrtsphase2@gmail.com

S.No.	Name	Designation	Mobile No.
1.	Pravin Sute	Executive Engineer	+91 98694 04439
2.	Pradhnya Kamle	System Analyst (IT)	+91 85309 68228
3.	Arvind Mahakalkar	Dy. Executive Engineer	+91 7767803844

EOI & other documents related to EOI published by MSEDCL from time to time shall form part & parcel of this circular and shall be read harmoniously.

All the field officers are requested to take necessary action accordingly.

  
19/01/2024  
Chief Engineer (Commercial)

Copy to:  
As per mailing list

## Annexure-A

### **TECHNICAL SPECIFICATIONS FOR GRID CONNECTED SPV SYSTEMS**

The proposed projects shall be commissioned as per the technical specifications given below. Any short comings will lead to cancelation of Empanelment as may be decided by MSEDCL and Competent Authority's decision will be final and binding on the bidder.

#### **1. DEFINITION:**

A Grid connected Solar Rooftop Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables, solar meter, bi-directional energy meter and switches. PV Array is mounted on a suitable structure. Grid connected SPV system is without battery and should be designed with necessary features to supplement the grid power during daytime. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should confirm to the BIS, IEC, or international specifications, wherever such specifications are available and applicable.

Solar PV system shall consist of following equipment/components.

- Solar PV modules consisting of required number of Crystalline PV modules.
- Grid interactive Power Conditioning Unit with Remote Monitoring System.
- Mounting structures.
- Junction Boxes.
- Earthing and lightening protections.
- IR/UV protected PVC Cables, pipes and accessories.
- Solar Generator Meter and Bi-directional Energy Meter

#### **a) SOLAR PHOTOVOLTAIC MODULES:**

**1.1.1 The PV modules and Solar Cell used should be made in India. Necessary documents in this regards must be provided to MSEDCL.**

Violation of norms of Domestic Content Requirement (DCR) UNDER Solar PV projects will lead to penalties and actions as mentioned in office memorandum of MNRE GOI vide letter no. 283/2018-GRID SOLAR dated 20<sup>th</sup> February, 2018 as under:

- a) Filing of criminal case under IPC 420 and related Sec.
- b) Blacklisting of developers for period of 10 years
- c) Forfeiting of relevant bank guarantee(s)
- d) Disciplinary case against the Officers of concerned CPSU/ State Govt.
- e) Any other action, in addition to those above

**SPV Modules and Solar Cells must be used for this Scheme shall be domestically manufactured as per MNRE's requirement. The Empanelled Agencies shall require to submit the Self declaration, regarding the Modules and Solar cells used under this Scheme are "Made in India" in Appendix-3 Proforma-**

**B. In absence of the ALMM (Approved list of Models & Manufacturers of SPV), the Empanelled Agencies shall have to submit self-declaration regarding domestically manufactured Cell and Modules used in the SPV System in this project. Whenever, the ALMM list published by the MNRE, the Model and Manufactures of the Module and Cell shall be from the ALMM only used in the SPV System in this project.**

“The PV modules used shall conform to the latest edition of IEC 61215 and IS 14286 (Terrestrial photovoltaic (PV) modules - Design qualification and type approval). The PV modules shall also conform to IS/ IEC 61730 (Photovoltaic (PV) module safety qualification: Requirements for construction and testing).”

1.1.2. The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215 and IS14286, IEC 61853-Part I, IS 16170-Part I for Photovoltaic (PV) module performance testing and energy rating, Irradiance and temperature performance measurements, and power rating, In addition, the modules must conform to IEC61730 Part-2- requirements for construction & Part 2 – requirements for testing, for safety qualification or equivalent IS.

- a) For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701
- b) The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar crystalline modules of minimum 250 Wp. Module capacity less than 250 watts shall not be accepted.
- c) Protective devices against surges (SPD) at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- d) PV modules must be tested and approved by one of the IEC/BIS authorized test centres.
- e) The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.
- f) The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid.
- g) The PV Module efficiency should be higher than 15%.
- h) Other general requirement for the PV modules and sub systems shall be the following:
  - i. The rated power of solar PV module shall have maximum tolerance up to +3%. No negative tolerance in the rated capacity of solar PV module is allowed.
  - ii. The peak-power point voltage and the peak-power point current of any supplied module string (series connected modules) shall not vary by +2% from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
  - iii. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangements for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
  - iv. I-V curves at STC shall have to be provided by bidder.

- v. Minimum certified PV module efficiency shall be 15% for crystalline. The temperature co-efficient power of the PV module shall not be less than - 0.50% /°C.
- vi. All PV modules should carry a performance warranty of > 90% during the first 10 years, and >80% during the next 15 years. Further, module shall have performance warranty of > 97% during the first year of installation. Degradation of module should not be more than 1 % per annum. MSEDCL authorized representative will check the efficiency of the system on random basis.
- vii. The PV modules shall be equipped with IP67 or higher protection level junction box with a minimum of 3 (three) numbers of bypass diodes of appropriate rating and appropriately sized output power cable of symmetric length with MC4 or equivalent solar connectors.

1.1.3. Modules deployed must use a RF identification tag. The following information must be mentioned in the **RFID** used on each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).

- a) Name of the manufacturer of the PV module
- b) Name of the manufacturer of Solar Cells.
- c) Month & year of the manufacture (separate for solar cells and modules)
- d) Country of origin (separately for solar cells and module)
- e) I-V curve for the module Wattage,  $I_m$ ,  $V_m$  and FF for the module
- f) Unique Serial No and Model No of the module
- g) Date and year of obtaining IEC PV module qualification certificate.
- h) Name of the test lab issuing IEC certificate.
- i) Other relevant information on traceability of solar cells and module as per 9001 and ISO 14001

#### 1.1.4. **Warranties:**

- a) Material Warranty:
  - i. Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of commissioning.
  - ii. Defects and/or failures due to manufacturing.
  - iii. Defects and/or failures due to quality of materials.
  - iv. Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option.
- b) Performance Warranty:
  - i. The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25 year period and not more than 10% after ten years period of the full rated original output.

## 2. **ARRAY STRUCTURE:**

- a) Supply, installation, erection and acceptance of module mounting structure (MMS) with all necessary accessories, auxiliaries and spare part shall be in the scope of the Empanelled Agency.
- b) Hot dip galvanized MS /anodized aluminium mounting structures shall be

used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions and to take maximum insolation. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements. MMS shall be made of hot dip Galvanized steel per ASTM A123. Minimum thickness of HDGI zinc coating should be minimum 80 micron at any point when measured. No averaging is allowed in the measurement of coating thickness. All bolts, nuts, panel mounting clamps fasteners shall be of stainless steel of grade SS 304 and must sustain the adverse climatic conditions.

- c) PV array structure shall be designed and positioned such that the PV modules are completely shadow-free solar during generation hours.

### **3. JUNCTION BOXES (JBs):**

- a) The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction Boxes (JBs) shall be made of GRP/FRP/Powder Coated aluminium /cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB shall be such that input & output termination can be made through suitable cable glands. **Suitable markings shall be** provided on the busbars for easy identification and cable ferrules will be fitted at the cable termination points for identification.
- b) Copper bus bars/terminal blocks housed in the junction box with suitable termination threads conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single /double compression cable glands.
- c) For array junction box/ PV combiner box, Empanelled Agency may also provide polyamide glands and MC4 Connectors. The rating of the junction box shall be suitable with adequate safety factor to interconnect the Solar PV array.
- d) Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes.
- e) Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification.
- f) Junction boxes shall be mounted on the MMS such that they are easily accessible and are protected from direct sunlight and harsh weather.

### **4. DC DISTRIBUTION BOX (DCDB):**

- a) DC Distribution Box (DCDB) to receive the DC output from the PV array field.
- b) DC DBs shall be dust & vermin proof conform having IP 65 protection.
- c) The bus bars are made of EC grade copper of required size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

## 5. AC DISTRIBUTION BOX (ACDB):

- a) AC Distribution Panel Board (DPB) shall control the AC power from PCU/inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid connected mode.
- b) All switches and the circuit breakers, connectors should conform to IEC60947:2019, part I, II and III/ IS60947 part I, II and III.
- c) The changeover switches, cabling work should be undertaken by the bidder as part of the project.
- d) All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air - insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50 Hz.
- e) The panels shall be designed for minimum expected ambient temperature of 50 degree Celsius, 80% humidity and dusty weather.
- f) All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- g) Should conform to Indian Electricity Act and CEA safety regulations (till last amendment). h) All the 415 AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions.
  - a. Variation in supply voltage : +/- 10 %
  - b. Variation in supply frequency : +/- 3 Hz
- h) The inverter output shall have the necessary rated AC surge arrestors and MCB/ MCCB. MCB shall be used for currents up to 63 Amperes, and MCCB shall be used for currents greater than 63 Amperes. RCCB shall be used by the Agency if required for successful operation of the PV system.

## 6. PCU/ARRAY SIZE RATIO:

- a) The combined wattage of all inverters should not be less than rated capacity of power plant under STC.
- b) Maximum power point tracker shall be integrated in the PCU/Inverter to maximize energy drawn from the array.

## 7. PCU/Inverter:-

- i. **Marking:** All the Inverters should contain the following clear and indelible Marking Label & Warning Label as per IS 16221 Part II, clause 5. The equipment shall, as a minimum, be permanently marked with:
  - a) The name or trade mark of the manufacturer or supplier;
  - b) A model number, name or other means to identify the equipment,
  - c) A serial number, code or other marking allowing identification of manufacturing location and the manufacturing batch or date within a three-month time period.
  - d) Input voltage, type of voltage (a.c. or d.c.), frequency, and maximum

continuous current for each input.

- e) Output voltage, type of voltage (a.c. or d.c.), frequency, maximum continuous current and for a.c. outputs, either the power or power factor for each output.
- f) The Ingress Protection (IP) rating should be as per IS 16221.

ii. Marking shall be located adjacent to each fuse or fuse holder, or on the fuse holder, or in another location provided that it is obvious to which fuse the marking applies, giving the fuse current rating and voltage rating for fuses that may be changed at the installed site.

Particulars	Details
Switching devices	IGBT/MOSFET
Control	Microprocessor /DSP
Nominal AC output voltage	For 3-phase/ 1phase :- 415V / 240 V
Output frequency	50 Hz
Grid Frequency Synchronization range	+ 3 Hz or more
Grid Voltage Tolerance	-20 % & +15 %
Ambient temperature considered	-20° C to + 50° C
Humidity	95 % Non-condensing
Protection of Enclosure	IP-65(Minimum).
Grid Frequency Tolerance range	+ 3 or more
No-load losses	Less than 1% of rated power
<b>Inverter Efficiency (minimum)</b>	
(Below 10 kW)	>90%
(Above 10 kW)	>93%
THD	<3%
PF	>0.9
Communication interface	RS 485 with Modbus
Display type	LCD for data display. LCD / LED for status display
Protections	<ul style="list-style-type: none"> <li>• Over voltage (both input and output)</li> <li>• Over current (both input and output)</li> <li>• Over/Under grid frequency</li> <li>• Over temperature</li> <li>• Short circuit</li> <li>• Lightening</li> <li>• Surge voltage induced at output due to external source</li> <li>• Anti-islanding</li> </ul>
Recommended Alert/Indications	<ul style="list-style-type: none"> <li>• Inverter ON</li> <li>• Grid ON</li> <li>• Inverter Under / Over Voltage</li> <li>• Inverter Overload</li> <li>• Inverter Over Temperature</li> </ul>
Recommended LCD Display on Inverter	<ul style="list-style-type: none"> <li>• Output power (W)</li> <li>• Daily Energy (Wh)</li> <li>• cumulative energy (Wh)</li> <li>• DC voltage (V)</li> <li>• DC current (A)</li> </ul>

	<ul style="list-style-type: none"> <li>• AC voltage (V)</li> <li>• AC frequency (Hz)</li> <li>• AC current (A)</li> <li>• Cumulative hours of operation (h).</li> </ul>
--	---

- a) The inverter shall have an RS-485 interface and support communication of its operational parameters and logs over Modbus protocol. The register mapping/memory mapping of the inverter data shall be made available by the Empanelled Agency from the inverter supplier to the MSEDCL.
- b) PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- c) The output of power factor of PCU/ inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustain fault in feeder line and against the lightning on feeder.
- d) Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- e) The power conditioning units / inverters should comply with applicable IEC/equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068-2(1,2,14,30) /Equivalent BIS Std.
- f) The charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS std. The junction boxes/enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 Specifications.
- g) The PCU/ inverters should be tested from the MNRE approved test centres /NABL /BIS/IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses. Valid type test report shall be submitted by the empanelled agency before commissioning of the SPV System.
- h) All inverters shall be IEC 61000 compliant for electromagnetic compatibility, harmonics, Surge, etc.
- i) Maximum Power Point Tracker (MPPT) shall be integrated in the PCU/inverter to maximize energy drawn from the array.
- j) The PCU/ Invertor shall have overloading capacity of minimum 15%.

## 8. INTEGRATION OF PV POWER WITH GRID:

The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid. Once the grid comes into service PV system shall again be synchronized with grid supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid power connection need to be provided, as per regulation.

## 9. DATA ACQUISITION SYSTEM / PLANT MONITORING

- As per Technical specifications of RMS mentioned in Annexure-15.
- The following parameters should be accessible via the operating interface display in real time separately for solar power plant as provided by the manufacturer:
  - a. AC Voltage.
  - b. AC Output current.

- c. Output Power
  - d. Power factor.
  - e. DC Input Voltage.
  - f. DC Input Current.
  - g. Time Active.
  - h. Time disabled.
  - i. Time Idle.
  - j. Power produced
  - k. Protective function limits (Viz-AC Over voltage, AC Under voltage, Over frequency, Under frequency ground fault, PV starting voltage, PV stopping voltage).
- Bidirectional and Generator energy meter along with CT/PT as applicable should be as per MSEDCL latest Technical Specifications.
  - Location of Bidirectional and Generator energy meter shall be installed at suitable location so as to accessible for meter reading to MSEDCL staff and meter reading agencies deputed by MSEDCL.

