

- f) The National Portal will be accessible through apps, chatbots and WhatsApp also, enabling wider outreach to all segments. The Portal will also generate multi-level triggers for delays in DISCOM inspection and net meter installations and the DISCOMs shall be encouraged to ensure timely commissioning of RTS plants, once the vendors have installed the systems.
  - g) There shall be other value-added activities such as providing basic financial modelling of the proposed system and consumer's return period, entry of technical parameters of the system.
  - h) The portal will provide integration with banking products offered by various financial institutions and will promote digital-only products for ease of use by the beneficiaries. Integration with Jan Samarth portal shall be done to ensure bidirectional flow of information to and from the National Portal to the respective financial institutions and to ensure tagging of loan account of consumer to the application on National Portal.
  - i) An application shall be kept active on the National Portal for a period of 6 months from the date of application. After 6 months of inactivity, the application shall be deemed to be dormant. The applicant can reactivate the dormant application at any time through the consumer profile on the National Portal subject to the overall limit of 1 crore active applications.
  - j) As the scheme is fund limited, the receiving of applications on the National Portal shall be limited to 1 crore active applications and only these applications shall be considered for release of CFA. Once this limit is reached, active applications shall be given a time period of 3 months to complete the process as per clause 6(c) above, failing which these applications will be deemed to be dormant and deactivated.
  - k) Applicant login will be provided on the national portal to undertake relevant activities pertaining to each installation including updating of status of installation, technical specifications of the system installed, grievance redressal, uploading of relevant pictures (pre and post installation) and other items. The vendor may assist the consumer. The consumer has the user rights to undertake all activities on the National Portal without relying on the vendor.
- 9) Vendor Registration
- a) There shall be a registration of vendors on the National Portal. Vendors shall be registered based on submission of the following documents:-

- i) PAN
- ii) Key Contact Personnel
- iii) Documents of Incorporation/Proprietorship/Partnership
- iv) Key Manpower and Training Credentials
- v) Declaration as Service Provider by Vendor (Annexure V)
- vi) Bank Guarantee

b) The registered vendors shall be able to specify their states and districts of operation.. The vendors will have to submit a Bank Guarantee of the following amount for the initial registration:

Type of registration	Bank Guarantee (Entry Level)
State based vendor registration	Rs 2.5 lakh for each State/ UT registered for
National Vendor registration	Rs 25 lakh for all States/UTs

c) Once the vendors have installed a significant capacity through the National Portal, the bank guarantee requirement will be indexed to the capacity as follows:

Capacity installed	Bank Guarantee
0-200 kW	Existing Initial Bank Guarantee
200-1000 kW	Rs 15 lakh
1000-5000 kW	Rs 50 lakh
>5000 kW	Rs 1 crore

- d) The registered vendors shall be able to create their profiles on National Portal, including RTS system specifications offered, prices offered and key contacts for consumers to reach out to. It is also expected that the vendors will respond to interest expressed by consumers in a timely and reasonable manner. The vendor will also specify if they are a capex mode or RESCO developer, and in case of both, create separate profiles for them.
- e) The Vendors shall be obligated to provide minimum assured set of services as detailed in Annexure VI and may offer optional value added services as detailed in Annexure VII.
- f) The vendors will be able to respond to expression of interest by beneficiaries, manage their project portfolios, display offered RTS systems with price points, showcase history of completed projects and other attributes for the benefit of the beneficiaries. The vendor profile will also include vendor rating, details about consumer feedback and other data relating to the performance of the vendor on completed/ongoing projects for which they are the designated vendors.
- g) The Implementing agency (State DISCOM or agency) or MNRE officials or any other designated agency may inspect the ongoing installation or installed plants. In case the systems are not as per standards, nonfunctional on account of poor quality of installation, or in non-compliance of scheme guidelines, NPIA will reserve the right to deactivate the vendor and de-register it from the National Portal registration list as applicable.

#### 10) Technical Specifications

- a) A Roof Top Solar (RTS) Photo Voltaic (PV) system shall consist of equipment/components like Solar Photo Voltaic (SPV) modules, Inverter/micro inverters, Module Mounting structures, Energy Meter, Array Junction Boxes, DC Distribution Box, AC Distribution Box, Protections – Earthing, Lightning, Surge, Cables, Drawing & Manuals and any other necessary component based upon the site requirement. The projects under the scheme shall be commissioned as per the technical specifications as published by MNRE (Detailed in Annex VII).

- b) The vendors shall ensure that the minimum technical specifications as detailed by MNRE as well as those required by extant State regulations are met. The vendor will be solely responsible for any shortcomings or negligence/malpractice which may lead to encashment of bank guarantees, deactivation of profile, blacklisting of the firm/vendor from participation and other possible disciplinary actions. Any deficiency of the RTS system leading to non-disbursal of CFA/non-commissioning of the RTS by the DISCOM on account of system quality/component issues shall be rectified by the vendor.
- c) One requirement for CFA is that Domestic Modules manufactured from domestic cells as per Domestic Content Requirement (DCR) are used failing which no CFA shall be disbursed.
- d) The Ministry of New and Renewable Energy may notify, from time to time, the approved list of modules and inverters which will be eligible for availing CFA based on minimum specified technical criteria in order to prevent supply of poor quality equipment by vendors. The vendors must use one of these modules and inverters in all projects being installed under the scheme.
- e) The Original Equipment Manufacturers of inverters enlisted under the scheme will also have to share generation data reporting from their systems through API integration with the National Portal. Any data generated and transmitted by these inverter systems should be integrated with the National Portal and shall be utilized to provide better services to the beneficiary through the portal.
- f) Registered vendors shall provide the services to the beneficiaries for repairs/maintenance of the RTS plant free of cost for 5 years of the Comprehensive Maintenance Contract (CMC) period from the date of commissioning of the plan. Non-performing/ under-performing PV panels will be replaced free of cost in the warranty period. The beneficiary shall be provided with the specified warranties given by the respective OEMs on the system components for any future replacement of malfunctioned components.

