

# **STANDARD OPERATING PROCEDURE (SOP)**

**For**

**INSTALLATION & COMMISSIONING**

**Of**

**ROOFTOP SOLAR SYSTEM**

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## **A. INTRODUCTION:**

As a part of Intended Nationally Determined Contributions (INDCs), India has committed to increase the share of installed capacity of electric power from non-fossil-fuel sources to 40% by 2030. Solar energy is one of the main sources to accomplish the target. In line with the same, Government of India has set the target of achieving 100 GW of solar power capacity in the country by the year 2022, out of which 40 GW is to be achieved from rooftop solar (RTS).

The Rooftop Solar (RTS) plant is a system installed mainly on the roof of a building wherein valid and live electricity connection has been provided by the concern Distribution utilities / companies (DISCOMS). Typically, 1 (one) kWp RTS plant requires about 10 sq. m area. The Solar power so generated can then be used either for captive consumption of the premises or can be fed into the grid and be adjusted in the electricity bill.

In Maharashtra, the MERC (Net Metering Regulations in 2015) was notified by Maharashtra Electricity Regulatory Commission in 2015. Thereafter, first amendment was issued in 2017. Then, the MERC has notified MERC (Grid Interactive Rooftop Renewable Energy Generating System) Regulations 2019 in Dec'2019.

The installed capacity of Rooftop Solar in MSEDCL area has reached up to 873 MW by 30.11.2021.

The Government of India, on 30<sup>th</sup> December 2015, approved “Grid Connected Rooftop and Small Solar Power Plants Program” for installation of 4,200 MW RTS plants in the country by year 2019-20, out of which 2,100 MW was through Central Financial Assistance (CFA). The RTS projects sanctioned under this Program are under implementation by State Nodal Agencies (SNAs), Solar Energy Corporation of India (SECI), Public Sector Undertakings (PSUs) and other Government Agencies (GAs).

The Government of India, on 19<sup>th</sup> February 2019 approved Phase-II of “Grid Connected Rooftop and Small Solar Power Plants Program” for achieving cumulative capacity of 40 GW RTS plants by 2022.

It has been decided to make the DISCOMs and its local offices as the nodal points for implementation of the In MNRE Rooftop Solar Phase-II Program.

The DISCOMs will play a key role in expansion of RTS as DISCOMs are having a direct contact with the end user and they provide approval for installation, manage the distribution network and also have billing interface with rooftop owner.

## **B. PREAMBLE:**

The MERC has notified the Grid Interactive Rooftop Renewable Energy Generating Systems Regulations, 2019 on 30th December 2019 with certain new provisions and the previous MERC (Net Metering for Roof-top Solar Photo Voltaic Systems Regulations), 2015 have been repealed.

As per Regulations, Renewable Energy sources includes the renewable sources or combination of such sources, such as Mini, Micro and Small Hydro, Wind, Solar, Biomass including bagasse, bio-fuel, urban or Municipal Solid Waste.

The Ministry of New & Renewable Energy (MNRE), Government of India, has launched Phase - II of Grid Connected Rooftop Solar Program vide order reference number 38/331/2017-GCRT Division dated 08.03.2019.

The program is launched for achieving cumulative capacity of 40,000 MW from Rooftop Solar (RTS) Projects by the year 2022 and has provided Central Financial Assistance (CFA) for residential consumers as follows:

- CFA @ 40 % for capacity up to 3 kwp
- CFA @ 40 % for capacity only for the first 3 kwp and for capacity above 3 kwp and upto 10 Kwp, the CFA would be limited to 20 % (No subsidy beyond 10Kwp capacity)
- CFA @ 20 % for Group Housing Societies/Residential Welfare Associations for capacity upto 500 Kwp (limited to 10kwp per house and total upto 500 kwp)

As per MNRE guidelines, the DISCOMs are required to implement the program by empanelment of eligible agencies selected through transparent bidding process for installation, commissioning of Rooftop Solar System with 5 years operations & maintenance.

MSEDCL has participated in this Program with initial target of 25 MW and now MNRE has allocated 100 MW for FY 2021-22. The program will continue up to 2030 and MNRE will sanction the target on year on year basis.