#### **10. METERING:**

- a) The Net meter along with CT/PT as applicable (As per MSEDCL latest Technical Specifications) shall be installed for the measurement of Import/Export of energy in co-ordination with MSEDCL.
- b) The Generation energy meter along with CT/PT as applicable (As per MSEDCL latest Technical Specifications) shall be installed for the measurement of solar energy generation of energy in co-ordination with MSEDCL.
- c) Location of Net Meter and Generator energy meter shall be installed at suitable location so as to accessible for meter reading to MSEDCL staff and meter reading agencies deputed by MSEDCL.
- d) The empanelled agency must take approval/NOC from the MSEDCL for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network before commissioning of SPV plant.
- e) Reverse power relay shall be provided by empanelled agency (if necessary), as per the MSEDCL requirement.

#### **11. PROTECTIONS:**

The system should be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

##### **11.1. LIGHTNING PROTECTION:**

The SPV power plants shall be provided with lightning & over voltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC62305 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and

suitable earthing such that induced transients find an alternate route to earth.

### **11.2. SURGE PROTECTION:**

Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and –ve terminals to earth (via Y arrangement).

### **11.3. EARTHING**

- i. Each array structure of the PV yard should be grounded/ earthed properly as per IS:3043-1987.
- ii. In addition the lighting arrester/masts should also be earthed inside the array field.
- iii. It shall be ensured that all the earthing points are bonded together for AC systems to make them at the same potential.
- iv. Earthing for Lightning Arrestors/DC Systems shall be provided separately.
- v. All the earthings required as per the technical specifications should be maintenance free earthings.
  - a) Each array structure of the PV yard, LT power system, earthing grid for switchyard, all electrical equipment, inverter, all junction boxes, etc. shall be grounded properly as per IS 3043-1987. All metal casing/ shielding of the plant shall be thoroughly grounded in accordance with CEA Safety Regulation 2010.
  - b) Each string/ array and MMS of the plant shall be grounded properly. The array structures are to be connected to earth pits as per IS standards.
  - c) Necessary provision shall be made for bolted isolating joints of each earthing pit for periodic checking of earth resistance.
  - d) The complete earthing system shall be mechanically and electrically connected to provide independent return to earth.
  - e) Earthing bus bar shall be terminated at both ends of the switchgear to suit the connections to outside earthing conductor. All components and the module are required to be earthed individually and are to be looped and connected to the earthing grid.
  - f) Separate earth pits shall be prepared for equipment body earthing. Lightning arrester earth pits and equipment earth pit are to be kept separate.
  - g) **Earthing system shall consist of earth grids and electrodes buried in soil in the premises, embedded in concrete inside the buildings/rooms to which all the electrical equipment, metallic structures are connected to have earth continuity for safety reasons.**

### **11.4. GRID ISLANDING:**

- i. In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off immediately. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as “islands.” Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid- connected equipment. The Rooftop PV system shall be equipped with Anti islanding features. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.
- ii. A manual disconnect 4 / 2 pole isolation switch (RCCB may also be used) beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance.

## **12. CABLES:**

Cables of required size to be used in the system shall have the following characteristics:

- i. Shall meet IEC 60227/IS 694, IEC 60502/IS 1554 standards
- ii. Temp. Range:  $-10^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ .
- iii. Voltage rating 660/1000V
- iv. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation.
- v. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
- vi. **Cable Routing/ Marking:** All cable/wires are to be routed in a RPVC pipe/ GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- vii. The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25 years.
- viii. The ratings given are approximate. All the cables required for the plant are to be provided by the bidder. Any change in cabling sizes if desired by the bidder/approved after citing appropriate reasons.
- ix. Multi Strand, Annealed high conductivity copper conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/equivalent BIS Standards as specified below: BoS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC 69947. Aluminium cable may be used on the AC-side of the PV system.
- x. The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 1%.
- xi. The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.

## **13. CONNECTIVITY:**

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the MERC regulation for Grid connectivity and norms of MSEDCL and amended from time to time.

## **14. DRAWINGS & MANUALS:**

- i. Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be provided to beneficiary. Agency shall upload scanned copies of complete technical datasheets for each equipment giving details of the specifications along with make/makes along with basic design of the power plant and power evacuation, synchronization along with protection equipment on the Web portal of Solar Roof top before commissioning.
- ii. ISI marked (wherever applicable) and reputed makes equipment be used.

## **15. SOLAR PV SYSTEM ON THE ROOFTOP/ GROUND:**

The Solar PV system on the rooftop/ ground of the premises will be installed for PV capacity permitted by MSEDCL as per regulation issued by MERC.

## **16. SAFETY MEASURES:**

The bidder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA Safety Regulation 2010 etc.

## **17. DOCUMENTATION:**

Operation & Maintenance manual / user manual shall be supplied along with the each power plant. The manual shall include complete system details such as array lay out, schematic of the system, inverter details, working principle etc. Step by step maintenance and troubleshooting procedures shall be given in the manuals and provided to the beneficiary.

## **18. SHADOW ANALYSIS:**

The shadow analysis of each site has to be carried out by Bidder and shall be his responsibility to educate the user to install the system only in shadow free space. Lower performance of the system due to shadow effect shall be the responsibility of the bidder and shall be liable for penalty for lower performance.

## **19. PERFORMANCE RATIO:**

The Performance Ratio of Grid Connected Systems shall be more than 75% throughout the five year maintenance period, and necessary efforts shall be made to achieve it by the empanelled agency considering CUF (Capacity Utilization factor) to be minimum 15%.

## **20. TOOLS & TACKLES AND SPARES:**

- After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the EoI holder for maintenance purpose. List of tools and tackles to be supplied by the EoI holder for approval of specifications and make from MSEDCL/ owner.
- A minimum set of spares shall be maintained in the respective service centers for the entire period of warranty and CMC which upon its use shall be replenished.

## **21. DANGER BOARDS AND SIGNAGES :**

- Danger boards should be provided as and where necessary as per IE Act. /IE rules as amended up to date. Three signage shall be provided one each at battery –cum- control room, solar array area and main entry from administrative block. Text of the signage may be finalized in consultation with MSEDCL/ owner.

## 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:

<b>Solar PV Modules/ Panels</b>	
IEC 61215 and IS 14286	Design Qualification and Type Approval for Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
IEC 61701:2011	Salt Mist Corrosion Testing of Photovoltaic (PV) Modules
IEC 61853-1:2011 / IS 16170-1:2014	Photovoltaic (PV) module performance testing and energy rating: Irradiance and temperature performance measurements, and power rating
IEC 62716	Photovoltaic (PV) Modules – Ammonia (NH <sub>3</sub> ) 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
<b>Solar PV Inverters</b>	
IEC 62109 & IS : 16221	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)
IS/IEC 61683 latest (as applicable)	Photovoltaic Systems – Power conditioners: Procedure for Measuring Efficiency (10%, 25%, 50%, 75% & 90-100% Loading Conditions)
IS :16169 :2014/ IEC 62116:2008	Utility-interconnected Photovoltaic Inverters - Test Procedure of Islanding Prevention Measures
IEC 60068-2 / IEC 62093 (as applicable)	Environmental Testing of PV System – Power Conditioners and Inverters
<b>Fuses</b>	
IS/IEC 60947 (Part 1, 2 & 3), EN 50521	General safety requirements for connectors, switches, circuit breakers (AC/DC):  1) Low-voltage Switchgear and Control-gear, Part 1: General rules 2) Low-Voltage Switchgear and Control-gear, Part 2: Circuit Breakers 3) Low-voltage switchgear and Control-gear, Part 3: Switches,

	disconnectors switch, disconnectors and fuse-combination units EN 50521: Connectors for photovoltaic system-Safety requirements and tests
IEC 60269-6:2010	Low-voltage fuses - Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems
<b>Solar PV Roof Mounting Structure</b>	
IS 2062/IS 4759	Material for the structure mounting
<b>Surge Arrestors</b>	
BFC 17-102:2011	Lightening Protection Standard
IEC 60364-5-53/IS 15086-5 (SPD) IEC 61643-11:2011	Electrical installations of buildings - Part 5-53: Selection and erection of electrical equipment - Isolation, switching and control  Low-voltage surge protective devices - Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods
<b>Cables</b>	
IEC 60227/IS 694, IEC 60502/IS 1554 (Part 1 & 2)/ IEC69947 (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)258), mainly for DC Cables
<b>Earthing /Lightning</b>	
IEC 62561 Series (Chemical earthing) (as applicable)	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
<b>Junction Boxes</b>	
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
<b>Energy Meters</b>	Testing facility of Net Meters and Generation Meters shall be provided by MSEDCL by accepting the meter testing fees as per circular No. CE(Dist.)/M-III/ Schedule of Charges/ 09078 dated 07.4.2020.

Sanction No: <<BU>>/<<Sub Div>>/<<No:>>

Date:<<System Date>>

To,

<<Consumer Name>>  
<<Address Line 1>>  
<<Address Line 1>>, <<District>>  
<<Pin Code>>  
<<Mobile No>>, <<E-mail>>

Sub: - Sanction Letter for <<Sanction RE Capacity>>KW Rooftop Renewable Energy Generating System for <<Consumer No>> under <<RE Billing Arrangement>>.

Ref:- 1. Your Application No.<<Application ID>> Date:<<Application Date>>  
2. Technical Feasibility date<< Technical Feasibility date>>  
3. MERC Grid Interactive Rooftop Renewable Energy Generating System Regulations 2019.

Dear Sir/Madam,

Your application for Rooftop Renewable Energy Generating System vide above reference is hereby sanctioned under <<RE Billing Arrangement>> at the above mentioned premises as under:

**Scheme Name:- <<Scheme Name>> Agency Name:- <<Agency Name>>**

**Existing Parameters:-**

Sanctioned Load (KW)	<< Sanctioned Load>>	Contract Demand	<< Contract Demand>>
DTC Code	<< DTC Code>>	DTC Name	<< DTC Name>>
Existing Rooftop RE Capacity	<< Existing Rooftop RE Capacity>>	Tariff Category	<<Tariff on Existing Conn>>

**Sanctioned Parameters: -**

RE Source- (Solar)	<<Solar RE Capacity>>
RE Source- (Wind)	<<Wind RE Capacity>>
RE Source- (Hydro)	<<Hydro RE Capacity>>
RE Source- (Biomass)	<<Biomass RE Capacity>>
RE Source- (Bio-Fuel Solid waste)	<<Bio-Fuel Solid waste Capacity>>
<b>Total Sanctioned Rooftop RE Capacity (KW)</b>	<< Sanction RE Capacity>>
<b>Cumulative Rooftop RE Capacity (KW) (Existing + New Sanctioned)</b>	<< Existing Rooftop RE Capacity + Sanction RE Capacity >>

Sanction No: <<BU>>/<<Sub Div>>/Rooftop RE/<<Consumer No.>>/<<No. >>Date:<<System Date>>

**Terms & Conditions:**

1. The validity of this sanction is for 06 (Six) months i.e. up to <<Sanctioned Date + 06 Month>>from the sanctioned date << System Date>>. If the Rooftop RE system is not

- commissioned and commissioning report is not uploaded by <<Sanctioned Date + 06 Month>>, this sanction shall be deemed cancelled and you shall have to apply afresh.
2. The metering arrangement and the inter-connection of the Renewable Energy Generating System with the Network of the MSEDCL shall be as per the provisions of the Grid Interactive Renewable Regulations, and the technical standards and norms specified by the Central Electricity Authority for connectivity of distributed generation resources and for the installation and operation of meters.
  3. The Eligible Consumer agrees, that he shall install, prior to connection of the Renewable Energy Generating System to the Network of MSEDCL, an isolation device (both automatic and in-built within inverter and external manual relays); and the MSEDCL shall have access to it if required for the repair and maintenance of the distribution Network.
  4. The design, installation, maintenance and operation of the Renewable Energy Generating System shall be undertaken in a manner conducive to the safety of the Renewable Energy Generating System as well as the Licensee's Network.
  5. The Eligible Consumer shall obtain any statutory approvals and clearances that may be required, such as from the Electrical Inspector (For System Above 200KW) or the municipal or other authorities, before connecting the Renewable Energy Generating System to the distribution Network.
  6. The existing metering System, if not in accordance with the Grid Interactive Renewable Regulations, shall be replaced by a bi-directional meter (whole current/CT operated) and a separate Renewable Energy Generation Meter shall be provided to measure Renewable Energy generation. The bi-directional meter (whole current/CT operated) shall be installed at the inter-connection point to the MSEDCL's Network for recording export and import of energy.
  7. The Generation Meter and bi-directional meters shall be fixed in separate meter boxes in the same proximity.
  8. Separate Generation Meter shall be installed to each RE Generating source.
  9. The Eligible Consumer shall bear all costs related to the setting up of the Renewable Energy Generating System, including the cost of the Renewable Energy Generation Meter, bi-directional meter (Net Meter) etc.

Office In-Charge

<<Employee Name>>

<<CPF No.>>

<<BU>>/<<Sub Div>>/<<Circle Name>>

Note: This sanction letter is system generated, hence, signature not required.



## Maharashtra State Electricity Distribution Co. Ltd.

### Renewable Energy Generating System

#### Annexure- I

(Commissioning Report for RE System)

S No. Particulars	As commissioned
1 Name of the Consumer	THE CHAIRMAN SHRI NIWAS APPT
2 Consumer Number	170140297421
3 Mobile Number	8578550103
4 E-mail	chairman@gmail.com
5 Address of Installation	PLOT NO .GP 106,WING-B,NEA G BLOCK,MIDC,SHAHUNAGAR,CH Aghane 410503
6 RE Arrangement Type	Net Metering Arrangement
7 RE Source	Wind
8 Sanctioned Capacity(KW)	3
9 Capacity Type	Rooftop + Ground
10 Project Model	Capex
11 RE installed Capacity(Rooftop)(KW)	NA
12 RE installed Capacity(Rooftop + Ground)(KW)	<input type="text" value="3"/>
13 RE installed Capacity(Ground)(KW)	NA
14 Installation date	<input type="text" value="03-November-2020"/>
<b>15 Solar PV Details</b>	
Inverter Capacity(KW)	<input type="text" value="4"/>
Inverter Make	<input type="text" value="Any Other"/>
No. of Modules	<input type="text" value="1"/>
Module Capacity(KW)	<input type="text" value="3"/>

**To be uploaded separately:**

1. Self-certification of safety of the installation of the RTS system along with the test report of the Licensed Electrical Contractor (Proforma-A).
2. Electrical Inspector permission if System is above 200 KW. (Mandatory if system is above 200KW only)
3. Third party leasing agreement if Model selected is RESCO.
4. Photograph of the system commissioned.