## 11) Ensuring Quality of Installations

- a) The Scheme Implementation Agencies (National Programme Implementation Agency (NPIA) nationally and State Implementation Agencies (SIA) at State level) as well as other designated agencies by State/UT governments shall conduct regular inspections of RTS systems installed under the scheme, both at the time of commissioning and post commissioning.
- b) The NPIA shall establish adequate mechanism to ensure independent third party assessment of RTS installations at time of commissioning of at least 1% of installations and post-installation inspection of at least 1% of installed systems.
- c) The SIA shall establish adequate mechanism to ensure independent third party assessment of RTS as post-installation inspection of at least 5% of installed systems annually. At least 5% of DR shall be done in presence of an officer not below rank of AE and at least 1% of DR shall be done in presence of an officer not below rank of EE to ensure quality installations.
- d) All the vendors registered on the National Portal shall be given a vendor rating depending on the size and scale of installations done, consumer feedback, reporting of data, physical inspection of quality of workmanship of randomized project sites and other criteria as per separate guidelines that will be notified by the Ministry. This vendor rating shall be visible to the beneficiaries on the National Portal.

## 12) Grievance Redressal

- a) The beneficiaries and vendors can raise grievances through the National Portal that will be channeled for resolution to the State Implementation Agency through a 2 tier escalation matrix. The grievances have to be resolved as per the timelines detailed in Annexure VIII failing which the grievance will get escalated to the NPIA.
- b) The NPIA will establish the necessary mechanisms for ensuring that grievances raised on the National Portal are resolved within a period of 30 days.

- c) The beneficiaries and vendors will get regular updates regarding status of grievances through SMSes, emails and other channels of communication.
- d) The grievances may be raised through the National Call Centre, State/UT DISCOMs, National Portal or the portal app. In each case, a unique tracking ID will be created by the NPIA for the consumer to track the status of resolution of the grievance through an online system.

### 13) Memorandum of Understanding

- a) A Memorandum of Understanding (MoU) shall be signed under the scheme between Ministry of New and Renewable Energy and the State/UT Energy Department within 3 months of notification of these guidelines. The Draft MoU between MNRE and the State/UTs is as per Annexure IX.
- b) Release of funds under other scheme components (Incentives to DISCOMs, Model Solar Village, Incentives to PRIs/ULBs, Payment Security Mechanism etc.) to State/UTs or entities under the State/UTs shall be conditional to signing of the MoU with the concerned State/UT.
- c) The MoU will also be essential for allowing the release of additional state/UT subsidy for RTS to beneficiaries under the scheme.

### 14) Implementation Agency

- a) REC Limited shall initially be the Implementation Agency at the national level (National Programme Implementation Agency (NPIA)) and shall undertake activities relating to operation of the National Portal and registration of vendors at the national level as well as all other scheme related activities. However, MNRE will have the discretion to designate any other agency as the NPIA as per any exigency.

- b) The DISCOMs shall be the State Implementation Agencies (SIA) at the State/UT level. However, State Governments may notify any other agency as an implementation agency. DISCOMs shall ensure adherence to timelines specified for provisioning of services for prosumers and shall coordinate with NPIA on matters pertaining to performance of vendors registered on the National Portal, grievance redressal, programme monitoring at State/UT level and other responsibilities ascribed to it by MNRE from time to time.
- c) The primary responsibility of monitoring and reporting will be with the implementing agencies i.e. DISCOMs and NPIA and they may carry out 3rd party inspection through National Monitors/Consultants, for ground verification/performance evaluation on a random basis.

#### 15) Programme Monitoring

- a) A Group of Ministers (GoM) will provide overall guidance and coordination with States/UTs.
- b) A Steering Committee under the chairmanship of Cabinet Secretary and including Secretaries of Ministry of New and Renewable Energy, Department of Financial Services, Ministry of Power, Ministry of Housing and Urban Affairs and Ministry of Rural Development shall monitor the implementation of the scheme from time to time.
- c) The implementation of the scheme shall be overseen by the Mission Directorate in the Ministry of New and Renewable Energy. The Directorate shall be headed by Additional/Joint Secretary in charge of Rooftop Solar and the Directorate shall be authorized to issue all instructions/guidelines/frameworks pertaining to the scheme after due approvals.
- d) The States/UTs shall constitute a State Level Coordination Committee headed by the Chief Secretary/Administrator and comprising of Secretaries of key departments at the State/UT level. The Committee shall meet once every three months or more regularly to oversee the implementation of the scheme in the State/UT.

- e) The States/UTs shall also constitute a District Level Committee headed by the District Magistrate/District Collector and comprising of other members including 2 elected representatives from the Urban Local Bodies/Panchayati Raj Institutions, Lead Bank Manager, Divisional DISCOM official, State Nodal Agency representative in the district (if any) and at least 3 non-official members to be nominated by the Mission Directorate. The Committee shall meet once every two months or more regularly to oversee the implementation of the scheme in the State/UT.

#### 16) Financing

- a) The beneficiaries under the scheme may additionally benefit from lending instruments created for rooftop solar under the scheme. This may include low interest products created specifically for beneficiaries upto 3 kW systems or standardized products for other beneficiaries. In both cases, the beneficiary shall enter the details of the beneficiary's loan account utilized for the rooftop solar installation so that the CFA amount can flow directly into the loan account for prepayment of certain share of the loan amount.
- b) The national portal will be integrated with Jan Samarth portal to channel the applications of beneficiaries under the scheme to apply for loans at the relevant banks. The portal shall also be integrated with any other financial instruments that may be offered by banks or other financial institutions.
- c) The banks and other financial institutions will be encouraged to come out with standardized banking products. The standard loan products from the partner Banks/FIs will be published on the portal.