### **C. MSEDCL INITIATIVES FOR SPEEDY IMPLEMENTATION:**

- Online Application Portal is provided for the use of consumers.
  - This will save valuable time of all concerned and the consumer will be free from all the manual processes like visiting field offices, obtaining application forms, payment of registrations charges etc.
  
- As per the MNRE guidelines, MSEDCL has empanelled agencies for implementation of RTS-II Program all over the state through a transparent e-tendering process.
  - The consumers need not have to search for agencies for installation of Rooftop Solar System.
  - MSEDCL has empanelled the eligible agencies having adequate work experience and expertise in the field.
  - The consumer has been given the option to select the agency as per his choice.
  
- Wide publicity is given through advertisements, press cuttings, posters, SMS to consumers.
  - Apart from this MSEDCL will organise consumer awareness program in due course.
  
- Nodal officer has been appointed at Zone/Circle level for proper coordination between the agencies, consumers and MSEDCL field officers.
  - Consumer can also approach them for resolution of disputes if any.

## **D. ACTIVITIES RELATED TO THE CONSUMER:**

### **ONLINE SUBMISSION OF APPLICATION BY THE CONSUMER:**

1. The application shall be submitted **online** only.
2. Visit Mahadiscom official website: [www.mahadiscom.in](http://www.mahadiscom.in)  
Go to *Consumer Portal* →  
Go to *Renewable Energy Portal* →  
Go to *Solar Rooftop* →  
Go to *Apply for RE Rooftop* →

OR

Follow link- <https://www.mahadiscom.in/ismart/>

Application Form Format will get opened.

There are 2 steps viz.           i) Submit Application  
  ii) Make Payment of Registration fees

3. The consumer has to enter his Consumer Number as per the energy bill. The system will show all the relevant billing details such as Name, Address, Sanctioned load, DTC Code, Consumer Category, Supply Voltage, etc.
4. Consumer has to verify Mobile Number and E-mail address for correctness which is already exist in the MSEDCL billing system. All the communication will be through SMS on mobile number and E-mail only. If consumer wants to change the mobile number/E-mail, separate link for the same is provided.
5. If consumer wants to enhance the sanction load, separate link for the same is provided.
6. Then, consumer has to enter the technical details such as RE Project type, its capacity, Generation Voltage level etc.

#### **Notes:**

- Existing MSEDCL consumer can apply for new Rooftop RE generating system.
- The consumer already having Rooftop Solar system can also apply for extension of Rooftop Solar System.
- **NO DOCUMENTS ARE REQUIRED TO BE SUBMITTED AT APPLICATION STAGE**
- The consumer should not have any arrears or outstanding dues at the time of application.
- The application shall be processed by the system if adequate capacity is available on the Distribution Transformer as per MERC norms.
- The proposed capacity of RE generating plant shall be less than or equal to the sanctioned load/contract demand.

**ONLINE PAYMENT OF (NON-REFUNDABLE) REGISTRATION CHARGES:**

- **LT consumers - Rs. 500/-** for consumer having Sanctioned Load or Contract Demand up to 20 kW and Rs 100 thereafter for every 20 kW or part thereof.
- **HT consumer - Rs. 5000/-**

**SELECTION OF SCHEME:**

- Select MNRE RTS Phase-2 Subsidy if a Residential Consumer wants to participate in subsidy Scheme
- Select “Regular Non Subsidize” in all other cases.

**SELECTION OF EMPANELLED AGENCY:**

- The names of empanelled agencies will be displayed.
- Consumer other than MNRE phase-II scheme may select agencies from the drop down list or add the new agency if not appearing in the list.
- Auto intimation via SMS to the agency is given through the system.
- The details of consumer are made available to the agency.