**Signature of Consumer**

**Date:** 05-November-2020

THE CHAIRMAN SHRI NIWAS APPT

**COMMISSIONING REPORT (PROVISIONAL) FOR GRID CONNECTED SOLAR  
PHOTOVOLTAIC POWER PLANT (with Net-metering facility)**

Certified that a Grid Connected SPV Power Plant of ..... KWp capacity has been installed at the site .....  
.....  
district ..... of .....  
which has been installed by M/S .....  
on ..... The system is as per BIS/MNRE specifications. The system has been checked for its performance on .....with / without installation of bi-directional meter and it is working satisfactorily. The system is suitable for installation of bi-directional and gross energy meters.

Signature of the beneficiary

Signature of the rep. of supplier  
With name, seal and date

Signature of the P.O./APO  
With name, date and seal

## Undertaking/Self- Declaration for domestic content requirement fulfillment

(On a plain Paper)

This is to certify that M/S [Name of the company empaneled under Phase-II] has installed [Capacity of RTS system installed in KW] Grid Connected Rooftop Solar PV Power Plant for [Full name of the beneficiary as per ID Proof] at [Address where the RTS system is installed] under sanction number [sanction number issued by implementing agency/DISCOM] dated [date on which sanction was issued by implementing agency/DISCOM] issued by [Name of the implementing agency/DISCOM]

2. 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: Capacity of the installed PV Module
2. Number of PV Modules: Total number of PV Modules Installed in one project
3. Sr No of PV Module: Serial Number of each PV Module Installed (Add signed and stamped annexure page with all serial numbers, if number of PV modules is large]
4. PV Module Make: Name of the company who manufactured the installed PV Modules
5. Purchase Order Number: Number of your Purchase Order document issued by empaneled company to the PV Module manufacturer
6. Purchase Order Date: Date on which Purchase order was issued by empaneled company to the PV Module Manufacturer
7. Cell manufacturer's name: Name of the manufacturer of solar cells used in the PV Modules installed in the project.
8. Cell GST invoice No: Invoice number of the purchase invoice for the Solar Cells

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

4. I, [Name of the officer signing this document] on behalf of M/S [Name of the company empaneled under Phase-II] 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 action may be taken against me and my company for wrong declaration. Supporting documents and proof of the above information will be provided as and when requested by MNRE.

(Signature With official Seal/stamp)

For M/S [Name of the company empaneled under Phase-II]

Name: [Name of the officer signing this document]

Designation: [Designation of the officer signing this document]

Phone: [Phone Number of the officer/ company]

Email: [Email address of the officer/company]

Enclosed: Certificate issued by PV Module manufacturer/supplier

**Format for Joint Undertaking for Grid Connectivity of Rooftop Solar Power Plant  
through a Common Energy Meter**

*(To be furnished on Stamp Paper of appropriate value)*

I/We .....as Secretary/ Director /Managing Trusty (in case of trust) of ..... (Name of Society) **[Owner]**, registered under the Section ..... of The State/Central Societies Registration Act having electricity connection under the ambit ..... (Name of distribution company) bearing Customer Account No ..... **[Annexure-I]** at .....(Address) **[Premises]** do hereby solemnly affirm and declare as under:

- 1) That I am/ We are the legal heir of the above said premises and have entered into a lease agreement with ..... (Name of Beneficiary) for a period of ..... years upto .....(Date of Termination);
- 2) We understand that the .....(Name of State Nodal Agency) has sanctioned Financial Assistance [including assistance from The Ministry of New and Renewable Energy and Govt. of .....(Name of the State)] for installation of Grid Connected Rooftop Solar Photovoltaic Power Plant of ..... KWh capacity at the above said premises. The Financial Assistance has been sanctioned in the name of .....(Name of Beneficiary);
- 3) We, hereby submit our undertaking that the referred Grid Connected Rooftop Solar Power Plant [RTS] can be connected to the Energy Meter/ Bi-directional Energy Meter bearing Consumer Account No..... Any benefit availed from the excess solar energy exported through the Bidirectional Energy Meter to the grid as per the Net-Metering regulation of Central/State Electricity Regulatory Commission, can be claimed by ..... (Name of Beneficiary);
- 4) It is certified that the Financial Assistance sanctioned by ..... (Name of State Nodal Agency) to ..... (Name of Beneficiary) for the installation of referred RTS is not transferred to the Owner;
- 5) It is stated that following are also connected to the same Energy Meter/ Bi-Directional Energy Meter bearing Consumer Account No. ....:
  1. ....
  2. ....

3. ....

This undertaking is being given for submission to MNRE & ..... (Name of the DISCOM) in compliance to the norms set for Grid Connectivity of our Grid Connected Rooftop Solar Power Plant.

**Signature**

(\_\_\_\_\_)

**Name of the Owner/Signing Authority**

**Signature**

(\_\_\_\_\_)

**Name of Beneficiary**

Date:

Place:

Accepted By:

(witness with name, address & signature)

For .....(1) Signature (_____)	For .....(2) Signature (_____)	For .....(3) Signature (_____)
-----------------------------------	-----------------------------------	-----------------------------------

**ANNEXURE-I**

Copy of latest electricity bill to be enclosed



# **Solar Rooftop Application Portal**

**Date : 21.12.20**

## Section 1: Solar Rooftop Application Portal

## ❖ Instructions Part :



## Application for installation of Renewable Energy Generating System

Language :

English **Instructions for filling the form :**

I. Correct Email address and Mobile number is mandatory for OTP. If you want to modify, please [Click here](#).

II. Kindly fill complete and correct information in relevant column.

III. Applicant will be solely responsible for incomplete or incorrect information.

IV. Applicant is requested to note the request id for future tracking of the application.

V. Application Processing fees (Non Refundable)

a) Low Tension Consumer Rs. 500 for consumer having Sanctioned Load or Contract Demand upto 20 kW and Rs 100 thereafter for every 20 kW or part thereof.

b) High Tension Consumer Rs. 5000/-

VI. Documents to be submitted at the time of commissioning. Refer Help Document for Details.

1. Short instructions for filling the form are provided.
2. For Details Help Document is provided beside search button.

## ❖ General Details :


General Details	
Consumer Number : *	<input type="text" value="410013729046"/> <input type="button" value="Search"/> <a href="#">Help Document ?</a>
Application Type : New	
Billing Unit / Circle Code [ 4683 - TRIMURTI NAGAR S/DN.] : [699 - NAGPUR (U) CIRCLE ]	
Applicant's Full Name : THE. PANNASE UTKARSH COMPLEX COMMAN.	
<b>Address of Premises at which Roof Top Renewable Energy Generating System is to be installed</b>	
Address Line 1 : KOTWAL NAGAR P. NO. 9-12	Address Line 2 : RING ROAD
Address Line 3 : NAGPUR	Pincode : 440022
Landmark(optional) :	<input type="text"/> Maximum 100 Char
District : * <input type="text" value="NAGPUR"/>	State : * <input type="text" value="Maharashtra"/> <a href="#">If you want to correct the Address please Click Here.</a>
<b>Other Contact Details:</b>	
Email : * <input type="text" value="solar_test@mahadiscom.in"/>	Mobile : * <input type="text" value="222222222"/> <a href="#">If you want to modify Mobile Number/Email, please Click Here.</a>
<b>(Make sure Email ID and Mobile No. are correct for future communication.OTP will be sent to Mobile Number and Email ID)</b>	
Aadhar Number(optional) :	<input type="text"/>
Technical Details :	

1. Enter the Consumer No and click on Search Button.
2. Consumer general information like Name , address ,BU is displayed from billing data .
3. Email Id and Mobile No are mandatory and non editable.
4. If any one is blank, mobile no and email id updation link is provided.
5. For correction in address, address correction link is provided.

## ❖ Technical Details for Subsidize Consumer:

Technical Details :						
Category of Existing connection : 092 - LT-I Residential 3Ph			Voltage at Which Existing Supply is Given 415 Volt			
Sanctioned Load : 8 KW			Contract Demand : 0 KVA			
If you want to Change the Sanctioned Load/Contract Demand, please <a href="#">Click here.</a>						
DTC Number : 4683131			DTC Name : UTTKARSH COMPLEX APPT.			
Scheme Name : * MNRE Subsidy <span>?</span>			RE Arrangements : * Net Metering Arrangement <span>?</span>			
Ac Capacity of Renewable Energy Generating System						
RE Generator Type *	Connection Type *	Ground Capacity		RoofTop Capacity		Total
<input checked="" type="checkbox"/> Solar	Only Rooftop Cap <span>?</span>	<input type="text" value="0"/> KW		<input type="text" value="6"/> KW		<input type="text" value="6"/> KW
<input type="checkbox"/> Wind	Ground	<input type="text" value="0"/> KW				<input type="text" value="0"/> KW
<input type="checkbox"/> Hydro	Ground	<input type="text" value="0"/> KW				<input type="text" value="0"/> KW
<input type="checkbox"/> Biomass	Ground	<input type="text" value="0"/> KW				<input type="text" value="0"/> KW
<input type="checkbox"/> Bio-Fuel Solid Waste	Ground	<input type="text" value="0"/> KW				<input type="text" value="0"/> KW
<b>Total RE capacity :</b>						<input type="text" value="6"/> KW
Output voltage of RE system : * 400/415 Volt <span>?</span>			Solar Inverter AC Capacity : * <input type="text" value="6"/> KW			
Project Model : * Capex <span>?</span>						
Do you want to maintain the Chronology in case of there is inadequate distribution transformer capacity? * <span>?</span>						
<input checked="" type="radio"/> Yes <input type="radio"/> No						

## ❖ Technical Details for Subsidize Consumer:

 Do you want to maintain the Chronology in case of there is inadequate distribution transformer capacity? \*   Yes  No

## Available Zone Capacity

Slab Name	Balance Capacity (in KW)
1 KW	517
Above 1 KW to 2 KW	496
Above 2 KW to 3 KW	254
Above 3 KW to 10 KW	470
Above 10 KW to 100 KW including GHS and RWA	200


## Agency Availability for Zone

Slab Name	Number of agencies available
1 KW	6
Above 1 KW to 2 KW	5
Above 2 KW to 3 KW	6
Above 3 KW to 10 KW	6
Above 10 KW to 100 KW including GHS and RWA	5

## Installation Cost :-

 Estimated Cost of Installation  
 (Including GST) Rs. :  

Rate of RTS system in Rs/Wp : 40.29 Rs

 Estimated Central Financial Assistant  
 (CFA) in Rs. :  

 Estimated Cost to be borne by  
 Consumer :   
 In Rs.

## Application Details :

### ❖ Technical Details for Subsidize Consumer:

For Subsidized Consumers under **MNRE Phase-II RTS Program** following tariff code are considered .

134	HT Group Housing Society (Residential) 11 KV
135	HT Group Housing Society (Residential) 33 KV
136	HT Group Housing Society (Residential) EHV
166	HT Group Housing Society (Residential) 22 KV
60	HT-LT Residential on High Voltage
90	LT-I Residential 1Ph
91	LT-I BPL
92	LT-I Residential 3Ph
302	LT-I Residential Temp 1Ph
303	LT-I Residential Temp 3Ph

- In technical Details consumer need to select Scheme Name, RE Arrangement , RE Generator type, connection type, RE Capacity, Solar Inverter Capacity and Output Voltage of RE System.
- If Consumer Opt for **MNRE Subsidy scheme**, he has to go for Net Metering Only and project model is Capex and one of the RE Generator must be Solar .
- If Consumer go for **No Scheme** then he can apply for Net Metering , Net Billing or Grid Connected behind the Meter and can select project model as Capex or Resco and RE Generator can be Solar , Wind , Hydro, Biomass, Bio Fuel solid waste etc.

## ❖ Installation Cost and Application Submission for Subsidize Consumer:

Application Details :
Name of Distribution Licensee: Maharashtra State Electricity Distribution Company Ltd. (M.S.E.D.C.L.)
Name of Administrative Office : Sub-Division OFFice 4683 - TRIMURTI NAGAR S/DN.
Application received date : 03-Dec-2020
Terms and Conditions
<b>a. Application will be processed after the payment of Registration Fees.</b>
<b>b. Commission of the RE Plant within Six month from the Date of Sanction of RE Capacity is Mandatory.</b>
<input checked="" type="checkbox"/> I agree as above
Please Click on Generate OTP button to get OTP on Mobile for verification purpose.
<input type="button" value="Generate OTP"/>
Enter OTP*: <input type="text" value="123"/>
<b>Your application id is : 2691 .Please note that your application will be processed only after the payment of Registration Fee.</b>
<b>Click Here To Pay Now &gt;&gt;</b>
<input type="button" value="Submit"/> <input type="button" value="Cancel"/>
For any queries email to support_solarrf@mahadiscom.in

- For Subsidy Consumer, as per applied solar RE Capacity, Estimated Installation cost, Subsidy amount(CFA) and cost to be paid are shown.
- OTP will generate on Registered Mobile No for verification and application will submit.
- Application ID is generated and consumer can pay his Registration Fee.
- After application submission, SMS will be sent to consumer containing application Id and Date.

## ❖ Payment Part:

SOLAR ROOFTOP CHANGE OF NAME LOAD CHANGE RE-CONNECTION ADDRESS CO

CHECK SOLAR RTS APPLICATION STATUS , PAY FIRM QUOTATION / D  
NOTE AND UPLOAD DOCUMENTS.

Search

Search By : Consumer Number

Application Type :  RoofTop Solar PV  RoofTop Solar PV Enhancement

Consumer Number: 410013729046

**N9PP94**

Enter the above characters in the box.