#### 17) Roles of Stakeholders

- a) Ministry of New and Renewable Energy (MNRE), Government of India



- i) Enlist product lines of modules, inverters (including hybrid/micro inverters) and other major system components.
  - ii) MNRE or its designated agency shall collect a bank guarantee of the appropriate amount as notified from time to time from the prospective vendors for their empanelment for the installation of the residential projects through the National Portal.
  - iii) MNRE shall release the eligible performance-linked incentives to DISCOMs based on the performance achieved in the previous financial year.
  - iv) MNRE or any other agency on behalf of MNRE shall conduct the physical inspection of the installed RTS power plants to verify the quality and technical standards. If it is not found to be satisfactory, MNRE may deduct the same percentage of the service charge as decided by the competent authority.
  - v) MNRE shall be responsible for encouraging large and established players in the renewable energy ecosystem to enter into the residential rooftop solar market.
  - vi) MNRE shall be responsible for establishing a robust vendor rating programme to recognize high performance vendors with quality installations.
- b) National Programme Implementation Agency
- The NPIA shall be responsible for the overall implementation of the scheme (all components) which shall include the following major components:-
- i) Development, operations and management of the National Portal and its value added features such as GIS planning, integration with Jan Samarth and other portals, integration with DISCOM portals, updation of knowledge portal, skill database integration etc.
  - ii) Development, implementation and monitoring of IEC plans including content and dissemination, grievance redressal of vendors, DISCOMs and consumers.
  - iii) Sample examination of CFA claims by scrutiny of uploaded photos, GPS location based checks, verification of account details and electricity bill connection details, received through all channels, including portal or directly through DISCOMs, capex or RESCO mode or otherwise.

- iv) Creation of RTS Cell/PMU/PMC for overall programme implementation or its components within the NPIA or in the Ministry of New and Renewable Energy to assist the Mission Directorate as per the requirements of the Directorate.
  - v) Engagement and collaboration with all stakeholders, including vendor networks, consumers, banks and other financial institutions, multilateral institutions, think tanks for promotion of rooftop solar in general, and residential rooftop solar in particular.
  - vi) Coordination with all government institutions, including Ministries and Departments at central and State government levels, and public sector undertakings for facilitation and monitoring of rooftop installation targets in government sector.
  - vii) Make recommendations to the Ministry on modifications in scheme implementation/guidelines/frameworks/standards/qualifications and any other scheme documents based on implementation feedback.
  - viii) To conduct periodic national, regional and State level workshops with all stakeholders.
  - ix) To receive proposals, applications and requests from State/UT DISCOMs and to assist the mission directorate in disposal of such proposals in alignment with the scheme guidelines.
  - x) To coordinate and engage with other Ministries and Departments and non-government channels such as volunteer networks to popularize the scheme and to generate applications from consumers.
  - xi) To set in place, the necessary mechanisms for third party audits of the scheme, including performance and outcome audits periodically and to set in place mechanism to ensure adequate randomized physical verification of installations to ensure proper performance of vendors and DISCOMs under the scheme.
  - xii) To coordinate with State regulatory commissions to implement rooftop solar-friendly regulations.
  - xiii) Compliance with any other directions given by the Scheme Mission Directorate.
- c) State Implementation Agencies

The SIA shall normally be the DISCOM/Distribution Utility in the State/UT. However, the State government may designate another agency as an additional SIA in order to assist the DISCOM in implementation of the PM Suryaghar Scheme. The roles of SIA shall include:

- i) Create a dedicated rooftop solar vertical in the DISCOM administrative set up with adequate manpower up to the field level, with clearly defined work profiles and levels of escalation for all issues pertaining to installation of RTS in their area.
- ii) To map the dedicated manpower to the National Portal or the integrated State portal for channeling of applications for feasibility approval, inspection, net metering and meter installations.
- iii) To bring timelines relating to service delivery relating to RTS and associated services (name change, load change etc) in alignment with national rules and State level regulations.
- iv) To develop a time bound grievance redressal mechanism as per the scheme guidelines.
- v) To coordinate with State regulatory commission to implement rooftop solar-friendly regulations.
- vi) To train field level operatives on proper inspection of installed RTS systems prior to commissioning and to update DR on the National Portal properly for CFA release.
- vii) To establish and operate IT solutions for tracking of consumer electricity generation and integration with billing systems to regularly update households on financial benefits (including surplus settlement)
- viii) To ensure a ready supply chain of net meters, and to expand meter inspection and sealing capacity to address the demand adequately and to ensure zero wait time for net meters for residential consumers.
- ix) To formulate and implement dedicated State level IEC activities in compliance with scheme guidelines.
- x) To integrate the National Portal with the DISCOM IT systems and any additional IT systems for rooftop solar being operated by the DISCOM.

- xi) To set in place, the necessary mechanisms for third party audits of the scheme, including performance and outcome audits periodically and to set in place mechanism to ensure adequate randomized physical verification of installations to ensure proper performance of vendors under the scheme.
- xii) Coordination with all government institutions, including Ministries and Departments at State government levels, and State public sector undertakings for facilitation and monitoring of rooftop installation targets in government sector.
- xiii) Vetting of CFA claims by onsite inspection, scrutiny of uploaded photos, GPS location based checks, verification of account details and electricity bill connection details, DCR fulfillment and any other conditions established by these guidelines and to update the National Portal accordingly in a timely manner.
- xiv) Compliance with any other directions given by the Scheme Mission Directorate.

#### 18) Rooftop Solar on Government Building

- a) All Government rooftops under the administrative control of Central Government Ministries/Departments, including autonomous bodies, subordinate offices etc. shall be saturated with rooftop solar to the extent possible technically by 2025. Ministries may utilize available rooftop space through the RESCO model or capex mode on a priority basis. Through high levels of automation and energy generation data flows, investment in RESCO models in government rooftops may be de-risked and enable enforcement and monitoring of contracts without major administrative overheads.
- b) The Central Public Sector Enterprises with experience in deployment of renewable energy technologies will be allocated on a nomination basis to Central Ministries for assisting these Ministries in deploying rooftop solar on their assets on a priority basis.
- c) MNRE will monitor and track installations in the Government sector. All Central Ministries/Departments will collate information regarding available potential and expedite coverage to ensure saturation of government assets by 2025. All buildings under Central Government shall deploy RTS in mission mode to achieve saturation by 2025. State/UTs shall be encouraged to undertake a similar exercise for RTS saturation in their buildings

d) Detailed guidelines regarding role of CPSEs and use of payment security mechanism shall be issued separately.