**PROCESS FLOW OF APPLICATION IN ONLINE PORTAL:**

1. In Technical details following parameters will be shown
  - a. Category of Existing connection - (As per Billing Data)
  - b. Sanction Load (KW) - (As per Billing Data)
  - c. Contract Demand (KVA) - (As per Billing Data)
  - d. Voltage at Which Existing Supply is Given: - (As per Billing Data)
  - e. DTC Number in case of LT Consumer - (As per Billing Data)
  - f. Existing Rooftop RE Capacity KW - (As per Billing Data)
  - g. Option for Scheme selection -
    - i. Non subsidized (regular)
    - ii. (MNRE Phase-II Rooftop Solar scheme) (available only for residential consumer)
  - h. RE Arrangement Type:
    1. Net Metering Arrangement\*
    2. Net Billing Arrangement
    3. RE Generating System Behind the meter without Net Metering/Net Billing

\*(Under MNRE Phase-II Rooftop Solar, only Net Metering Arrangement will be applicable)

i. Solar Consumer Type: Residential Consumers has to select the type as:

- a) Residential
- b) Group Housing Society for common facilities.
- c) Residential Welfare Associations for common facilities.

j. RE Source:

RE Generator Type	Connection Type	Capacity (KW)
Solar**	Rooftop**, Rooftop + Ground	
Wind	Ground	
Hydro	Ground	
Biomass	Ground	
Bio-Fuel Solid Waste	Ground	
Total RE Capacity	Rooftop + Ground	

\*\* (Under MNRE Phase-II Rooftop Solar Scheme, only Rooftop Solar will be considered)

k. Inverter AC Capacity (KW)

l. Output Voltage of Solar System- Voltage at which the RE Generating system is to be connected with Grid (Output Voltage of Inverter)

m. **Project Model:** - 1. CAPEX\*\*\* 2. RESCO

\*\*\* (Under MNRE Phase-II Rooftop Solar, only CAPEX Model will be applicable)

n. If the DTC capacity is inadequate the application for RE System will be kept in waiting list in chronology.

Option to Consumer: - To maintain application in waiting list in case of there is inadequate distribution transformer capacity? (YES / NO)

o. When the DTC capacity is augmented message will be triggered to SDO of MSEDCL Sub-division and the applicant for taking further action for application processing.

p. Specifications of Net Meter as per the sanction load of consumer will be displayed which can be purchased by consumer/Agency from MSEDCL approved vendor.

2. After submission of all the information, click on checkbox to agree Terms & Conditions. Then, click on 'Generate OTP', OTP will be send to registered mobile number. After submission of OTP, click on 'Submit' button to submit the application.



3. After submission of Application by consumer, OTP based Payment option shall be made available.
4. After successful payment of Application Registration fees, SMS will be triggered to consumer. Receipt will be generated automatically.

In case of Non-Subsidized Consumers, agencies will be available in drop down.

- The list of empanelled agencies will appear in case of Non-subsidized consumers along with option to add new agency details as required by MNRE.
- Agency will be intimated through SMS that consumer has selected/added the agency for installation of RTS system for confirmation.

**Note:**

1. If consumer has arrears during the submission of application, Application will not be submitted and consumer will be prompted to pay the arrears first.
2. Total RTS Capacity shall be less than or equal to Sanction Load (KW) or Contract Demand (KVA) as applicable and less than 1MW in Net Metering Arrangement & equal to Sanction Load (KW) or Contract Demand (KVA) as applicable in Net Billing Arrangement and for RTS System behind the meter without Net Metering/Net Billing
3. Inverter AC Capacity (KW) may be equal or more than Total RE Capacity but shall be less than or equal to sanction load (KW)/ Contract Demand as applicable.
4. Data of consumer with RE arrangement type, RE Generator Type, Connection Type etc. shall be available in system.

## **E. ACTIVITIES RELATED TO THE EMPANELLED AGENCY**

- Consumer can apply online for installation of RTS under MNRE RTS Scheme through <https://www.mahadiscom.in/ismart/>
- Upon completion of online RTS application by consumer, application details will be available to all empanelled agencies of that specific Zone through vendor login portal. (Login credential will be provided to all empanelled agencies after empanelment)
- Any empanelled agency of that particular Zone/Area can approach the consumer or vice versa and execute the agreement with the consumer. The consumer shall have the right to select suitable agency from the offers received.
- After execution of agreement between consumer and empanelled agency, the scan copy of the agreement is to be uploaded by the consumer in online application portal against the said empanelled agency. This online uploading of agreement shall be OTP based for consumer and empanelled agency will confirm the authenticity of agreement on Vendor Portal.
- Upon successful uploading of agreement on online portal, this applied RTS capacity shall be booked against that particular empanelled agency. This applied RTS capacity shall be used for further calculations like capacity balance, capacity booked etc.