XOW2CL

Submit Reset

- After click on Pay Now , Consumer need to provide Application ID
- His Application Details will be shown as follow and consumer can make payment on payment Gateway

## ❖ Payment Part:

Consumer Information	
Application ID	2691
Application Date	03-Dec-20
Consumer No	410013729046
Sanctioned Load	8 KW
Contract Demand (KVA)	0 KVA
Consumer Name	THE. PANNASE UTKARSH COMPLEX COMMAN.
Address	KOTWAL NAGAR P. NO. 9-12 RING ROAD NAGPUR NAGPUR (U) CIRCLE 440022
Mobile No	2222222222
Email Address	solar_test@mahadiscom.in
Consumer Category	Residential
Service Type	Renewable Energy Sources
Supply Type	LT-SUPPLY
RE Source	Solar
RE Capacity (KW)	6
Scheme Name	MNRE Subsidy
Existing RE Sanctioned Capacity	0 KW
Total Applied RE Capacity	6 KW
Applied Chronology	Y
RE System Cost (In Rs.)	241740
Subsidy Amount (In Rs.)	72522
Amount To Be Paid To Agency (In Rs.)	169218
No of Documents Online Uploaded.	0
Application Status	A1 Approved
Region Name/Zone Name	NAGPUR REGION / NAGPUR ZONE
Circle Name/Divison Name	NAGPUR (U) CIRCLE / NAGPUR CONGRESS NAGAR DIV
Sub Divison Name/BU	TRIMURTI NAGAR S/DN. / 4683

## ❖ Payment Part:

Estimate No			Firm Quotation / Demand Note	
Estimate No	Estimate Date	Type	Description	Amount (Rs.)
12881805	03-Dec-20	LT	GOODS AND SERVICE TAX	90
			SOLAR ROOF-TOP REGISTRATION FEE	500
				Total : 590

[Print Quotation](#)

**Conditions for Online Payment of estimate amount for New connection:**

1. International cards are blocked for online payment of MSEDCL estimate amount .
2. Please note that a convenience fee i.e. gateway charges levied by Master/Visa/others will be applicable for credit card payments exceeding Rs. 500. Gateway charges are waived Off for Net Banking , Debit card , UPI, Digital Wallet & Cash Card payments.
3. In case of multiple payments for an estimate amount , credit (refund) for the extra amount will be paid by MSEDCL on email request of consumer with proper proof of multiple payment. This extra amount will be refunded by MSEDCL as per existing RBI Guidelines on the same account.
4. There will be no refund for the estimate amount paid to MSEDCL. Excess amount if any will be refunded by MSEDCL. In case of any such chargeback request , appropriate action regarding New Connection as per MSEDCL Rules will be initiated.
5. To avoid fraudulent transaction, it is recommended not to reveal details of your card details like (Card Number, CVV, OTP/Password) to anybody; make payment yourself without going through any channels/agents.
6. Do not open multiple payment windows simultaneously and do not press 'Refresh' / 'Back' Button while making Payment.
7. New connection release is subject to Technical Feasibility Approval from concerned field officer.
8. I / we agree to pay the Balance Estimate amount for New connection as per actual estimate.



I accept Terms and Conditions.

MobileNo :

[Pay Now](#)

[Click here to update Agency Details](#)

## ❖ Agency Selection for Subsidized Consumer :

Language : English

---

Consumer General Details

<b>Consumer Number :</b> 410013729046	<b>Consumer Name :</b> THE. PANNASE UTKARSH COMPLEX COMMUN.
<b>Application Id :</b> 2691	<b>Application Date :</b> 03-12-2020
<b>Sanctioned Load :</b> 8 KW	<b>Contract Demand :</b> KVA
<b>RE Arrangement :</b> Net Metering Arrangement	<b>Tariff Code :</b> 092 LT-I Residential 3Ph
<b>Zone :</b> NAGPUR ZONE	<b>Circle :</b> NAGPUR (U) CIRCLE
<b>Division :</b> NAGPUR CONGRESS NAGAR DIV	<b>Sub Division :</b> TRIMURTI NAGAR S/DN.
<b>Applied RE Capacity :</b> 6 KW	<b>Applied Solar RE Capacity :</b> 6 KW

---

Installation Cost Details based on Sactioned Solar Capacity for MNRE Phase-2 scheme only

Estimated Cost of Installation (Rs.) : <input type="text" value="241740"/>	Rate of RTS system in Rs/Wp: 40.29 Rs
Estimated Central Financial Assistant (CFA) in Rs. : <input type="text" value="72522"/>	Estimated Cost to be borne by Consumer : <input type="text" value="169218"/> in RS.

---

Agency Selection : (Empannelled agencies for your Zone)

Agency Name : --Select--

--Select--



C.R.I. Pumps Pvt. Ltd

Ishan Solar Power Private Limited

M/s Claro Energy Pvt. Ltd

- After payment done, subsidize consumer can select agency, empannelled for his Zone

### ❖ Agency Selection for Subsidized Consumer :

Language : English ▼

---

Consumer General Details

<b>Consumer Number :</b> 410013729046	<b>Consumer Name :</b> THE. PANNASE UTKARSH COMPLEX COMMAN.
<b>Application Id :</b> 2691	<b>Application Date :</b> 03-12-2020
<b>Sanctioned Load :</b> 8 KW	<b>Contract Demand :</b> KVA
<b>RE Arrangement :</b> Net Metering Arrangement	<b>Tariff Code :</b> 092 LT-I Residential 3Ph
<b>Zone :</b> NAGPUR ZONE	<b>Circle :</b> NAGPUR (U) CIRCLE
<b>Division :</b> NAGPUR CONGRESS NAGAR DIV	<b>Sub Division :</b> TRIMURTI NAGAR S/DN.
<b>Applied RE Capacity :</b> 6 KW	<b>Applied Solar RE Capacity :</b> 6 KW

---

Installation Cost Details based on Sactioned Solar Capacity for MNRE Phase-2 scheme only

Estimated Cost of Installation (Rs.) : <input type="text" value="241740"/> ?	Rate of RTS system in Rs/Wp: 40.29 Rs
Estimated Central Financial Assistant (CFA) in Rs. : <input type="text" value="72522"/> ?	Estimated Cost to be borne by Consumer : <input type="text" value="169218"/> in RS.

---

Agency Selection : (Empannelled agencies for your Zone)

Agency Name : M/s Claro Energy ▼

Submit Agency
Go Back to previous Page

Agency Name : <b>M/s Claro Energy Pvt. Ltd</b>	Agency Address : <b>A1600_add</b>
Contact Person Name : <b>MrA1600</b>	Agency Mobile : <b>7588623258</b>
Agency Email : <b>A1600@gmail.com</b>	Agency District : <b>NAGPUR</b>
Agency State : <b>MAHARASHTRA</b>	

SMS is also sent to Agency you have selected.  
You can track your application on [www.mahadiscom.in](http://www.mahadiscom.in)

- Details of selected agency, is shown to consumer for further contact.
- Consumer can track his application till meter assignment on Solar Application Track by giving his Application ID.

## Section 2: Solar Rooftop Vendor Portal

<https://rts.mahadiscom.in/RoofTopSolar/>

# Section 2: Solar Rooftop Vendor Portal

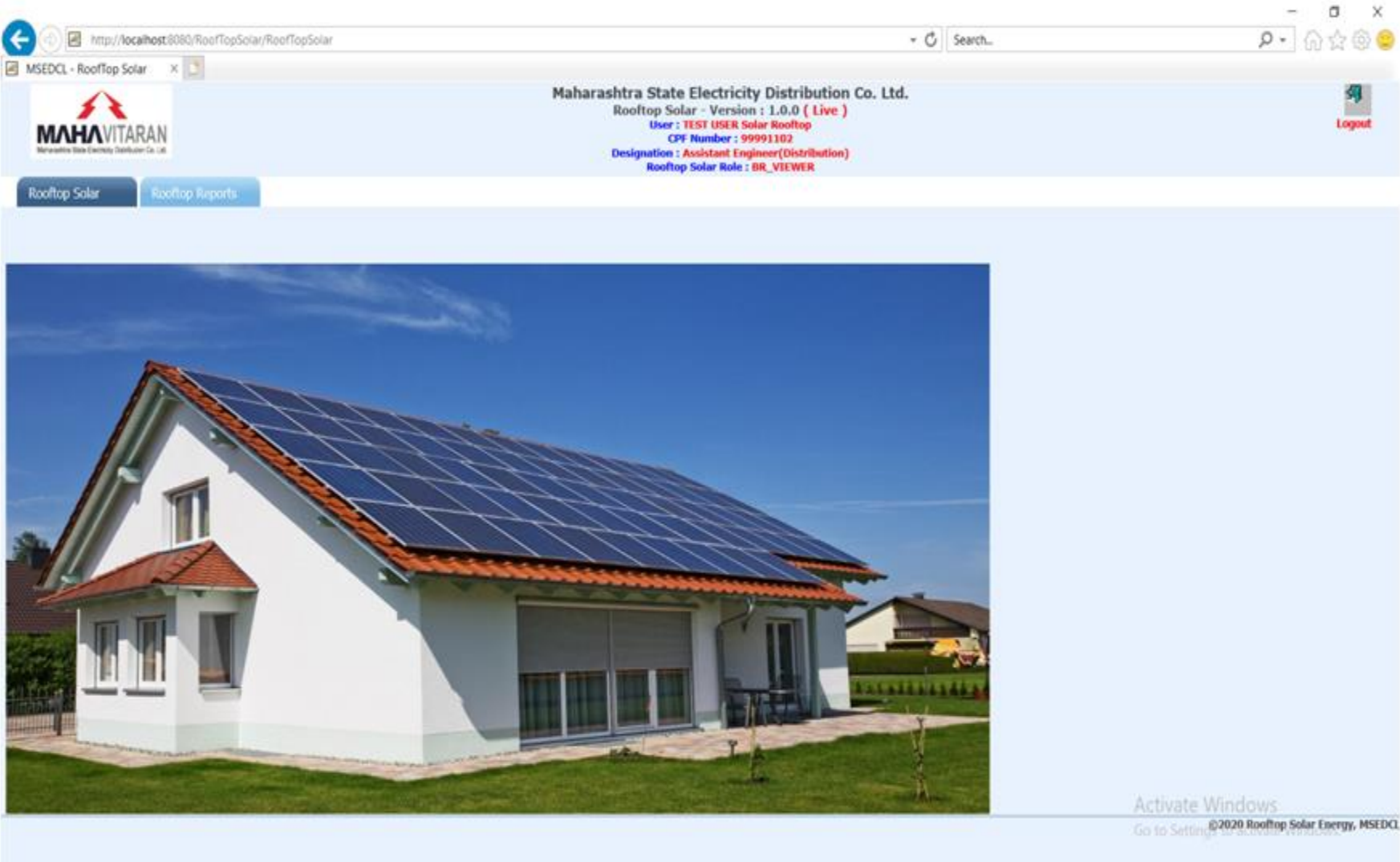
## Rooftop Solar Vendor Portal Screenshots, Login screen:

The screenshot shows a web browser window with the URL `localhost:8080/RooftopSolar/RooftopSolar?uiActionNa`. The page header includes the MAHAVITARAN logo and the text "Maharashtra State Electricity Distribution Co. Ltd. Rooftop Solar - Version : 1.0.0 ( Live )". A notification "Logout successfully" is visible. The "Login Details" section contains a red instruction: "Please Login with your CPF Number and Password as used in RAPDRP System. \*For vendors use your Login Id and Password". Below this are input fields for "Login ID" (containing "99991102") and "Password" (masked with dots). There are "Submit" and "Reset" buttons, and a link for "First Time User ?". The footer contains the copyright notice "©2020 Rooftop Solar Energy, MSEDCL".

Login credential for Vendor Portal are provided after Vendor registration in SAP.

# Section 2: Solar Rooftop Vendor Portal

## ❖ Home Screen:



# Section 2: Solar Rooftop Vendor Portal

## ❖ Rooftop Solar List:

**MAHAVITARAN**  
Maharashtra State Electricity Distribution Co. Ltd.


**Maharashtra State Electricity Distribution Co. Ltd.**  
Rooftop Solar - Version : 1.0.0 ( Live )  
User : TEST USER Solar Rooftop  
CPF Number : 99991102  
Designation : Assistant Engineer(Distribution)  
Rooftop Solar Role : BR\_VIEWER

Rooftop Solar    Rooftop Reports


- Rooftop Solar List
- Accept/Reject Consumer
- Download Installation Documents
- Upload Installation csv
- Show Installation Details

## Section 2: Solar Rooftop Vendor Portal

❖ To show consumer List, Various Search Options are available for Vendor .



**Maharashtra State Electricity Distribution Co. Ltd.**  
 Rooftop Solar - Version : 1.0.0 ( Live )  
 User : TEST USER Solar Rooftop  
 CPF Number : 99991102  
 Designation : Assistant Engineer(Distribution)  
 Rooftop Solar Role : BR\_VIEWER



Rooftop Solar

Rooftop Reports

### Rooftop Solar Consumer List

#### Search Criteria

Search by Billing Unit:

Search by Consumer Number:

Search by Application ID:

Search by Circle :

Search by Division :

13 record(s) found

Go to page:   ← Page 1 of 2 →

Application ID ↓	Consumer Number	Consumer Full Name	Consumer Address	Circle Name	Division Name	Sub-division Name	Billing Unit	Current Workflow Status	Capacity Type	Agency Name
2366	410010152643	SHRI S G ABHYANKAR	WEST HIGH COURT RD NAGPUR PLOT NO 67	NAGPUR (U) CIRCLE	NAGPUR CONGRESS NAGAR DIV	SHANKAR NAGAR S/DN.	4681	Status A1 Application Draft	Only Ground	M/s Claro Energy Pvt. Ltd
2367	410010150560	SHRI WAMAN K ALMELKAR	H NO 834K/10 NAGPUR SHANKAR NAGAR	NAGPUR (U) CIRCLE	NAGPUR CONGRESS NAGAR DIV	SHANKAR NAGAR S/DN.	4681	Status A1 Application Draft	Only Rooftop	M/s Claro Energy Pvt. Ltd
2379	410018628078	KAILAS GANPATRAO KEJGIR	HNO311/A/306 PLNO 309 ABHYANKAR NAGAR	NAGPUR (U) CIRCLE	NAGPUR CONGRESS NAGAR DIV	SHANKAR NAGAR S/DN.	4681	Status A1 Application Draft	Only Rooftop	M/s Claro Energy Pvt. Ltd
2380	410010150624	SMT RASIKA VASANT KULKARNI	PLOT NO 5 DANDIGE LAYOUT NAGPUR SHANKAR NAGAR	NAGPUR (U) CIRCLE	NAGPUR CONGRESS NAGAR DIV	SHANKAR NAGAR S/DN.	4681	Status A1 Application Draft	Only Rooftop	M/s Claro Energy Pvt. Ltd

## Section 2: Solar Rooftop Vendor Portal

❖ Accept/Reject Consumer by vendor within 3 days :

The screenshot displays the MSEDCL Rooftop Solar Vendor Portal interface. The browser address bar shows the URL: `http://localhost:8080/RooftopSolar/RooftopSolar?uiActionName=getConsumerDetails`. The page header includes the MAHAVITARAN logo and the text: "Maharashtra State Electricity Distribution Co. Ltd. Rooftop Solar - Version : 1.0.0 ( Live )". The user information is displayed as: "User : TEST USER Solar Rooftop", "CPF Number : 99991102", "Designation : Assistant Engineer(Distribution)", and "Rooftop Solar Role : BR\_VIEWER". A "Logout" button is visible in the top right corner.