19) Rooftop Solar in Commercial and Industrial and other sectors

a) There shall be no CFA for C&I and other sectors.

b) Investment de-risking efforts shall be promoted to enable C&I segment to confidently and easily deploy RTS. These measures will include regulatory recognition of new and innovative business models for RTS, measures proposed include option of single window facility for clearances, if any, encouraging financial institutions and intermediaries to create targeted financial products for RTS (including instruments of partial credit risk guarantee) for MSME segment etc.

20) Non-Subsidized Residential Rooftop Solar

a) Consumers who opt for installing RTS without availing CFA under this scheme, including those who may wish to forgo the RTS CFA (under the “Give It Up” campaign or otherwise) shall be free to do so without using domestically manufactured cells/modules (Domestic Content Requirement or DCR).

b) The facility for forgoing CFA under the scheme as a part of the “Give It Up” campaign shall be created on the National Portal. Such consumers would still be able to access all facilities of the National Portal as well as linkages with banks for necessary financial products as per availability. This segment will benefit from non-financial easement of processes and standardized financing products created by banks through the National Portal.

21) Financing

a) It is envisaged that standardized low interest loan products in the range of benchmark rates (Repo + 50 bps) for installation of residential RTS systems that are up to 3 kW in size will be made available to the beneficiaries by Banks.

b) These financing options shall be supplemented by standardized products of similar nature for non-subsidized segments also, including residential sector RTS of sizes more than 3 kW.

22) Domestic Content Requirement on cells and modules

- a) The scheme CFA shall be released only for installations in residential sector that use domestically manufactured modules with domestically manufactured cells.

23) Metering Arrangements

- a) All metering arrangements (net metering, gross metering, net billing, virtual net metering, group net metering etc.) approved by the respective Electricity Regulatory Commissions of States/UTs shall be covered under the scheme.
- b) Systems that are not feeding into the grid but are connected to the grid (behind-the-meter systems, battery hybrid systems etc.) shall be eligible for CFA under the scheme subject to approval by the respective Electricity Regulatory Commissions.

24) Technology

- a) The rooftop solar installation may include additional technology components such as small wind hybrids, battery storage, solar tracker systems etc. However, the CFA calculation shall be based on the CFA structure under the scheme as per capacity of solar modules installed in the system.

Annexures

Annexure I

Applicability of the CFA for applications on the National Portal

<b>Application received under Phase II rooftop solar programme (before 13<sup>th</sup> Feb 2024)</b>		
<b>Sr. No</b>	<b>Parameter</b>	<b>Applicable Subsidy</b>
1	First instance of claims submission before 5 <sup>th</sup> Jan	Rs. 14,588/kW for upto 3 kW capacity and thereafter Rs. 7,294/kW till 10kW capacity (Subsidy prevailing before revision on 05.01.2024)
2	First instance of claims submission on and after 5 <sup>th</sup> Jan	Rs. 18,000/kw for upto 3kW capacity and thereafter Rs. 9,000/kw till 10kW capacity (revised subsidy as per notification dated 05.01.2024)
<p><b>Note:</b> all applications received prior to launch of PM - Surya Ghar : Muft Bijli Yojana (before 13<sup>th</sup> Feb 2024 shall be covered under the Phase II rooftop solar programme) and shall be eligible for the CFA as indicate above. All applications submitted under the Phase II of rooftop solar programme shall be admissible for CFA if the claim is received till October 2024. The claims received after October 2024 will not be entertained.</p>		
<b>Application received under PM - Surya Ghar : Muft Bijli Yojana (on and after 13<sup>th</sup> Feb 2024)</b>		
1	All applications made on and after 13 <sup>th</sup> Feb	60% of benchmark cost upto 2 kW capacity and 30% for 1 kW additional capacity. No subsidy beyond 3 kW.  (as approved under PM-Surya Ghar: Muft Bijli Yojana)

The CFA claims from installations undertaken in tender mode by respective DISCOMs/implementation agencies under previous programmes for Rooftop Solar shall be considered under the guidelines of the respective programmes and not PM Suryaghar. The CFA calculation shall also be as per the respective programme guidelines.

DRAFT



Annexure II Photographs

<b>Photograph requirements</b>	
<ul style="list-style-type: none"><li>Photograph with all installed modules clearly viewed (front view or side/ isometric view of the installation)</li></ul>	
<ul style="list-style-type: none"><li>Photograph of the safety devices such as earthing, LA and surge protection devices installed</li></ul>	
<ul style="list-style-type: none"><li>Photograph of the net metering devices / net meter or solar generation meter (generation units /kW produced should be clearly visible in the photograph)</li></ul>	
<ul style="list-style-type: none"><li>Photograph of the Beneficiary with overall RTS installation (aesthetic view of installation quality is visible)</li></ul>	

Annexure III Net meter Model Agreement

**Net Metering Connection Agreement**

This Agreement is made and entered into at (location) ..... on this (date) ..... day of (month) ..... (year) ..... between the Eligible Consumer (Name) ..... having premises at (address) ..... and Consumer No. .... as the first Party,

AND

The Distribution Licensee ..... (hereinafter referred to as 'the Licensee') and having its Registered Office at (address) ..... as second Party of this Agreement.

Whereas, the Eligible Consumer has applied to the Licensee for approval of a Net Metering Arrangement under the provisions of the (State Guidelines reference name) ..... and subsequent amendments and sought its connectivity to the Licensee's Distribution Network.

And whereas, the Licensee has agreed to provide Network connectivity to the Eligible Consumer for injection of electricity generated from its Roof-top Renewable Energy

Generating System of ..... kilowatt (kW)

Both Parties hereby agree as follows:-

**1. Eligibility:**

The Roof-top Renewable Energy Generating System meets the applicable norms for being integrated into the Distribution Network, and that the Eligible Consumer shall maintain the System accordingly for the duration of this Agreement.