## **F. ACTIVITIES RELATED TO THE MSEDCL FIELD OFFICER & EMPANELLED AGENCY'S**

### **I. Technical Feasibility/Sanction of RTS:**

- The field officer gets automatic intimation on mobile number and in NC portal once the proposal is uploaded by the consumer in case of MNRE Phase-II scheme. For all other consumers, intimation through SMS, after application is registered successfully.
- Joint visit to the consumer premises is conducted along with the agency to ascertain the technical feasibility and feeding the Geo coordinates of the site into the system.
- The proposal can be approved / rejected on **Technical Feasibility App** via Mobile App.
- The Geo-coordinates will be captured on the same app.
- The proposal can be rejected if shadow free area is not available/ RTS capacity entered is wrong. If consumer wants to reduce RTS capacity (Applied capacity) he is permitted to do so by providing consent letter. The consent letter shall be uploaded and RTS capacity shall be reduced in the Mobile App by field officer.
- Once the technical feasibility is approved, the auto intimation regarding the sanction of application is sent to the consumer by SMS and Sanction copy is emailed.
- **The validity of sanction is for SIX months only.** Beyond this period, the sanction gets lapsed.

### **II. Metering Specifications:**

- The Net Meter Specifications are available on MSEDCL website. The same is available in sanction letter (for LT Consumers).
- The specifications of Net-Meter and associated metering CTs & PTs for HT consumers shall be communicated by the Testing Division.
- As per MERC Regulations consumer is required to procure Generation Meter (uni-directional) and Net Meter (Bi-directional).
- In case of MNRE RTS Phase II Scheme, the cost of generation meter will be borne by the empanelled agency and only the cost of NET meter along with its testing charges will be borne by the consumer and paid to the agency.

**G. Process flow for verification of Technical feasibility and Sanction using Mobile App & NC portal:**

The field officer shall visit the premises and verify the Technical feasibility & Sanction through Mobile app only and shall fill all the relevant details in Mobile App. After approval Technical feasibility Sanction letter will be automatically generated and mailed to consumer. *(The latitude / longitude of Rooftop RE generating system will get captured automatically through Mobile App.) New Mobile App Ver. 2.5.85 or the latest shall be used for carrying out Technical feasibility of Rooftop RE Generating system.*

In Mobile App, in addition to other details of application, following details shall be available for the information of field officer:

- a. Applications pending for Technical Feasibility will be available as per billing unit.
- b. Field officer shall select the Application ID.
- c. Captured latitude / longitude of location.
- d. Source wise applied rooftop capacity, Total Rooftop RE Capacity applied (A)
- e. DTC capacity(B), Sanctioned Capacity of Rooftop RE on DTC (C), available DTC capacity for sanctioning Rooftop RE generating system(D) ( $D=70\%$  of B- C)
- f. Whether Shadow free area is available as per applied RE capacity (YES/NO) *(will be entered by field officer)*
- g. For the respective application ID the Name of the Agency selected by the consumer will be displayed.
- h. Agency shall be present during technical feasibility.
- i. During technical feasibility, concerned MSEDCL officer will tag the connection as Residential OR Group Housing Societies/ Residential Welfare Association.
- j. Technical feasibility accepted / Rejected. *(will be entered by field officer)*
- k. If accepted, Technical feasibility date shall be captured by app and saved and sanction tab/window will open.
- l. Rooftop RE capacity in KW to be sanctioned (E) *shall be entered by field officer manually.*
- m. Technical feasibility remark for Rejection.... *(will be entered by field officer)(i- Shadow free area not available as per RE capacity applied ii- RE capacity entered wrong), SMS will be triggered to consumer.*

**Note:** *If consumer wants to reduce RTS capacity (Applied capacity) he is permitted to do so by providing consent letter. The consent letter shall be uploaded and RTS capacity shall be reduced in the Mobile App by field officer.*

**Conditions for sanction:**

1. For LT consumers, applied Rooftop Solar capacity (E) shall be less than or equal to available RTS capacity on DTC for sanctioning Rooftop RTS generating system (D) and less than or equal to Total RTS Capacity applied (A).
2. Application will be kept in pending stage by field officer if,
  - Adequate distribution transformer capacity is not available for sanctioning. (SMS/E-mail shall be triggered to consumer if the option is selected by consumer to maintain chronology else application will be rejected with SMS if chronology option is not selected.
  - Live arrears are available on consumer premises. (*This option shall be available only if live arrears are present in system.*)
- n. If sanctioned by field officer, Date of Sanction will be the System date by default. *SMS/Email shall be triggered to consumer.* Sanction letter will be send by E-mail to consumer and Agency.