The main navigation menu includes "Rooftop Solar" and "Rooftop Reports". Under "Rooftop Solar", there are sub-menus for "Rooftop Solar List" and "Accept/Reject Consumer".

The "Search Criteria" section contains a form with the following fields:

- Application ID :
- Search :

The "Consumer Details" section contains the following fields:

- Application ID :
- Consumer Number :
- Consumer Name :
- Mobile Number :
- Email Id :
- Billing Unit :
- Subdivision Name :
- Division Name :
- Circle Name :
- Consumer Address :
- Landmark :
- Agency Name :

The "Approval Decision" section is currently empty.

An "Activate Windows" watermark is visible in the bottom right corner of the browser window.

Enter Application ID and click on Search Button.

# Section 2: Solar Rooftop Vendor Portal

## ❖ Accept Consumer:

The screenshot shows a web browser window with the URL `http://localhost:8080/RooftopSolar/RooftopSolar`. The page has two tabs: "Rooftop Solar" (active) and "Rooftop Reports".

**Search Criteria**

Application ID:

**Consumer Details**

Application ID :	2480
Consumer Number :	170084409319
Consumer Name :	RIVER RESIDENCY COMM-17A
Mobile Number :	7588575625
Email Id :	rupeshgadade@gmail.com
Billing Unit :	4595
Subdivision Name :	AKURDI SUB-DIV.
Division Name :	BHOSARI DIVISION
Circle Name :	GANESHWADI (U) CIRCLE
Consumer Address :	GAT NO 90, DEHU-ALANDI ROAD,
Landmark :	
Agency Name :	C.R.L. Pumps Pvt. Ltd

**Approval Decision**

Approval Decision for Consumer Acceptance:

**Message from webpage**

Consumer Number Accepted Successfully !!

OK

©2020 Rooftop Solar Energy, MSEDCL

# Section 2: Solar Rooftop Vendor Portal

## ❖ Reject Consumer:

The screenshot shows a web browser window with the URL `http://localhost:8080/RooftopSolar/RooftopSolar`. The page has two tabs: 'Rooftop Solar' and 'Rooftop Reports'. The main content is divided into three sections: 'Search Criteria', 'Consumer Details', and 'Approval Decision'.

**Search Criteria:** A form with an 'Application ID' input field and a 'Search' button.

**Consumer Details:** A form with the following fields and values:

Application ID :	2547
Consumer Number :	160224701613
Consumer Name :	Sena Mehendra Yeole
Mobile Number :	222222222
Email Id :	solar_test@mahadiscom.in
Billing Unit :	4599
Subdivision Name :	ALUNDH SUB-CRL
Division Name :	SHEVAJI NAGAR DIVISION
Circle Name :	GANESH-KH-IND (U) CIRCLE
Consumer Address :	Plot NO 711/119 Sindh COOP
Landmark :	
Agency Name :	Murali G

**Approval Decision:** A form with 'Approval Decision for Consumer Acceptance' and a dropdown menu set to 'Reject', along with a 'Submit' button.

A modal message box titled 'Message from webpage' is displayed in the center, containing a yellow warning icon and the text 'Consumer Number Rejected Successfully !!' with an 'OK' button.

©2020 Rooftop Solar Energy, MSEDCL

## Section 2: Solar Rooftop Vendor Portal

### Download Installation Documents:

**MAHAVITARAN**  
Maharashtra State Electricity Distribution Co. Ltd.

Maharashtra State Electricity Distribution Co. Ltd.  
Rooftop Solar - Version : 1.0.0 ( Live )  
User : TEST USER Solar Rooftop  
CPF Number : 99991102  
Designation : Assistant Engineer(Distribution)  
Rooftop Solar Role : BR\_VIEWER

Rooftop Solar   Rooftop Reports

- Rooftop Solar List
- Accept/Reject Consumer
- **Download Installation Documents**
- Upload Installation csv

## Section 2: Solar Rooftop Vendor Portal

### Download Installation Documents:



Maharashtra State Electricity Distribution Co. Ltd.

Rooftop Solar - Version : 1.0.0 ( Live )

User : TEST USER Solar Rooftop

CPF Number : 99991102

Designation : Assistant Engineer(Distribution)

Rooftop Solar Role : BR\_VIEWER

#### Application Details

Please Enter application ID For downloading Installation docs

Application ID

Submit

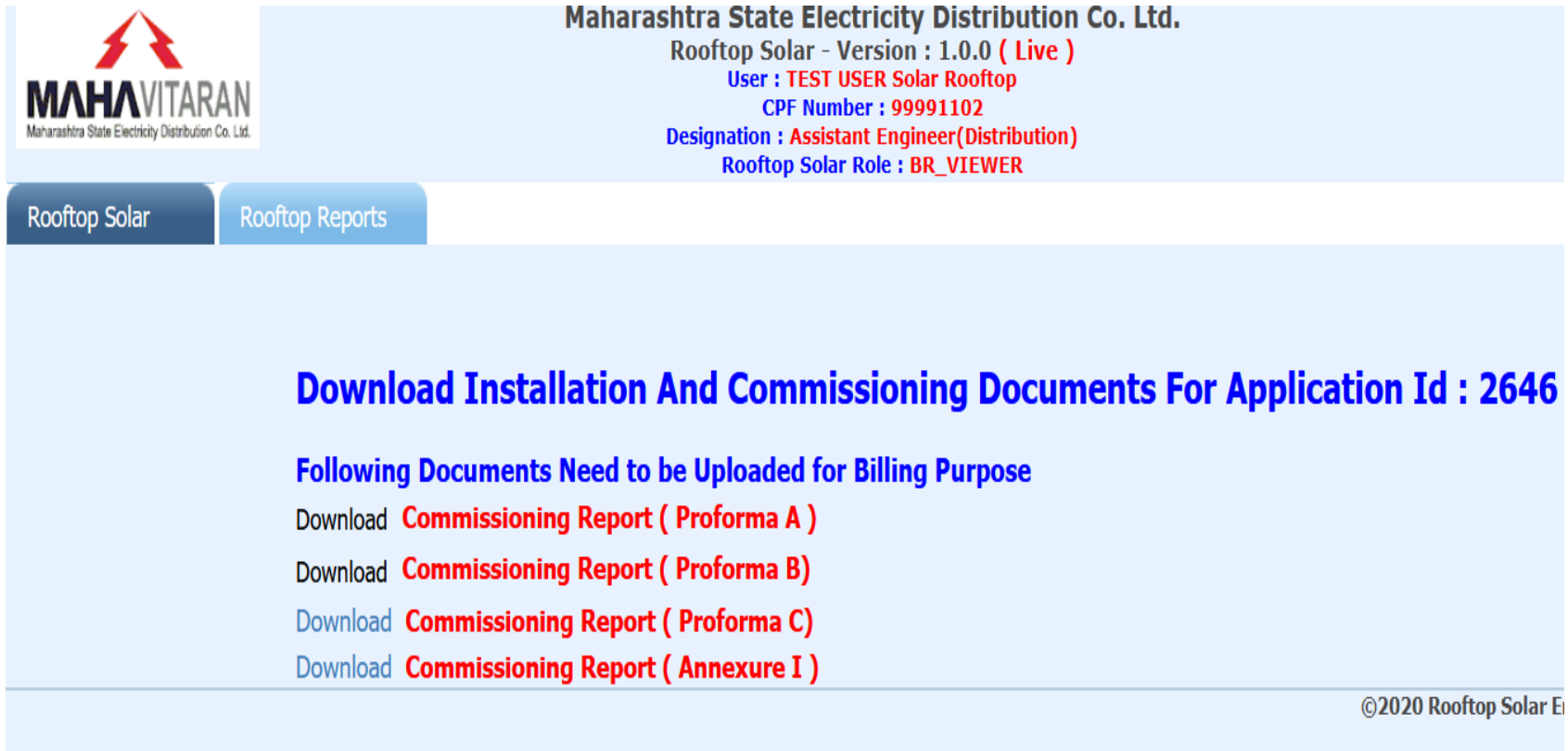
Reset

- Vendor will provide Application Id for which preprinted Installation Document Formats he want to download

## Section 2: Solar Rooftop Vendor Portal

### Download Installation Documents:

- After Submit it will lead to next page as



**Maharashtra State Electricity Distribution Co. Ltd.**  
Rooftop Solar - Version : 1.0.0 ( Live )  
User : TEST USER Solar Rooftop  
CPF Number : 99991102  
Designation : Assistant Engineer(Distribution)  
Rooftop Solar Role : BR\_VIEWER

[Rooftop Solar](#) [Rooftop Reports](#)

**Download Installation And Commissioning Documents For Application Id : 2646**

**Following Documents Need to be Uploaded for Billing Purpose**

Download [Commissioning Report \( Proforma A \)](#)

Download [Commissioning Report \( Proforma B \)](#)

Download [Commissioning Report \( Proforma C \)](#)

Download [Commissioning Report \( Annexure I \)](#)

©2020 Rooftop Solar E

- Vendor can download all 4 formats using download link as shown.

## Section 2: Solar Rooftop Vendor Portal

### Uploading Installation CSV and Invoice

**MAHAVITARAN**  
Maharashtra State Electricity Distribution Co. Ltd.

**Maharashtra State Electricity Distribution Co. Ltd.**  
Rooftop Solar - Version : 1.0.0 ( Live )  
User : TEST USER Solar Rooftop  
CPF Number : 99991102  
Designation : Assistant Engineer(Distribution)  
Rooftop Solar Role : BR\_VIEWER

Rooftop Solar    Rooftop Reports


- Rooftop Solar List
- Accept/Reject Consumer
- Download Installation Documents
- Upload Installation csv

Background image: A white house with a red-tiled roof covered in solar panels under a clear blue sky.

- *Option to Upload csv and invoice*

# Section 2: Solar Rooftop Vendor Portal

## Uploading Installation CSV and Invoice



Maharashtra State Electricity Distribution Co. Ltd.  
Rooftop Solar - Version : 1.0.0 ( Live )  
User : TEST USER Solar Rooftop  
CPF Number : 99991102  
Designation : Assistant Engineer(Distribution)  
Rooftop Solar Role : BR\_VIEWER

Rooftop Solar   Rooftop Reports

Rooftop Solar : Installation csv upload utility for Vendor

**Upload Installation Details \***

Upload invoice billed for Application Id : 2646

No file selected.  

Upload Installation .csv file for Application Id : 2646

No file selected.  

©2020 Rooftop Sola

- *Option to Upload csv and invoice*

# Section 2: Solar Rooftop Vendor Portal

## ❖ Download Consumer List:

The screenshot shows a web browser window with the URL `http://localhost:8080/RooftopSolar/RooftopSolar?uiActionName=downloadConcList`. The page header includes the MHA VITARAN logo and the text "Maharashtra State Electricity Distribution Co. Ltd. Rooftop Solar - Version : 1.0.0 ( Live )". The user is identified as "TEST USER Solar Rooftop" with CPF Number "99991102" and Designation "Assistant Engineer(Distribution)". The Rooftop Solar Role is "DR\_VIEWER". A "Logout" button is visible in the top right. The main navigation menu includes "Rooftop Solar", "Rooftop Reports", and "Rooftop Solar List Download". The central content area displays "CONSUMER DETAILS LIST" in red text. Below this, there is a button labeled "Export To Excel".

# Section 2: Solar Rooftop Vendor Portal

## ❖ Download Consumer List output:

Microsoft Excel (Product Activation Failed)

Maharashtra State Electricity Distribution Company Limited

Maharashtra State Electricity Distribution Company Limited  
CONSUMER DETAILS LIST AS ON 09/11/2020