## **2. Technical and Inter-connection Requirements:**

- 2.1. The metering arrangement and the inter-connection of the Roof-top Renewable Energy Generating System with the Network of the Licensee shall be as per the provisions of the Net Metering 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.
- 2.2. The Eligible Consumer agrees that he shall install, prior to connection of the Roof-top Renewable Energy Generating System to the Network of the Licensee, an isolation device (both automatic and in built within inverter and external manual relays); and the Licensee shall have access to it if required for the repair and maintenance of the Distribution Network.
- 2.3. The Licensee shall specify the interface/inter-connection point and metering point.
- 2.4. The Eligible Consumer shall furnish all relevant data, such as voltage, frequency, circuit breaker, isolator position in his System, as and when required by the Licensee.
- 2.5. All the equipment connected to Network of the Licensee at the time of installation shall be compliant with the Technical Specifications for rooftop system as Published by MNRE.

## **3. Safety:**

- 3.1. The consumer shall comply with the Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations 2010
- 3.2. The equipment connected to the Licensee's Distribution System shall be compliant with relevant International (IEEE/IEC) or Indian Standards (BIS), as the case may be, and the installation of electrical equipment shall comply with the requirements specified by the Central Electricity Authority regarding safety and electricity supply.
- 3.3. The design, installation, maintenance and operation of the Roof-top Renewable Energy Generating System shall be undertaken in a manner conducive to the safety of the Roof-top Renewable Energy Generating System as well as the Licensee's Network.
- 3.4. If, at any time, the Licensee determines that the Eligible Consumer's Roof-top Renewable Energy Generating System is causing or may cause damage to and/or results in the Licensee's other consumers or its assets, the Eligible Consumer shall disconnect the Roof-top Renewable Energy Generating System from the distribution Network upon direction from the Licensee and shall undertake corrective measures at his own expense prior to re-connection.
- 3.5. The Licensee shall not be responsible for any accident resulting in injury to human beings or animals or damage to property that may occur due to back-feeding from the Roof-top Renewable Energy Generating System when the grid supply is off. The Licensee may disconnect the installation at any time in the event of such exigencies to prevent such accident.

#### **4. Other Clearances and Approvals:**

The Eligible Consumer shall obtain any statutory approvals and clearances that may be required, such as from the Electrical Inspector or the municipal or other authorities, before connecting the Roof-top Renewable Energy Generating System to the distribution Network.

## **5. Period of Agreement, and Termination:**

This Agreement shall be for a period for 25 years, but may be terminated prematurely.

- (a) By mutual consent; or
- (b) By the Eligible Consumer, by giving 30 days' notice to the Licensee.
- (c) By the Licensee, by giving 30 days' notice, if the Eligible Consumer breaches any terms of this Agreement or the provisions of the Net Metering Regulations and does not remedy such breach within 30 days, or such other reasonable period as may be provided, of receiving notice of such breach, or for any other valid reason communicated by the Licensee in writing.

## **6. Access and Disconnection:**

- 6.1. The Eligible Consumer shall provide access to the Licensee to the metering equipment and disconnecting devices of Roof-top Renewable Energy Generating System, both automatic and manual, by the Eligible Consumer.
- 6.2. If, in an emergent or outage situation, the Licensee cannot access the disconnecting devices of the Roof-top Renewable Energy Generating System, both automatic and manual, it may disconnect power supply to the premises.
- 6.3. Upon termination of this Agreement under Clause 5, the Eligible Consumer shall disconnect the Roof-top Renewable Energy Generating System forthwith from the Network of the Licensee.

## **7. Liabilities:**

- 7.1. The Parties shall indemnify each other for damages or adverse effects of either Party's negligence or misconduct during the installation of the Roof-top Renewable Energy Generating System, connectivity with the distribution Network and operation of the System.

7.2. The Parties shall not be liable to each other for any loss of profits or revenues, business interruption losses, loss of contract or goodwill, or for indirect, consequential, incidental or special damages including, but not limited to, punitive or exemplary damages, whether any of these liabilities, losses or damages arise in contract, or otherwise.

## **8. Commercial Settlement:**

8.1. The commercial settlements under this Agreement shall be in accordance with the Net Metering Regulations.

8.2. The Licensee shall not be liable to compensate the Eligible Consumer if his Rooftop Renewable Energy Generating System is unable to inject surplus power generated into the Licensee's Network on account of failure of power supply in the grid/Network.

8.3. The existing metering System, if not in accordance with the Net Metering Regulations, shall be replaced by a bi-directional meter (whole current/CT operated) or a pair of meters (as per the definition of 'Net Meter' in the Regulations), and a separate generation meter may be provided to measure Solar power generation. The bi-directional meter (whole current/CT operated) or pair of meters shall be installed at the inter-connection point to the Licensee's Network for recording export and import of energy.

8.4. The uni-directional and bi-directional or pair of meters shall be fixed in separate meter boxes in the same proximity.

## **9. Connection Costs:**

The Eligible Consumer shall bear all costs related to the setting up of the Roof-top Renewable Energy Generating System, excluding the Net Metering Arrangement costs.

**10. Dispute Resolution:**

- 10.1. Any dispute arising under this Agreement shall be resolved promptly, in good faith and in an equitable manner by both the Parties.
  
- 10.2. The Eligible Consumer shall have recourse to the concerned Consumer Grievance Redressal Forum constituted under the relevant Regulations in respect of any grievance regarding billing which has not been redressed by the Licensee.

In the witness where of ..... (name) for and on behalf of Eligible Consumer and Shri. .... (name) for and on behalf of Licensee agree to this agreement.

Signed by

.....  
(First Party)

.....  
(Second Party)

Witnesses:

1) Signature with Name and Address:

2) Signature with Name and Address

.....  
.....  
.....

.....  
.....  
.....