**III. Installation of Rooftop Solar Project:**

- The agency shall complete the installation of Rooftop Solar Project within the stipulated time period of six months from the date of sanction or as mentioned in Tender condition of MNRE Phase-II whichever is earlier.
- Meanwhile, the Net Meter & Generation meter shall be procured and got tested from the MSEDCL testing laboratory.
- The details of meters shall be fed into the Online Application portal ([www.mahadiscom.in/ismart/](http://www.mahadiscom.in/ismart/)) by the consumer/Agency.
- The details of meter procured will be available to concern Division Testing unit. On receipt of meters, testing will be carried out and Test reports will be uploaded in NC-Portal. This report will be sent to consumer/agency and field officer for further processing.
- After the installation is complete, the Work Completion Report (WCR) shall be uploaded in the prescribed format i.e. Annexure-I in online application portal by consumer. (In case of MNRE Phase-II RTS Scheme, Annexure I will be uploaded from the Vendor portal by the agency.)

**IV. Pre commissioning testing of Rooftop Solar Project installation:**

- The SDO along with Testing Engineer shall carry out Joint Inspection of site and verify the readiness of the RTS for charging.
- Discrepancies if any shall be pointed out to the agency for compliance
- Agency to rectify the discrepancy and submit compliance

- Agency shall upload all the required documents in the Vendor Portal against each RTS installation.

**V. Commissioning of Solar Rooftop Project:**

- The SDO along with Testing Engineer shall verify the compliance and permit commissioning of RTS and the metering system and record the Initial Readings.
- Meter Assignment shall be fed into NC Portal by field officer.

**VI. Disbursement of CFA (Only for MNRE Phase-II RTS Scheme):**

- The SDO shall submit the duly verified check list during Meter Assignment Stage in New Connection Portal.
- The SDO shall submit certificate for successful completion of the RTS installation.
- Disbursement process shall be initiated.
- After successful commissioning of the RTS system the empanelled agency will submit invoice claiming CFA through Vendor Portal.
- Signed Agreement between consumer & MSEDCL for Net Metering (As per MERC GIRREGS Reg 2019) shall be uploaded by field officer in NC system.
- Technical & Account scrutiny will be carried out online at HO presently and online approval will be accorded. The SAP document will be generated in system for further submission to WM section for payment of CFA to Agency.

## **H. Instructions to Empanelled Agencies under MNRE Phase-II RTS Scheme:**

- a. Login credentials will be provided for agency.
- b. Allocation quota may be transferable from one agency to another agency after review by Head Office.
- c. List of Empanelled agencies will be available in the drop down of the specific zone where beneficiary is applying.  
  
Balance Allocation capacity of agency (in KW) = Allocated capacity of agency (in KW) – Cumulative capacity of Work Order of agency (in KW).
- d. Agency wise data shall be available in Excel/PDF regarding allocation, balance & completed work.
- e. Agency can see the sanctioned applications to carry out work of installation of RTS system.
- f. Agency can see the Cumulative work assigned to him, Work completed, Work balance.
- g. Part wise total allocated quantity, work assigned quantity and balance quantity to be made available on portal through agency login.
- h. Agency will be able to see the status of subsidy disbursed to him.
- i. Commissioning report as per Annexure-I (Generated from System) will be submitted online by Agency through Vendor portal.
- j. Agency will upload the commissioning details of Rooftop Solar System.
  - i. Annexure-I (Installation of RTS System)
  - ii. Commissioning Report. (Proforma A, B & C)
  - iii. Copy of the ID proof of consumer (Aadhaar/PAN/Voter ID).
  - iv. Self-certification of safety of the installed RTS system along with the test report of the Licensed Electrical Contractor.
  - v. Copy of Insurance Policies of RTS System.
  - vi. Invoice billed to the beneficiary.
  - vii. Undertaking/ self-declaration for domestic content requirement fulfilment.
  - viii. Joint undertaking for grid connectivity of rooftop solar power plants through common energy meter.
  - ix. Photo of beneficiary
  - x. Photograph of the system with placard held by the beneficiary and representative of Agency or MSEDCL representative showing the name of the beneficiary, MSEDCL registration number and system capacity.
- k. Project Completion report (PCR) will be sent to SPIN portal of MNRE.