APPLICATION ID	CONSUMER NUMBER	CONSUMER NAME	CIRCLE NAME	BILLING UNIT	CURRENT WORKFLOW STATUS	CAPACITY TYPE	AGENCY NAME
2433	160260890856	M/S SIGMA ONE	GANESHKIHIND (U) CIRC	4613	Status A1 Application Dra	Only Rooftop	C.R.I. Pumps Pvt. Ltd
2442	410012388750	THE SECERATARY RAVI	NAGPUR (U) CIRCLE	4682	Status A1 Application Dra	Only Rooftop	M/s Claro Energy Pvt. Ltd
27359819	419990016888	KAVITA SANJAY AGRAW	NAGPUR (U) CIRCLE	4682	Status Receipt Approved	Only Rooftop	Mundra Solar PV Ltd.
27387970	510019009360	M/S SUNIL INDUSTRIES	Jalna (M Ci)	2712	Status Tech. Feasibility A	Only Rooftop	Mundra Solar PV Ltd.
27077314	370014042450	ANAND TIKAMCHANDJI	Yavatmal (M Ci)	1708	Status Tech. Feasibility A	Only Rooftop	Mundra Solar PV Ltd.
2463	170084409297	RIVER RESIDENCY COM	GANESHKIHIND (U) CIRC	4595	Status A1 Application Dra	Only Rooftop	G.K Energy Marketers Pvt. Ltd.
2480	170084409319	RIVER RESIDENCY COM	GANESHKIHIND (U) CIRC	4595	Status A1 Application App	Only Rooftop	
2439	170084494243	SUNIL MURLIDHAR KAR	GANESHKIHIND (U) CIRC	4595	Status A1 Application Dra	Only Ground	Mundra Solar PV Ltd.
2440	170084494251	BHUSHAN CHANDRAKAR	GANESHKIHIND (U) CIRC	4595	Status A1 Application Dra	Only Rooftop	M/s Claro Energy Pvt. Ltd
2430	170084494359	NANDA VINAYAK PATIL	GANESHKIHIND (U) CIRC	4595	Status A1 Application Dra	Only Rooftop	Mundra Solar PV Ltd.
2461	170084495860	Praveen Kumar Chaudhar	GANESHKIHIND (U) CIRC	4595	Status A1 Application Dra	Only Rooftop	G.K Energy Marketers Pvt. Ltd.
2487	170146059085	SILVER CITY WING-A	GANESHKIHIND (U) CIRC	4595	Status Tech. Feasibility A	Rooftop+Ground	C.R.I. Pumps Pvt. Ltd
27939853	030919019006	M/S MANGALAM ORGANI	Kumbhivali	4813	Status Receipt Approved	Only Rooftop	Mundra Solar PV Ltd.
26972115	203509022220	TE CONNECTIVITY INDI	Shirwal	4819	Status Receipt Submitted	Only Rooftop	Mundra Solar PV Ltd.
2273	049050050245	SHWETA INFRASTRUCT	Nashik (M Corp.)	4749	Status Tech. Feasibility A	Rooftop+Ground	Mundra Solar PV Ltd.
27831251	049060212642	SHRI SHRIYOG NAREND	Nashik (M Corp.)	4749	Status Estimate Approved	Only Rooftop	Mundra Solar PV Ltd.
2547	160224701613	Sema Mehandra Yeole	GANESHKIHIND (U) CIRC	4599	Status A1 Application App	Only Rooftop	Mrunalini G
27230710	458010047826	THE VIDHYARTHI SAHAY	Warora (M Ci)	2178	Status Tech. Feasibility A	Only Rooftop	Mundra Solar PV Ltd.
26992549	611219044070	LATUR COLD STORAGE	Latur (rural)	5126	Status Tech. Feasibility A	Only Rooftop	Mundra Solar PV Ltd.
27749611	611230006881	NITIN SURESH MANDAL	Harangul Bk	5126	Status Estimate Approved	Only Rooftop	Mundra Solar PV Ltd.
27195792	310230907306	SAJU LILABAIHARIBHAU	Akola (M Corp.)	4570	Status Tech. Feasibility A	Only Rooftop	Mundra Solar PV Ltd.
2399	160230560487	SHRI DEKHANI SHALST	RASTAPETH (U) CIRCLE	4604	Status A1 Application Dra	Only Rooftop	C.R.I. Pumps Pvt. Ltd
27654300	170853935673	SURESH DEVARAM DHA	Pune (M Corp.)	4677	Status Receipt Approved	Only Rooftop	Mundra Solar PV Ltd.
2414	410010213715	SHRI S L BADWAIK	NAGPUR (U) CIRCLE	4683	Status A1 Application Dra	Only Rooftop	Mundra Solar PV Ltd.
2482	410010198228	SHRI MANIKRAO T KACH	NAGPUR (U) CIRCLE	4683	Status A1 Application App	Only Rooftop	M/s Claro Energy Pvt. Ltd
27207481	952180001221	SAVVY PACKAGING PVT	Gondedumala	5401	Status Tech. Feasibility A	Only Rooftop	Mundra Solar PV Ltd.
27924705	3303999050010	THE REGISTRAR P.A. H	Solapur (M Corp.)	1325	Status Receipt Submitted	Only Rooftop	Mundra Solar PV Ltd.
27812025	330245973071	Shrinivas Ramakant Yem	Solapur (M Corp.)	4089	Status Tech. Feasibility A	Only Rooftop	Mundra Solar PV Ltd.
2464	424770164855	SHRI RAMKRUSHNA SUE	NAGPUR (R) CIRCLE	0359	Status A1 Application Dra	Only Rooftop	M/s Claro Energy Pvt. Ltd
2538	422200000019	SHRI DANI DA IFRAM S	NAGPUR (R) CIRCLE	0359	Status A1 Application App	Rooftop+Ground	M/s Claro Energy Pvt. Ltd

CONSUMER LIST

# Section 2: Solar Rooftop Vendor Portal

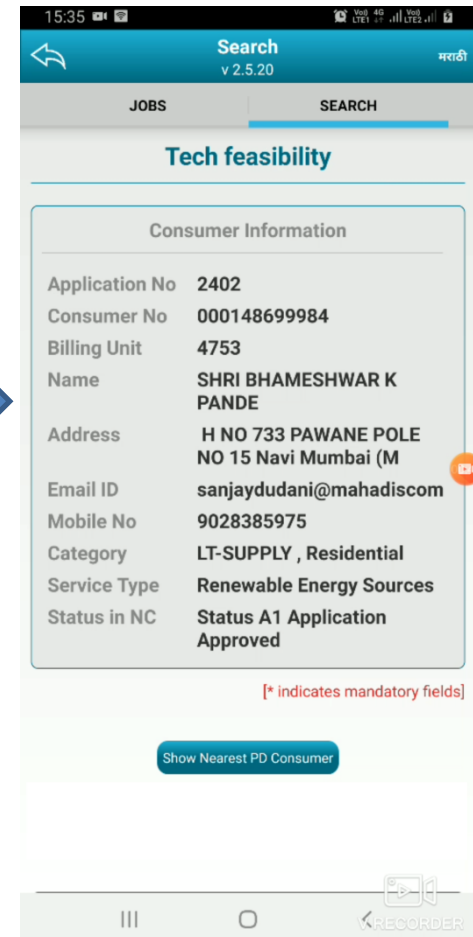
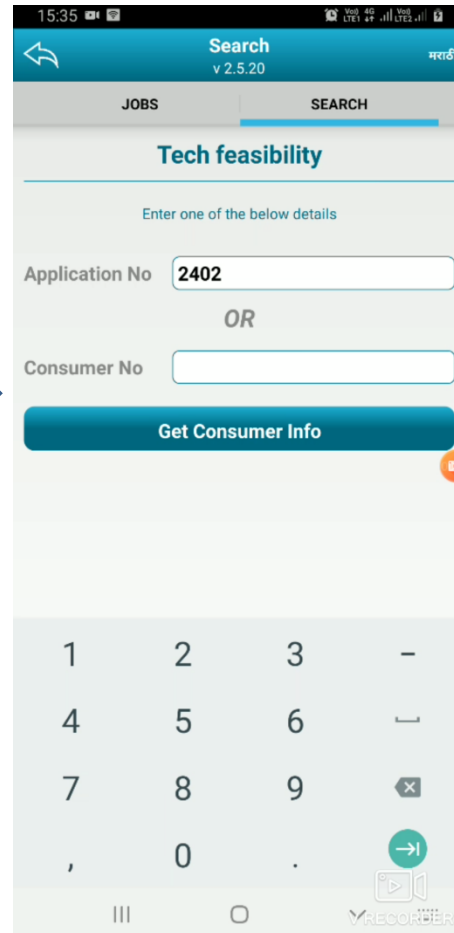
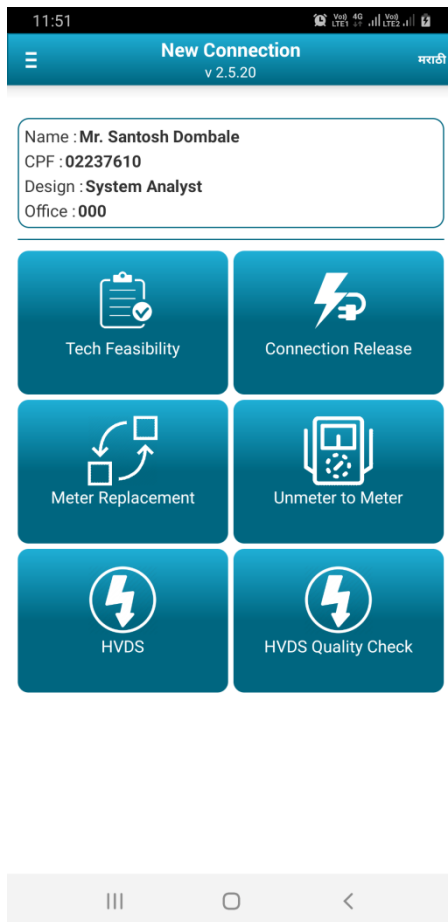
❖ Logout:

The screenshot shows a web browser window with the URL `http://localhost:8080/RooftopSolar/RooftopSolar?uiActionName=logout`. The page header includes the MAHAVITARAN logo and the text "Maharashtra State Electricity Distribution Co. Ltd. Rooftop Solar - Version : 1.0.0 ( Live )". A blue notification bar at the top left says "Logout successfully". Below this is a "Login Details" section with a red instruction: "Please Login with your CPF Number and Password as used in RAPORP System. \*For vendors use your Login Id and Password". The form contains two input fields: "Login ID" and "Password", followed by "Submit" and "Reset" buttons. A link for "First Time User ?" is located at the bottom right of the form. The footer of the page reads "©2020 Rooftop Solar Energy, MSEDCL".

## Section 3 : TECHNICAL FEASIBILITY – MOBILE APP

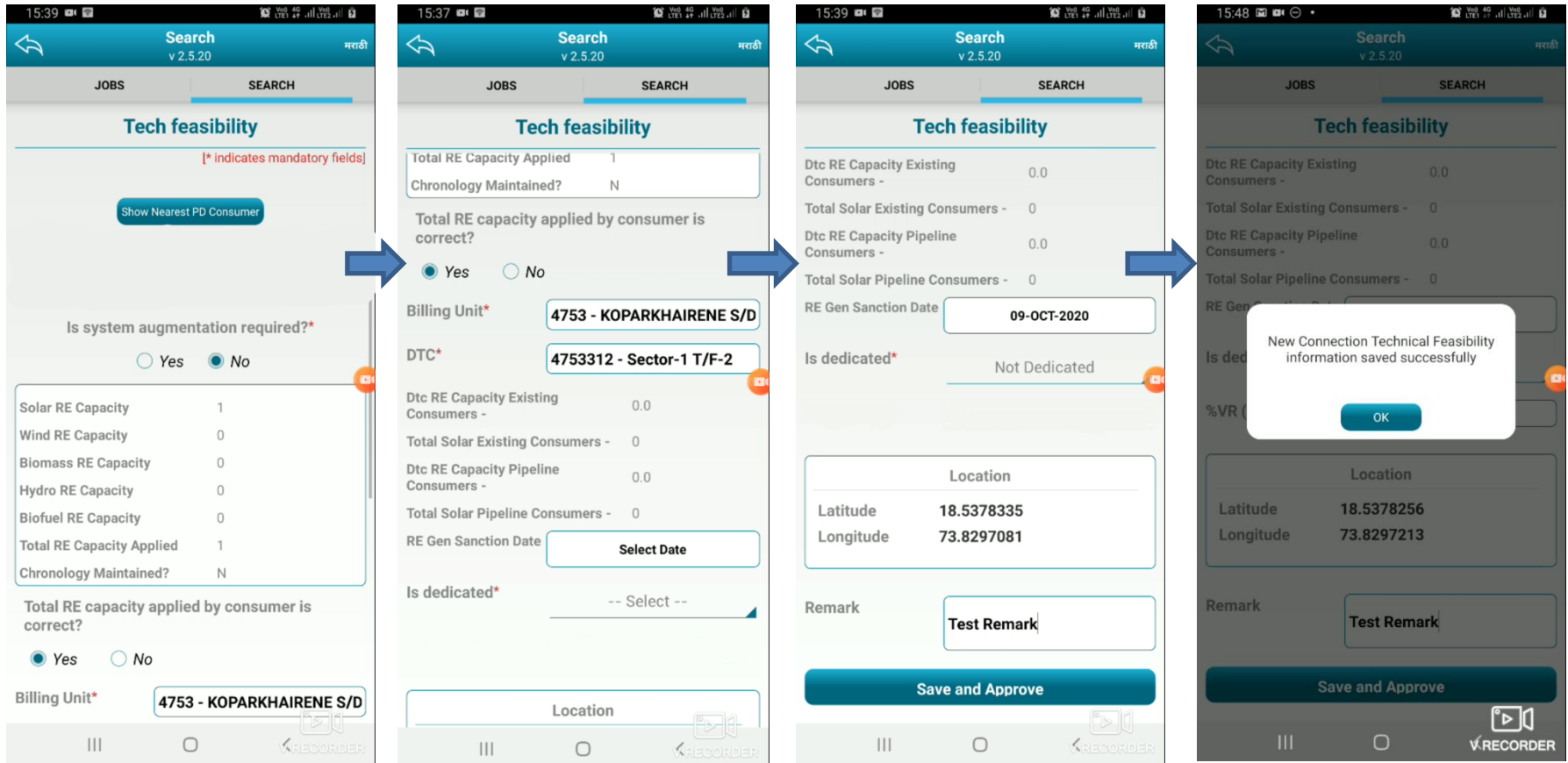
[Renewable Energy - Rooftop Solar]

❖ TECHNICAL FEASIBILITY – MOBILE APP :



- Employee User clicks on Tech Feasibility Menu.
- Here consumer need to provide his Application Id or Consumer No.
- User will be shown consumer information tapping on Get Consumer Info Button

❖ TECHNICAL FEASIBILITY – MOBILE APP :



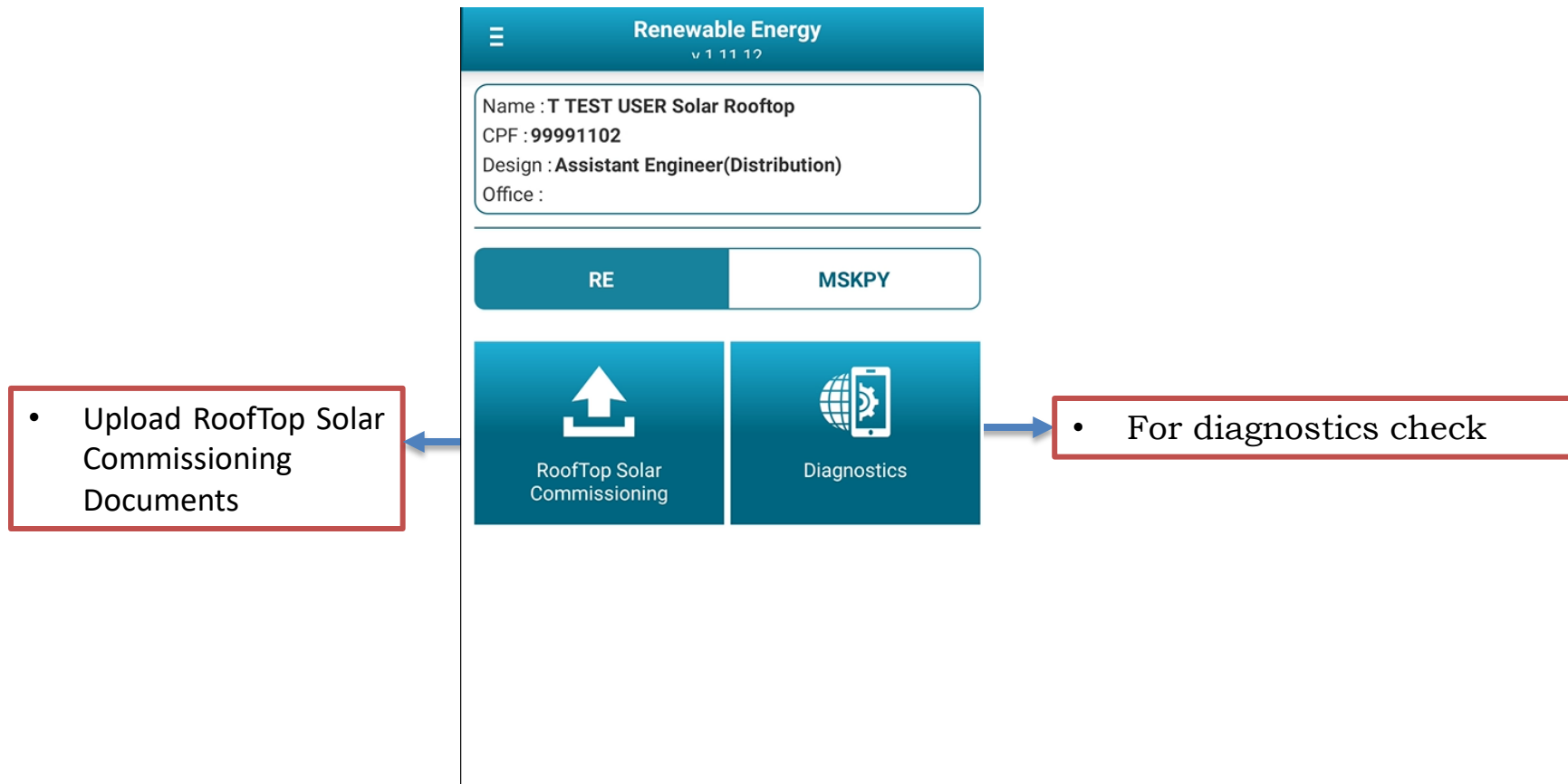
- Employee User will enter necessary information.
- Users actual location will be automatically captured.
- After entering all details, save and approve tech feasibility application.
- On successful submission and approval of tech feasibility, successful message will be shown.