Annexure IV DISCOM Report

<b>Consumer Details</b>	
Name of the Applicant	
Consumer Account Number	
Aadhar Card Number	
Address	
Mobile Number	
GPS Coordinates	
Metering Arrangement Type	Net meter / Gross meter / Net billing
<b>DISCOM Details</b>	
Name of the DISCOM	
Name of the DISCOM Nodal Person	
Designation	
Mobile Number	
<b>Vendor Details</b>	
Name of the Company	
Name of the Contact person	
Designation of the Contact person	
Mobile Number	
<b>Inspection Details</b>	
Date of Inspection	Click or tap to enter a date.
Time of Inspection	HH/MM
Rooftop solar capacity as per application (kWp)	
Rooftop solar capacity actually installed (kWp)	
Module Configuration	
Module OEM Details	



Module Type	
Module id	
Inverter OEM	
Inverter Type	
Inverter Capacity (AC) Nominal output power	
Inverter ID	
Meter id	
<b>DISCOM Check list</b>	
Copy of electricity bill has been uploaded	<input type="checkbox"/> No <input type="checkbox"/> Yes
Geo-coordinates have been uploaded	<input type="checkbox"/> No <input type="checkbox"/> Yes
Photos of installed RTS has been uploaded	<input type="checkbox"/> No <input type="checkbox"/> Yes
Net meter has been installed	<input type="checkbox"/> No <input type="checkbox"/> Yes
Commissioning inspection of the RTS is completed	<input type="checkbox"/> No <input type="checkbox"/> Yes
Bank account information and a cancelled cheque image has been uploaded	<input type="checkbox"/> No <input type="checkbox"/> Yes
Solar modules are installed as per the DCR requirement	<input type="checkbox"/> No <input type="checkbox"/> Yes
Inverter has capability to send generation data online	<input type="checkbox"/> No <input type="checkbox"/> Yes
DCR undertaking is verified & uploaded	<input type="checkbox"/> No <input type="checkbox"/> Yes
DISCOM report signed by the DISCOM official has been uploaded	<input type="checkbox"/> No <input type="checkbox"/> Yes
<b>Quality Check</b>	
Building Safety (LA and earthing separate from equipment earthing)	<input type="checkbox"/> No <input type="checkbox"/> Yes
Equipment Safety (RTS plant earthing)	<input type="checkbox"/> No <input type="checkbox"/> Yes
DCR equipment (domestically manufactured modules and cells)	<input type="checkbox"/> No <input type="checkbox"/> Yes
Manufacturing, design and workmanship warranty for a minimum period of 5 years	<input type="checkbox"/> No <input type="checkbox"/> Yes
Certified and tested Meter has been installed	<input type="checkbox"/> No <input type="checkbox"/> Yes

Equipment compliant to basic technical standards as per: <a href="https://pmsuryaghar.gov.in/pdf/Technical_Specifications_np.pdf">https://pmsuryaghar.gov.in/pdf/Technical_Specifications_np.pdf</a> .	<input type="checkbox"/> No <input type="checkbox"/> Yes
<b>Declaration</b>	
DISCOM certifies that the inspection is conducted and the RST is compliant to the guideline of MNRE	<input type="checkbox"/> No <input type="checkbox"/> Yes
Consumer certifies that he/she has not taken benefits of any prior CFA for the rooftop project on the address mentioned in the report.	<input type="checkbox"/> No <input type="checkbox"/> Yes
Vendor certifies that the work of installation is carried out in compliance with the guidelines of MNRE	<input type="checkbox"/> No <input type="checkbox"/> Yes
<b>Photograph requirements</b>	
Photograph with all installed modules clearly viewed (front view or side/ isometric view of the installation)	
Photograph of the safety devices such as earthing, LA and surge protection devices installed	

<p>. Photograph of the net metering devices / net meter or solar generation meter (generation units /kW produced should be clearly visible in the photograph)</p>	
<p>. Photograph of the Beneficiary with overall RTS installation (aesthetic view of installation quality is visible)</p>	

The above system is as per BIS / MNRE specifications and has been checked for its performance on  Click or tap to enter a date. and it is working satisfactorily.

**Signature of the Nodal Officer with Stamp**

## Annexure V Format of Declaration from Vendor

### **Format of Declaration from vendor**

1. Name of the Firm \_\_\_\_\_
2. Legal status of the Firm (Ltd/Pvt/Proprietary/Partnership/LLP) \_\_\_\_\_.
3. GSTIN number of the Firm \_\_\_\_\_
4. PAN number of the Firm \_\_\_\_\_.
5. Provident Fund number of the Firm (if applicable) \_\_\_\_\_
6. The Firm has sufficient (at least three) technical manpower trained in the skills required to execute the work of installation of rooftop solar plants.
7. The Firm fulfils all statutory requirements, for example those relating to electrical safety, to install rooftop solar plants.
8. The Firm will install rooftop solar plants fulfilling minimum technical standards and specifications issued by the MNRE.
9. The Firm will provide comprehensive maintenance of the rooftop solar plant installed by the Firm for at least 5 years.
10. The Firm will provide all necessary information related to installation of rooftop solar plants and Do's and Don'ts to the beneficiary.
11. The Firm will also provide name, contact number and e-mail of the person where the beneficiary can register a complaint related to rooftop solar plants installed by the Firm. This details will also be made available to the State authorities and MNRE.
12. In case of any discrepancy in terms of quality and services provided by the Firm, the concerned distribution company/Electricity Department can blacklist the Firm and encash the performance bank guarantee, apart from taking other legal actions.
13. The signatory of this declaration is authorised by the Firm and the Firm will abide by all the conditions mentioned above. In case of any misinformation or concealment of facts, appropriate legal action may be taken against the Firm by the affected parties.
14. Along with this declaration, the Firm is submitting a performance bank guarantee of Rs. 2.5 lakh valid for five years.
15. The Firm is willing to work in urban/rural areas of \_\_\_\_\_, \_\_\_\_\_, (name of districts).