## **I. Non-Subsidized RTS Consumers**

### **Submission of commissioning report**

- I. Commissioning report as per Annexure-I (Generated from System) to be uploaded. If commissioning report is not uploaded by consumer before the validity date of sanction, the application will be automatically cancelled by the system and the SMS will be triggered by the system to consumer mobile no and also notified to consumer via E-mail.
  1. Provision for uploading commissioning reports will be made available to consumer.
    - a. It is mandatory to upload the RTS commissioning report (Annexure-I) mentioning Technical details of Renewable Energy Generating System, Inverter and other equipment of the RTS System installed.
    - b. Self-certification of safety of the installed RTS system along with the test report of the Licensed Electrical Contractor.
    - c. Electrical Inspector permission if System is above 200 KW.
    - d. Third party leasing agreement if Model selected is RESCO.
    - e. Photograph of the system commissioned.
    - f. In NC module, commissioning details and verification will have to be carried in Meter Assignment stage by field officer.
    - g. Commissioning report Annexure-I uploaded by the Agency / consumer will be checked by field officer during site visit.. If any technical discrepancy is observed, field officer will submit the remark to rectify deficiencies and SMS to Agency / consumer will trigger with email.
    - h. After the commissioning report is accepted by field officer, Agreement between consumer & MSEDCL for Net Metering / Net Billing (As per MERC GIRREGS Regulation 2019) shall be signed by consumer and uploaded by field officer in NC system.
    - i. The meter details will be filled by field officer in meter assignment stage and will be sent automatically for billing process.



**J. Activity and timelines:**

Part	Activity related to the Consumer	Timeline in days
<b>Part I (A)</b>	<b>Submission of application</b>	<b>1</b>
1	The application shall be submitted online only	
2	Visit Mahadiscom official website	<a href="http://www.mahadiscom.in">www.mahadiscom.in</a>
	<b>Go to</b>	→Consumer portal
		→Renewable Energy Portal
		→Solar Rooftop
		→Apply for RE Rooftop
	<i>Follow link- <a href="https://www.mahadiscom.in/ismart/">https://www.mahadiscom.in/ismart/</a></i>	
	Application form format will be opened	
	There are 3 steps to be completed :	
		(i) Submit Application
		(ii) Make Payment
		(iii) Select Agency
<b>(B)</b>	<b>Payment of (Non-Refundable) Registration charges: Charges: Rs. 500/- for LT and Rs. 5000/- for HT</b>	<b>3</b>
<b>(C)</b>	<b>Selection of empanelled agency:</b>	<b>7</b>
<b>Part II</b>	<b>Activity Related to MSEDCL Field officer &amp; Empanelled Agency</b>	<b>15</b>
	<b><u>A) Technical feasibility / Sanction of RTS:</u></b>	
	<ul style="list-style-type: none"> <li>Local field officer after getting intimation on mobile and NC portal, and after acceptance of proposal by the empaneled agency schedules joint visit to check out technical feasibility based on which the proposal can be approved/rejected by the officer on his mobile app, also the geo coordinates of the consumer site can be captured using same app.</li> <li>Auto intimation regarding sanction of application is sent to consumer by SMS and on e-mail. The validity of sanction is for a period of six months, beyond which it gets lapsed.</li> </ul>	