## Section 4 : RE APP FOR VENDOR

**[Renewable Energy - Rooftop Solar]**

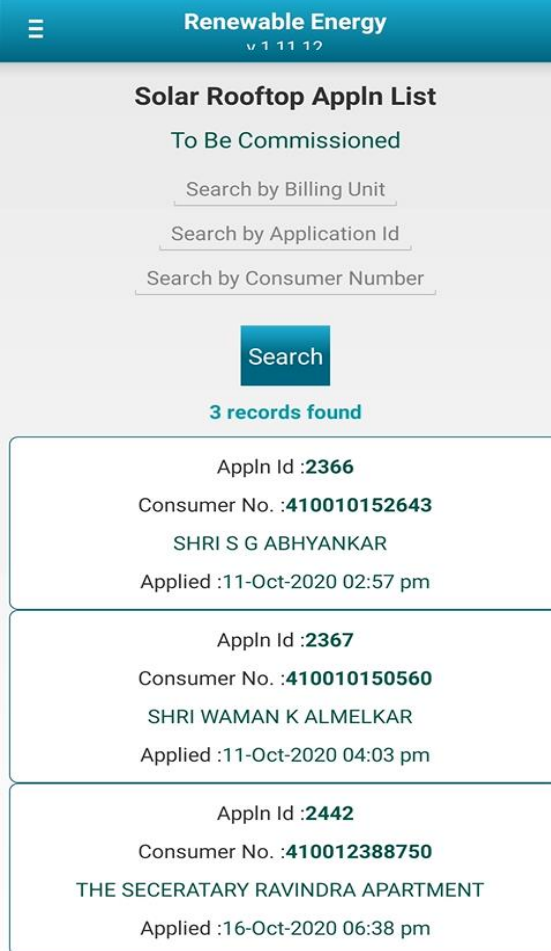
**<https://empportal.mahadiscom.in/EmpPortal/emp?uiActionName=getMobileAppDownload>**

# Section 4 : RE COMMISSIONING APP



## Upload RoofTop Solar Commissioning Documents

- Choose 'RoofTop Solar Commissioning' from the main menu. A list with applications to be commissioned will be displayed
- Application can be searched by following 3 options
  - Search by Billing Unit
  - Search by Application ID
  - Search by Consumer Number
- Choose an application from the list



**Renewable Energy**  
v 1 11 12

### Solar Rooftop Appln List

To Be Commissioned

Search by Billing Unit

Search by Application Id

Search by Consumer Number

**Search**

**3 records found**

Appln Id : <b>2366</b> Consumer No. : <b>410010152643</b> SHRI S G ABHYANKAR Applied :11-Oct-2020 02:57 pm
Appln Id : <b>2367</b> Consumer No. : <b>410010150560</b> SHRI WAMAN K ALMELKAR Applied :11-Oct-2020 04:03 pm
Appln Id : <b>2442</b> Consumer No. : <b>410012388750</b> THE SECERATARY RAVINDRA APARTMENT Applied :16-Oct-2020 06:38 pm



# Section 4 : RE COMMISSIONING APP

## Upload RoofTop Solar Commissioning Documents contd...

1. Choose each document from device or carefully capture photo
2. Tap on 'Upload All' to upload all documents



11:09

Renewable Energy  
v 1.11.12

### Rooftop Solar Commissioning

Application ID : 2366  
Application Date : 11-Oct-2020  
Consumer Number : 410010152643  
Name of the Consumer : SHRI S G ABHYANKAR  
Mobile Number : 9823343017  
E-mail : [pradhnya.kamle@gmail.com](mailto:pradhnya.kamle@gmail.com)  
Address of Installation : WEST HIGH COURT RD  
PLOT NO 67 NAGPUR  
NAGPUR (U) CIRCLE  
440010  
Name of Agency : M/s Claro Energy Pvt. Ltd  
Address of Agency : A1600\_add

RE Arrangement Type : Net Metering Arrangement  
Applied RE Capacity (KW) : 1  
Installed RE Capacity (KW) :

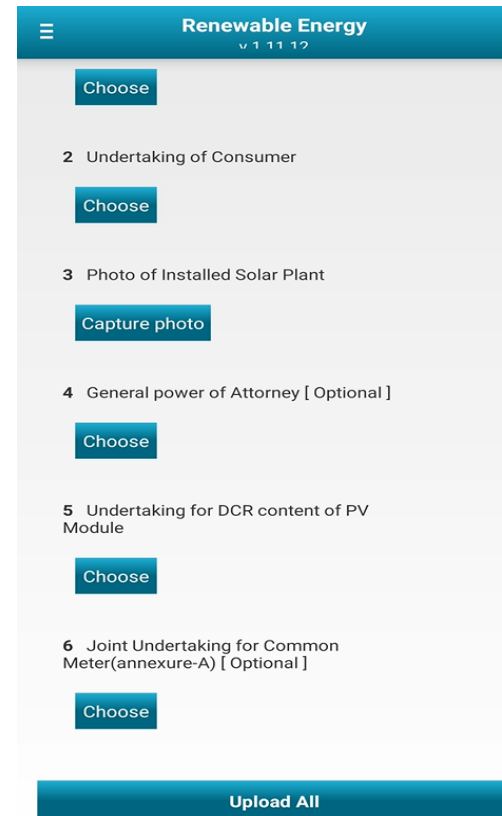
---

### Upload Documents

[Files with size in between 20 KB and 2 MB are allowed.  
Only JPG, JPEG, PNG, PDF files are supported]

1 RE Generating System Commissioning Report

Choose



Renewable Energy  
v 1.11.12

Choose

2 Undertaking of Consumer

Choose

3 Photo of Installed Solar Plant

Capture photo

4 General power of Attorney [ Optional ]

Choose

5 Undertaking for DCR content of PV Module

Choose

6 Joint Undertaking for Common Meter(annexure-A) [ Optional ]

Choose

Upload All

## **Section 5 : Solar Rooftop Vendor Portal (Employee-side Portal Operations )**


# Section 5 : Solar Rooftop Vendor Portal (Employee-side Portal Operations )

❖ Circle Employee will approve commissioning details uploaded by vendor



# Section 5 : Solar Rooftop Vendor Portal (Employee-side Portal Operations )

❖ Circle Employee will approve commissioning details uploaded by vendor



**Rooftop Solar - Version : 1.0.0 ( Live )**  
 User : test circle  
 CPF Number : 00040002  
 Designation : **Superintending Engineer(Distribution)**  
 Rooftop Solar Role : **BR\_VIEWER**

Log

Rooftop Solar

Rooftop Reports

## List of Consumers To Be Approved By Authority

**Search Criteria**

Search by Billing Unit:

Search by Consumer Number:

Search by Application ID:

Search by Circle :

Search by Division :

Search by Agency :

1 record(s) found

Go to page:   ← Page 1 of 1 →

Application ID	Consumer Number	Consumer Full Name	Consumer Address	Circle Name	Division Name	Sub-division Name	Billing Unit	Current Workflow Status	Capacity Type	Agency Name
2366	410010152643	SHRI S G ABHYANKAR	WEST HIGH COURT RD NAGPUR PLOT NO 67	NAGPUR (U) CIRCLE	NAGPUR CONGRESS NAGAR DIV	SHANKAR NAGAR S/DN.	4681	Status A1 Application Draft	Only Ground	M/s Claro Energy Pvt.

1 record(s) found

Go to page:   ← Page 1 of 1 →

**Page will show list of consumers whose installation docs uploaded by vendor, employee need to click on Application Id to check the details as below**

# Section 5 : Solar Rooftop Vendor Portal (Employee-side Portal Operations )

❖ Circle Employee will approve commissioning details uploaded by vendor

Rooftop Solar KOLE : BK\_VIEWEK

Rooftop Solar

Rooftop Reports

Rooftop Solar - Consumer No : 190560373736

### System Details

Consumer Number : \*

System Installation Date : \*

### Panel Details

Panel Make : \*

Panel Total Capacity : \*

No of Panels : \*  ( max. 10 modules )

### Inverter Details

Inverter Make : \*

Inverter Serial No : \*

Inverter Capacity : \*

Sr. No.	Panel Serial Number
1	<input type="text" value="605252147"/>
2	<input type="text" value="605252296"/>
3	<input type="text" value="605253297"/>
4	<input type="text" value="605253078"/>
5	<input type="text" value="605253077"/>

# Section 5 : Solar Rooftop Vendor Portal (Employee-side Portal Operations )

❖ Circle Employee will approve commissioning details uploaded by vendor

Inverter Capacity : *	<input type="text" value="3500"/>
Sr. No.	Panel Serial Number
1	<input type="text" value="605252147"/>
2	<input type="text" value="605252296"/>
3	<input type="text" value="605253297"/>
4	<input type="text" value="605253078"/>
5	<input type="text" value="605253077"/>
6	<input type="text" value="605253075"/>
7	<input type="text" value="605253158"/>
8	<input type="text" value="605253135"/>
9	<input type="text" value="605253136"/>

### RMU Details

RMU Make : *	<input type="text" value="125"/>
Serial No. : *	<input type="text" value="EZMCI20030572"/>

### AMR Readings

### SIM Details

SIM IMEI No	<input type="text" value="862818048805776"/>	SIM Mobile No	<input type="text" value="5759175857788"/>	Vendor Id	<input type="text" value="100029189"/>	Vendor Helpline	<input type="text" value="7722011133"/>
-------------	--	---------------	--	-----------	--	-----------------	---

### Other Details

Reading Date	<input type="text" value="02-Mar-20"/>	Modem RTC	<input type="text" value="12:20:00 PM"/>	Status	<input type="text" value="WORKING"/>
Total Panel Voltage	<input type="text" value="3015"/>	Total Panel Current	<input type="text" value="9"/>	Total Panel Power	<input type="text" value="3015"/>

# Section 5 : Solar Rooftop Vendor Portal (Employee-side Portal Operations )

❖ Circle Employee will approve commissioning details uploaded by vendor

## AMR Readings

## SIM Details

SIM IMEI No	<input type="text" value="862818048805776"/>	SIM Mobile No	<input type="text" value="5759175857788"/>	Vendor Id	<input type="text" value="100029189"/>	Vendor Helpline	<input type="text" value="7722011133"/>
-------------	--	---------------	--	-----------	--	-----------------	---

## Other Details

Reading Date	<input type="text" value="02-Mar-20"/>	Modem RTC	<input type="text" value="12:20:00 PM"/>	Status	<input type="text" value="WORKING"/>
Total Panel Voltage	<input type="text" value="3015"/>	Total Panel Current	<input type="text" value="9"/>	Total Panel Power	<input type="text" value="3015"/>

## Meter Details

Net Meter Make *	<input type="text" value="123"/>	Net Meter Sr No *	<input type="text" value="aaa"/>
Generator Meter Make *	<input type="text" value="123"/>	Generator Meter Sr No *	<input type="text" value="abb"/>

## Uploaded Documents \*

- Uploaded File Name : 2366\_13\_11052020103124\_sample\_doc.pdf [Click here to download Annexure I](#)
- Uploaded File Name : 2366\_18\_11052020103124\_sample\_doc.pdf [Click here to download Proforma-A](#)
- Uploaded File Name : 2366\_22\_11052020103125\_sample\_doc.pdf [Click here to download Proforma-B](#)

## Approval Decision

Approval Decision for Commissioning Reports	<input type="text" value="--SELECT--"/> <ul style="list-style-type: none"> <li>--SELECT--</li> <li>Accept</li> <li>Reject</li> </ul>	<input type="button" value="Submit"/>	<input type="button" value="Cancel"/>
---	--	---------------------------------------	---------------------------------------

## Section 6 : APPLICATION TRACKING

[Renewable Energy - Rooftop Solar]

## ❖ SECTION 6 : APPLICATION TRACKING :

NEW CONNECTION   SOLAR ROOFTOP   CHANGE OF NAME   LOAD CHANGE   RE-CONNECTION   ADDRESS CORRECTION   SD REFUND

CHECK SOLAR RTS APPLICATION STATUS , PAY FIRM QUOTATION / DEMAND NOTE AND UPLOAD DOCUMENTS.

Search

Search By : Application Number ▾

Application ID: 27916577

ADMU22

Enter the above characters in the box.

FGGI1B

Submit   Reset

Documents already uploaded.

- Consumer can track status of his Application through Consumer Tracking.
- Here consumer need to provide his Application Id or Consumer No.