Authorised Signatory  
Name: \_\_\_\_\_  
Designation: \_\_\_\_\_  
Name of the Firm: \_\_\_\_\_

Annexure VI Part A (Minimum Assured Services)

S.No.	Services Name
1.	DCR equipment (domestically manufactured modules and cells)
2.	List of equipment and compliance to basic technical standards as per: <a href="https://pmsuryaghar.gov.in/pdf/Technical_Specifications_np.pdf">https://pmsuryaghar.gov.in/pdf/Technical_Specifications_np.pdf</a> .
3.	Trained Professionals for undertaking installation
4.	Mounting Structure capable of withstanding wind load as per required standard and compliance with IS875 Part 3
5.	Equipment Safety (RTS plant earthing)
6.	Building Safety (LA and earthing separate from equipment earthing)
7.	User Manuals for equipment
8.	Maintenance schedule (preventive and corrective) and methodology
9.	Scheme Logo on the rooftop solar equipment like modules etc.
10.	Project Commissioning Report
11.	Manufacturing, design and workmanship warranty for a minimum period of 5 years
12.	Free of cost comprehensive maintenance contract (CMC) including warranty for 5 years period from the date of commissioning
13.	Retrofitting or grouting on the rooftop if required as per roof condition

Annexure VII Part B (Optional Value added services)

S. No.	Services Name
1.	GIS based design
2.	Customized design as per the requirement of the consumer
3.	Calculator / estimation for rooftops solar system (RTS) generation and returns/ savings calculations
4.	Data base maintenance for the consumers
5.	On request generation data (inverter or online)
6.	Module cleaning system operation methodology
7.	Weather monitoring system (irradiation sensor, temperature sensor)

DRAFT

Annexure VIII Technical specifications

<b>Solar PV Module / Panel Technical Specifications</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 etc)
IEC 61730-1,2	Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, Part 2: Requirements for Testing
IEC 62804	Photovoltaic (PV) modules – Test method for detection of potential induced degradation. IEC 62804-1: Part 1: Crystalline Silicon
<b>Solar PV Inverters</b>	
IEC 62109 or 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 or better for outdoor mounting, IP 54 or better 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)
IEC 60068-2 /IEC 62093 (as applicable)	Environmental Testing of PV System – Power Conditioners and Inverters
IEC 62116:2014/ IS16169	Utility-interconnected photovoltaic inverters - Test procedure of islanding prevention measures

<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 4) 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/AA6063 T6	Material for the structure mounting
<b>Surge Arrestors</b>	
BFC 17-102:2011/ NFC 102:2011/ IEC 62305	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)

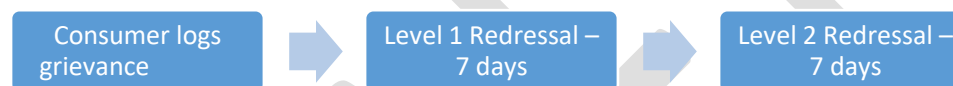


BS EN 50618	Electric cables for photovoltaic systems (BT(DE/NOT)258), mainly for DC Cables
<b>Earthing /Lightning</b>	
IEC 62561/IEC 60634 Series (Chemical earthing) (as applicable)	IEC 62561-1: Lightning protection system components (LPSC) - Part: Requirements for connection components  IEC 62561-2: 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 or better protection for outdoor use, and IP 54 or better protection for indoor use

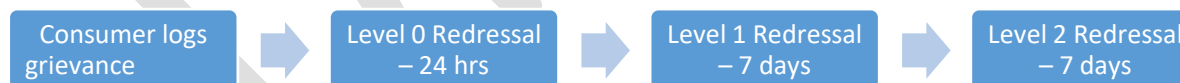
- The rooftop solar system should be installed on rooftops/terraces or elevated structures. In case of elevated structure, a minimum ground clearance of 8 feet must be provided in order to be considered eligible for the CFA under the scheme.
- It is advised that the module capacity shall not be greater than 20% of the inverter capacity

## Annexure IX Types of Grievance

For Grievances received through National Portal, the grievance is automatically allocated to the concerned nodal officer depending upon category, there are two levels of escalation: Level 1 and Level 2. The submitted grievance is forwarded to the Level 1 Grievance Officer for review and resolution. Concerned officials assess the grievance, gather additional information if necessary, and determine the appropriate course of action. In case of no response by Level 1 officer **within 7 days**, the ticket gets automatically flagged to Level 2 officer.



For Grievances received through the call center, call center would act as Level 0 officer, after which the grievance could be passed on to Level 1 in case the problem is not resolved **within 24 hours**. The submitted grievance is forwarded to the Level 1 Grievance Officer for review and resolution. Concerned officials assess the grievance, gather additional information if necessary, and determine the appropriate course of action. In case of no response by Level 1 officer **within 7 days**, the ticket gets automatically flagged to Level 2 officer.



Throughout the process, users receive updates on the status of their grievance via the online portal, email, or SMS. Officials communicate with users to provide updates, seek additional information if required, and inform them of the resolution outcome.

**Basic Categorization of Grievances**

DRAFT

Category	Sub Category	Conflict Classification	Level 1	Level 2
<b>Policy</b>	Subsidy eligibility Category of consumer Size of system Date of application/installation Occupation/ownership of premises Placement of RTS system (in spaces except rooftop) State subsidy details Net metering / Gross metering policies	Consumer – Central Govt.	MNRE	MNRE
<b>Registration and Login (IT issue)</b>	Unable to Register Consumer Not Found Portal freezing/unresponsive Captcha Issue OTP not received Website slow to load Consumer already registered	Consumer – Central Govt.	NIC	MNRE

<b>Application Process (IT issue)</b>	Consumer details not fetched/incomplete Unable to upload electricity bill Unable to find Division Unable to find Sub-division Application not passed on to Discom Application errors by consumer Correction/editing requests Application deletion requests Change of ownership/electricity connection details	Consumer – Central Govt.	NIC	MNRE
<b>Discom Issues</b>	Delay in feasibility Delay in net metering Delay in commissioning Incorrect metering and billing	Consumer - DISCOM	Discom	REC/MNRE (Detailed redressal mechanism to be discussed and finalized)
<b>Subsidy Related</b>	Delays in disbursement Incorrect subsidy amount Bank details submission	Consumer – Central Govt.	REC	REC/MNRE