Part	Activity related to the Consumer	Timeline in days
	<b><u>B) Metering Specifications:</u></b>	
	<ul style="list-style-type: none"> <li>Net metering specifications for consumers are made available on the MSEDCL website. The sanction letter &amp; metering specifications will be system generated for LT &amp; HT consumers. However, in case of change in CT-PT specifications, the same will be informed by the concern sub division office for LT consumers. For HT consumers metering specifications will be communicated by the local testing division.</li> <li>The consumer is required to procure unidirectional meter at generation end and bi-directional meters for Net Metering as per relevant MERC regulations. For RTS Phase-II scheme, cost of generation meter is borne by empaneled agency and consumer has to bear only the cost of NET meter and its testing charges.</li> </ul>	
	<b><u>c) Installation of Rooftop Solar Project:</u></b>	<b>6 months</b>
	The agency shall complete the installation of solar rooftop project within 6 months from the date of sanction and also get the meters tested at MSEDCL's lab. After completion of work the WCR shall be uploaded on Online Application portal / vendor portal by agency as per prescribed format (Annexure-I). <b>For MNRE Ph-II scheme</b> , it will be up to 6 month from the date of sanction of application or up to the due date of sanction of scheme from the MNRE <b>whichever is earlier</b> .	
	<b><u>D) Pre commissioning testing of Rooftop Solar Project installation:</u></b>	<b>7</b>
	SDO to carry out joint inspection to determine any possible discrepancy. Also, agencies shall upload documents in vendor portal for each RTS and submit compliance.	
	<b><u>E) Commissioning of Rooftop Solar Project:</u></b>	
	The SDO shall verify the compliance and permit commissioning of RTS and the metering system and record the Initial Readings after which meter Assignment shall be fed into NC Portal.	
	<b><u>F) Disbursement of CFA:</u></b>	<b>10</b>
	The SDO shall submit the duly verified check list and provide certificate for completion of RTS after which disbursement process shall be initiated.	

## **K. ANNEXURE - I**

Particulars

Name of Consumer

Consumer Number Mobile Number

Email

Address of Installation

Agency Name

Agency Address

RE Arrangement Type

RE Capacity Type

RE Sanctioned Capacity KW

RE Installed Capacity (Rooftop ) KW

Installation Date

### **Solar PV Details**

Inverter Capacity

Inverter Make

No. of Modules

Module Capacity

Signature of the Consumer / Empanelled agency  
With name, seal and date

## L. ANNEXURE-II (FOR MNRE PHASE-II SCHEME)

### I. PROFORMA-A

#### Joint Inspection report

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

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

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

	DISCOM	EMPANELLED AGENCY	CONSUMER
Name	_____	_____	_____
Designation	_____	_____	_____
Date	_____	_____	_____
Sign	_____	_____	_____
<b>Seal</b>	_____	_____	_____

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

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

	EMPANELLED AGENCY	CONSUMER
Name	_____	_____
Designation	_____	_____
Date	_____	_____
Sign	_____	_____
<b>Seal</b>	_____	_____

**Note:** This report will be applicable for all the projects installed/commissioned after 31-07-2021

## II. PROFORMA-B (FOR MNRE PHASE-II SCHEME)

### Undertaking/Self- Declaration for domestic content requirement fulfilment (On a plain Paper)

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

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

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

4. I, .....on behalf of M/S.....[Company Name] further declare that the information given above is true and correct and nothing has been concealed therein. If anything is found incorrect at any stage then the due Central Financial Assistance (CFA) that I have not charged from the consumer can be withheld and appropriate 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)

For Empanelled Agency.....

Name:.....

Designation:.....

Phone:.....

Email:.....

### III. PROFORMA-C (FOR MNRE PHASE-II SCHEME)

#### **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 ..... 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 MSEDCL has sanctioned Central Financial Assistance from The Ministry of New and Renewable Energy for installation of Grid Connected Rooftop Solar Photovoltaic Power Plant of ..... KWp 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 MERC Grid Interactive Rooftop Renewable Energy Generating System Regulations, 2019 can be claimed by ..... (Name of Beneficiary);
- 4) It is certified that the Financial Assistance sanctioned by MSEDCL (from MNRE) 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 & MSEDCL compliance to the norms set for Grid Connectivity of our Grid Connected Rooftop Solar Power Plant.

**Signature**

**Signature**

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

**Name of the Owner/ Signing Authority**

**Name of Beneficiary**

Date:

Place:

Accepted By:

(witness with name, address & signature)

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