## ❖ SECTION 6 : APPLICATION TRACKING :

Consumer Information	
<b>Application ID</b>	27916577
<b>Application Date</b>	07-Oct-20
<b>Consumer No</b>	061560006241
<b>Consumer Name</b>	VIKRAM SUKDEO GAIKWAD
<b>Address</b>	GNO 50 ANGANGAON TAL YEOLA DIST NASIK ANGANGAO Angangaon 423401
<b>Mobile No</b>	9422292256
<b>Email Address</b>	asmita18gaikwad@gmail.com
<b>Category</b>	Residential
<b>Service Type</b>	Renewable Energy Sources
<b>Supply Type</b>	LT-SUPPLY
<b>Arrangement Type</b>	Net Metering Arrangement
<b>Applied RE Capacity</b>	8 KW
<b>Applied Chronology</b>	N
<b>Sanctioned Load</b>	10 KW
<b>Contract Demand (KVA)</b>	0 KVA
<b>Region Name/Zone Name</b>	KOKAN REGION / NASIK ZONE
<b>Circle Name/Divison Name</b>	MALEGAON CIRCLE / MANMAD RURAL DIVISION
<b>Sub Divison Name/BU</b>	YEOLA-R / 5291
<b>No of Documents Online Uploaded.</b>	4
<b>Application Status</b>	Meter Assignment Approved (Paid Online)

## ❖ SECTION 6 : APPLICATION TRACKING :

Firm Quotation / Demand Note		
<b>Estimate No</b>	<b>Estimate Date</b>	<b>Type</b>
16138952	07-Oct-20	LT
<b>Description</b>		<b>Amount (Rs.)</b>
SOLAR ROOF-TOP REGISTRATION FEE		500
GOODS AND SERVICE TAX		90
		Total : 590

Receipt Details			
Description	Number	Date	Amount (Rs.)
SOLAR ROOF-TOP REGISTRATION FEE	1251235438	07-Oct-20	500
GOODS AND SERVICE TAX	1251235438	07-Oct-20	90
			Total : 590

[Print Receipt](#)

## ❖ SECTION 6 : APPLICATION TRACKING :

Agency Details Information	
<b>Agency Name</b>	<i>Mundra Solar PV Ltd.</i>
<b>Contact Person Name</b>	<i>Shree</i>
<b>Contact Number</b>	<i>7875761235</i>
<b>Email ID</b>	<i>shree@gmail.com</i>
<b>Agency Address</b>	<i>Hadapsar</i>
<b>District</b>	<i>Belgaon</i>
<b>State</b>	<i>Karnataka</i>
<b>Remark</b>	<i>Pending with agency</i>

Technical Feasibility Information	
<b>DTC Code</b>	<i>4582061</i>
<b>Tech Feasibility Done Date</b>	<i>07-Oct-20</i>
<b>RE Generation Sanctioned Date</b>	<i>07-Oct-20</i>
<b>Latitude</b>	
<b>Longitude</b>	
<b>Sanctioned RE Capacity</b>	

## ❖ SECTION 6 : APPLICATION TRACKING :

RE Commission Information	
<i>Re Type</i>	<i>Solar+Wind</i>
<i>RE Connection Type</i>	<i>Rooftop</i>
<i>Installed Capacity :</i>	<i>6 KW</i>
<i>Installation Date :</i>	<i>08-Oct-20</i>
<i>Installation Reports uploaded</i>	<i>3</i>

Uploaded Documents Information		
File	File Name	Uploaded on
Undertaking of Consumer	TestRTS.PDF	08-Oct-20
Photo of Installed Solar Plant	image001.jpg	08-Oct-20
RE Generating System Commissioning Report	TestRTS.PDF	08-Oct-20

## ❖ SECTION 6 : APPLICATION TRACKING :

Meter Assignment Information	
<i>Meter Serial No.</i>	X1162312
<i>Meter Receipt Date</i>	02-Oct-20
<i>Install Date</i>	10/9/2020 12:00:00 AM
<i>Supply Date</i>	09-Oct-20
<i>Meter Make</i>	055
<i>Meter Make Name</i>	Secure
<i>RE Generatong Commision Date</i>	08-Oct-20
<i>Solar Agreement Date</i>	09-Oct-20
<i>Solar App Rate</i>	

## **Section 7 : Commission Document Upload for Non-Subsidize Consumer**

## ❖ SECTION 7 : Commission Document Upload for Non-Subsidize Consumer :

Technical Feasibility Information	
<i>DTC Code</i>	-1
<i>Tech Feasibility Done Date</i>	25-Aug-20
<i>RE Generation Sanctioned Date</i>	10-Sep-20
<i>Latitude</i>	
<i>Longitude</i>	
<i>Sanctioned RE Capacity</i>	

[Commission Documents Upload](#)

- After Technical Feasibility, Non-Subsidize consumer can upload his commission report and other documents by Track his Application Link.

## ❖ SECTION 7 : Commission Document Upload for Non-Subsidize Consumer :

Maharashtra State Electricity Distribution Co. Ltd.

NEW CONNECTION   SOLAR ROOFTOP   CHANGE OF NAME   LOAD CHANGE   RE-CONNECTION   ADDRESS CORRECTION   SD REFUND

### UPLOAD DOCUMENTS FOR SOLAR ROOFTOP APPLICATION

[Click Here](#) to download format of Commissioning Report.

[Click Here](#) to download format of Proforma-A.

Upload required documents for Application Number : 2246

RE Generating System Commissioning Report (Annexure-I) *	Choose File	No file chosen
Undertaking of Consumer (Proforma-A) *	Choose File	No file chosen
Photo of Installed Solar Plant *	Choose File	No file chosen
General power of Attorney (Optional)	Choose File	No file chosen

I confirm that documents uploaded are self attested by me.

Upload Documents

Instructions to upload document.

1. Only Files upto 300Kb size are allowed.
2. Only .jpg, .jpeg, .png or PDF files are allowed.
3. Only PDF files are allowed for Undertaking of consumer and Only .jpeg, .jpg files are allowed for Photo of Installed Solar Plant.
4. Use proper DPI resolution, colour settings while scanning to reduce the file size.
5. Filename should not contain any special character.

[homepage](#) | © 2020 Anyone | Design by [www.mahadiscom.in](http://www.mahadiscom.in)  
 This work is licensed under a [MSEDCL](#)

- These are documents required to upload by Non –Subsidize Consumer.
- Commission Report and Proforma – A will be downloaded by consumer with pre-printed data. In Commission report consumer need to feed Installation date, installed capacity , inverter Make, capacity and Save it. Then Print the document. Upload duly signed Commission Report and Proforma – A and other documents.

## ❖ SECTION 7 : Commission Document Upload for Non-Subsidize Consumer :

Annexure-I		
(Commissioning report for Non- Subsidized consumer)		
S No.	Particulars	As commissioned
1	Name of the Consumer	THE CHAIRMAN SHRI NIWAS APPT
2	Consumer Number	170140297421
3	Mobile Number	8578550103
4	E-mail	chairman@gmail.com
5	Address of Installation	PLOT NO .GP 106,WING-B,NEA G BLOCK,MIDC,SHAHUNAGAR,CH Aghane 410503
6	RE Arrangement Type	Net Metering Arrangement
7	Capacity Type	Rooftop + Ground
8	Project Model	Capex
9	RE Type	
10	Sanctioned Capacity(KW)	6
11	RE installed Capacity(Rooftop)(KW)	
12	RE installed Capacity(Rooftop + Ground)(KW)	<input type="text"/> *
13	Installation date	<input type="text"/> * <a href="#">GetDate</a>
14	Solar PV Details	
	Inverter Capacity	<input type="text"/> *
	Inverter Make	<input type="text"/> * <input type="button" value="--Select--"/>
	No. of Modules (Optional)	<input type="text"/>
	Module Capacity (Optional)	<input type="text"/>

### To be uploaded separately:

1. Self-certification of safety of the installation of the RTS system along with the test report of the Licensed Electrical Contractor (Proforma-A).
2. Electrical Inspector permission if System is above 200 KW. (Mandatory if system is above 200KW only)
3. Third party leasing agreement if Model selected is RESCO.
4. Photograph of the system commissioned.

## ❖ SECTION 7 : Commission Document Upload for Non-Subsidize Consumer :

### Proforma-A

#### COMMISSIONING REPORT (PROVISIONAL) FOR GRID CONNECTED SOLAR PHOTOVOLTAIC POWER PLANT (with Net-metering facility)

Certified that a Grid Connected SPV Power Plant of ..... KWp capacity has been installed at the site PLOT NO .GP 106,WING-B,NEA G BLOCK,MIDC,SHAHUNAGAR,CH Aghane 410503 District ..... of MAHARASHTRA which has been installed by M/S ..... on ..... The system is as per BIS/MNRE specifications. The system has been checked for its performance on .....with installation of bi-directional meter and it is working satisfactorily.

Signature of the beneficiary  
THE CHAIRMAN SHRI NIWAS APPT

Signature of the empanelled agency  
With name, seal and date

Signature of the MSEDCL Officer  
With name, date and seal

Print

## SMS FOR VARIOUS STAGES

SMS No.	Event	To whom	Revise SMS text to shorten the Length For Confirmation
SMS- 1	After Application Submit	CONSUMER	"Dear Consumer, RE appln-id <<application ID>> for consumer no << consumer number>> is received. Track status at <a href="http://www.mahadiscom.in">www.mahadiscom.in</a> "
SMS-2	Agency Selection by Consumer	CONSUMER	"Dear Consumer, Agency <<Agency Name>>, having Mobile No <<Agency Mobile No>> is selected by you under MNRE Phase-II RTS scheme for RE appln-id <<application_id>>. Agency will contact you shortly for further process."
SMS-3	Agency Selection by Consumer	Agency	"Dear <<Agency Name>>, Consumer <<Consumer Name>>, Consumer No <<Consumer No>>, having Mobile No. <<Mobile No>> selected your agency under MNRE Phase-II RTS scheme. You have to submit acceptance/rejection within 3 days through <<Vendor portal Link>>, else considered as accepted."
SMS-4	Agency Selection by Consumer	EMPLOYEE	"RE appln-id <<application ID>> dated <<Application Date>> of Consumer No. <<Consumer Number>> for <<Total Capacity>> KW, selected agency <<Agency Name>>, Contact No. <<Contact Number of agency>> is initiated for carrying out Joint Technical feasibility."
SMS-5	Agency Reject to Consumer	CONSUMER	"Dear Consumer, Agency <<Agency Name>> has rejected your request, for RE appln-id <<application ID>>. So please select another agency. <<url to reselect agency>>"
SMS-6	Agency Accept to Consumer	CONSUMER	"Dear Consumer, Agency <<Agency Name>> has accepted your request, for RE appln-id <<application ID>>."
SMS07	After Online Payment Done by consumer	SDO	Application No. <<Application ID>> Dated <<Application Date>> for Rooftop RE Generating system for <<Total Capacity>> KW in r/o Shri/Smt <<Consumer Name>> & <<Consumer Number>> is initiated for carrying out Joint Technical feasibility.
SMS08	Rejection of Tech feasibility through Mobile App.	Consumer	"Dear Consumer, RE appln-id <<application ID>> for consumer no << consumer number>> is not feasible due to << Remark for rejection >>"
SMS09	Keep Application in pending Stage if Chronology flag is 'Y' and inadequate Distribution Transformer Capacity	Consumer	"Dear Consumer, RE appln-id <<application ID>> for consumer no << consumer number>> will be considered as per application seniority as soon as the distribution transformer capacity is upgraded."
SMS10	Cancel Application if Chronology flag is 'N'and inadequate Distribution transformer capacity	Consumer	"Dear Consumer, RE appln-id <<application ID>> for consumer no << consumer number>> is rejected due to Inadequate distribution transformer capacity."
SMS11	Cancel Application if Technical constraints	Consumer	"Dear Consumer, RE appln-id <<application ID>> for consumer no << consumer number>> is rejected due to technical constraints."
SMS12	When the DTC capacity is augmented	Consumer	"Dear Consumer, With reference to RE appln-id <<Application ID>> for consumer no << consumer number>> the DTC <<DTC No>> is augmented and your application will be considered for sanction."
SMS13		SDO	"The DTC <<DTC No>> is augmented. Please consider RE appln-id <<application ID>> for further processing."
SMS14	Tech feasibility Approved through mobile App	Consumer	"Dear Consumer, RE appln-id <<application ID>> for consumer no << consumer number>> is sanctioned on <<sanction date>> for <<Total capacity>> KWp is valid upto <<Validity Date>>. If commissioning report of RE is not uploaded on or before Validity date,appln will be deemed treated as cancelled and consumer have to re-apply"
SMS15	Reminder Message after 4 months of Sanction Date	Consumer	"Reminder : Dear Consumer, RE appln-id <<application ID>> for consumer no << consumer number>> is sanctioned on <<sanction date>> for <<Total capacity>> KWp is valid upto <<Validity Date>>. If commissioning report of RE is not uploaded on or before Validity date,appln will be deemed treated as cancelled and consumer have to re-apply"
SMS16	Auto Cancellation of Application for non-commissioning	Consumer	"Dear consumer, RE appln-id <<application ID>> for consumer no << consumer number> is cancelled for non-commissioning up to validity date<<validity Date>>."
SMS17	After commissioning If any technical discrepancy is observed	Consumer	"Dear consumer, RE appln-id <<application ID>> for consumer no << consumer number> installation have <<Remark of field officer>> deficiencies. Please rectify the deficiencies within 15 days."
SMS18	After commissioning If any technical discrepancy is observed	Agency	"Dear Agency,<<Agency Name >>, RE appln-id <<application ID>> for consumer no << consumer number> have <<Remark of field officer>> deficiencies. Please rectify the deficiencies within 15 days."
SMS19	Tech feasibility Approved through mobile App	AGENCY	"Dear Agency,<<Agency Name >>, RE appln-id <<application ID>> for consumer no << consumer number>> is sanctioned on <<sanction date>> for <<Total capacity>> KWp is valid upto <<Validity Date>>. If commissioning report of RE is not uploaded on or before Validity date,appln will be deemed treated as cancelled and consumer have to re-apply"
SMS20	Rejection of Tech feasibility through Mobile App.	AGENCY	"Dear Agency,<<Agency Name >>, RE appln-id <<application ID>> for consumer no << consumer number>> is not feasible due to << Remark for rejection >>"

**Thank You!**