<b>Vendor Related</b>	Unable to find a vendor Vendor not responding Delay in installation Maintenance not provided Quality issue System performance issue Asking for extra charges Fraudulent practice System not eligible for subsidy (Domestic Content Requirement not followed)	Consumer - Vendor	Discom	REC/MNRE (Detailed redressal mechanism to be discussed and finalized)
<b>Customer Service, Communication and Social Media</b>	Responsiveness of Call centre Grievance Management System No response from nodal official Delay in addressing queries and complaints Grievances posted on Social Media platforms	Consumer – Central Govt.	MNRE	MNRE

Annexure X Draft MoU between MNRE and the State/UTs

Memorandum of Understanding (MoU) Between: The Ministry of New and Renewable Energy (MNRE), Government of India and \_\_\_\_\_(Name of the State/UT)

**Preamble:**

This Memorandum of Understanding (MoU) is entered into on this [DD/MM/YYYY], between the Ministry of New and Renewable Energy (MNRE), Government of India, and the State/UT Government of \_\_\_\_\_

**Recitals:**

WHEREAS, MNRE is entrusted with the responsibility of promoting and developing renewable energy sources, including solar energy, in India.

AND WHEREAS, MNRE is implementing PM - Surya Ghar: Muft Bijli Yojana (hereinafter referred to as "The Scheme").

AND WHEREAS, REC Limited has been designated as the overall National Programme Implementing Agency (NPIA) for the PM - Surya Ghar: Muft Bijli Yojana.

AND WHEREAS, the Government of (State/UT name) and their agencies/departments, especially electricity distribution companies (Discoms) & State Nodal Agency (SNA) for renewable energy, have a crucial role in the successful implementation of the PM -Surya Ghar: Muft Bijli Yojana at ground level.

AND WHEREAS, both MNRE and the Government of (State/UT name) recognize the need to collaborate to accelerate the deployment of grid-connected rooftop solar under this scheme.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, both parties agree as follows:

**Objectives:**

To promote the installation of grid-connected rooftop solar systems in the residential sector within the geographical jurisdiction of State, and to that conduct public awareness, outreach activities, and capacity-building initiatives to promote their adoption;

To set ambitious rooftop solar targets for the Government, commercial, and industrial (C&I), as well as residential sectors and establish robust high-level monitoring mechanisms for overseeing the progress of the implementation of this scheme.

To strengthen Discoms for rooftop solar implementation by identifying dedicated manpower for this programme, undertake efforts to enhance the rooftop solar vendor base in respective states/UTs and create a positive regulatory environment for grid-connected rooftop solar power into the electricity grid, ensuring the efficient and sustainable use of solar energy

**Responsibilities of MNRE:**

Policy & Regulations Support: MNRE will provide guidance/inputs/recommendations to update existing policy and regulations to DISCOM/SNA/Designated State Department/Agency

Technical Assistance: MNRE will collaborate with DISCOM/SNA/designated state department for technical standards and guidelines assistance for grid-connected rooftop solar installations.

Financial Support: MNRE shall provide financial support in line with the guidelines of the PM-Surya Ghar: Muft Bijli Yojana.

National Portal: MNRE shall be responsible for the Development and management of the National Portal.

**Responsibilities of State / UT Government**

The State Government agrees to implement the Scheme and to that end shall ensure

- 1) Adherence to Scheme Guidelines: The State/UT Government shall ensure adherence to the scheme guidelines in their entirety including the use of the scheme name



- 2) Regulations: The State/UT Government shall ensure that the processes, State/UT level Standard Operating Procedures and regulatory provisions are at least in alignment with the provisions of Electricity (Right of Consumers) Rule 2020 and its amendments thereof and in alignment with the guidelines of the Scheme.
- 3) Service Time Lines: The State/UT government shall ensure that time-bound services are provided to consumers for RTS for critical services such as technical feasibility, inspection, commissioning, net meter supply and signing of Net Metering agreements.
- 4) IEC Activities: The State/UT Government shall undertake public awareness campaigns as per the IEC plan of the Scheme and shall ensure adherence to Scheme IEC guidelines.
- 5) Additional Subsidy: The State/UT Government may provide additional subsidy on top of the Central financial assistance, however this will be subject to adherence to all scheme guidelines and routing of additional subsidy through the National Portal. Any alteration to the Scheme framework must be duly approved by the Scheme Mission Directorate.
- 6) Coordination: The State/UT shall coordinate with National Programme Implementations Agency for the successful implementation of the PM Surya Ghar: Muft Bijli Yojana.
- 7) Monitoring of the Scheme: The State/UT Government shall constitute a State Level Steering Committee headed by the Chief Secretary of the State/UT and District Level Committees for the monitoring of the scheme.
- 8) IT Integration: The State/UT Government shall coordinate in the integration of the State Portal API with the National Portal for sharing of relevant data relating to rooftop solar installations.
- 9) Vendor Registration: The State/UT DISCOM shall may register the vendors operating within their respective State. The vendor is here by permitted to get registered to any DISCOM of the State/UT, in case of multiple DISCOMs operating in that State/UT and that no DISCOM shall refuse to cater their demand for registration.

10) Declaration of Target: The State/UT Governments may declare short medium and long term targets for rooftop solar systems across all sectors.

11) Formation of RTS cell: The State/UT Government shall create a dedicated RTS cell for the purpose of monitoring and coordination with the NPIA and Ministry.

**Cooperation:**

MNRE and States will collaborate on projects, research, and initiatives aimed at improving the distribution sector and accelerating the deployment of grid-connected rooftop solar systems.

Both parties will engage in regular meetings, discussions, and information sharing to ensure the effective implementation of this MoU.

**Funding:**

Funding for grid-connected rooftop solar projects and initiatives under this MoU will be determined through separate agreements or funding mechanisms as mutually agreed upon by MNRE and State.

**Duration:**

This MoU shall come into effect on the date of signing and shall remain in force for a period of [Specify Term], unless terminated by mutual consent.

**Amendment:**

Any amendment or modification to this MoU shall be made in writing and will require the consent of both parties.