



ఆంధ్రప్రదేశ్ రాజపత్రము
THE ANDHRA PRADESH GAZETTE
PUBLISHED BY AUTHORITY

PART II EXTRAORDINARY

No.53

AMARAVATI, SATURDAY, FEBRUARY 24, 2024

G.3921

NOTIFICATIONS BY HEADS OF DEPARTMENTS, Etc.

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**ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION
HYDERABAD.**

Lr.No.APERC / Secy / F.No.S-19 (Vol.III) / D.No.793.

Date: 23-02-2024.

**APERC (The Grid Interactive Solar Rooftop Photovoltaic System under
Gross/Net Metering) Regulation, 2023.**

(Regulation 4 of 2023)

Introduction

Hitherto, the Grid Interactive Solar Rooftop Photovoltaic Systems of a prosumer in the State of Andhra Pradesh are regulated by the Guidelines approved by the Commission from time to time. The guidelines last prepared by APEPDCL in its letter dated 04.02.2019 were approved by the Commission by its Order dated 25.05.2019. Subsequently, the Government of India issued the Electricity (Rights of Consumers) Rules 2020 inter alia envisaging the promotion of Solar Rooftop power plants. The Commission is also vested with the responsibility to promote the generation of electricity from Renewable sources, captive, and co-generation of energy in the state of Andhra Pradesh under the Electricity Act, 2003 (Act No.36 of 2003). Further, many consumers have brought to the notice of the Commission

during public hearings of the RST Order for FY 2023-24 certain issues relating to the Solar Rooftop Photovoltaic plants and the implementation of Solar Rooftop guidelines by DISCOMS. The DISCOMS have also addressed a letter to the Commission expressing some concerns in the implementation of the Solar Rooftop Guidelines. In view of the foregoing, the Commission issued a comprehensive draft Grid Interactive Solar Rooftop Photovoltaic Systems under gross/net metering regulation to address the various issues raised by the consumers & some of the concerns raised by the DISCOMS effectively, align to the extent possible with the various provisions of the Government of India Rules, and to promote the distributed Renewable Energy generation in the state of Andhra Pradesh in the place of existing guidelines. After considering all the views/objections/suggestions in this regard as discussed in the Order dated 22.02.2024, in exercise of powers under Sections 9, 61, 66, 86 (1) (e) and 181 of the Electricity Act, 2003 conferred on it and all other powers enabling it in this behalf, the Commission makes the final Regulation as under:

1. **Short title, Applicability, and Commencement:**

- 1.1 This regulation shall be called the Andhra Pradesh State Electricity Regulatory Commission (**The Grid Interactive Solar Rooftop Photovoltaic Systems under Net/Gross Metering**) Regulation, 2023.
- 1.2 This Regulation shall come into force from the date of its publication in the Official Gazette.
- 1.3 This Regulation shall be applicable to all the Grid-Interactive Solar Rooftop Photovoltaic systems with/ without Battery Energy Storage Systems (BESS), installed and commissioned in the areas of Distribution licensees, Andhra Pradesh as per the provisions stipulated herein.

2. **Definitions and interpretations:**

- 1.4 In this regulation, unless the context otherwise requires,
 - (i) **“Act”** means the Electricity Act, 2003 (Act No.36 of 2003) as amended from time to time;
 - (ii) **“Agreement”** means an agreement entered into by a Distribution Licensee and a consumer for executing a Net Metering/Gross Metering connection;
 - (iii) **“Billing Cycle or Billing Period”** means the period for which the regular electricity bills are prepared for different categories of consumers by the Distribution licensee as specified by the Commission;

- (iv) “**Commission**” means the Andhra Pradesh Electricity Regulatory Commission constituted under the Act;
- (v) “**Consumer**” means a consumer as defined in sub-section (15) of Section 2 of the Act;
- (vi) “**Contracted load / Contracted demand**” means as defined in the General Terms and Conditions of Supply (GTCS) approved by the Commission;
- (vii) “**Distribution Licensee**” means a licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;
- (viii) “**ESCO**” means energy service company.
- (ix) “**Gross Meter**” means a Bi/Unidirectional meter used for accounting and billing of electricity supplied to/from the Distribution licensee by a prosumer(s).
- (x) “**Gross-metering**” means a mechanism whereby the total energy exported from the Grid-Interactive Solar Rooftop Photovoltaic system and the total energy consumed by the prosumer from the DISCOM is measured separately through appropriate metering arrangements and for the billing purpose, the total energy consumed by the prosumer is accounted for at the applicable retail tariff as per Tariff Order and total energy exported to the DISCOM is accounted for at feed-in tariff as fixed by the Commission
- (xi) “Virtual Net Metering” means a mechanism whereby total energy exported from the Grid-Interactive Solar Rooftop Photovoltaic system of a group of prosumers/society is exported to the grid through a gross meter. The exported such energy is adjusted in the electricity service connection(s) of the same Group (society) prosumers in proportion to the share in their Grid-Interactive Solar Rooftop Photovoltaic system in units (kWh/kVAh) to arrive at the net imported or exported energy by an individual prosumer in the Group/Society from/to the Distribution licensee during the applicable billing period/cycle located within the same Electricity Revenue Office (ERO) of distribution licensee’s area of supply. The net energy imported by the prosumers is billed by the distribution licensee on the basis of the applicable retail tariff as per the Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as fixed by the Commission.”

Provided that in case the prosumer(s) is/are in the ambit of the Time of Day (ToD) tariff, the share of exported energy of such prosumer(s) under virtual net metering shall be netted off against his/their electricity consumption during off-peak hours.

Provided also that the applicable T&D losses and charges as per MYT orders of the Commission applicable for relevant periods from injection point to drawal point shall be deducted while adjusting the generation against the consumption.

- (xii) “Group Net Metering” means a mechanism whereby energy exported from the Grid-Interactive Solar Rooftop Photovoltaic system of an individual Prosumer at one or more points is adjusted in consumption by multiple electricity service connection(s) of her/him in units (kWh/kVAh) to arrive at the net imported or exported energy from/to the Distribution licensee during the applicable billing period/cycle located within the same Electricity Revenue Office (ERO) of distribution licensee’s area of supply. The net energy imported by the prosumer is billed by the distribution licensee on the basis of the applicable retail tariff as per the Tariff Order. The net energy exported by the prosumer is paid by the Distribution licensee at the Feed-In-Tariff as fixed by the Commission.

Provided that in case the prosumer is in the ambit of the Time of Day (ToD) tariff, the exported energy of such prosumer under Group net metering shall be netted off against electricity consumption of his multiple services during off-peak hours.

Provided also that the applicable T&D losses and charges as per MYT orders of the Commission applicable for relevant periods from injection point to drawal point shall be deducted while adjusting the generation against the consumption.

- (xiii) “Individual net-metering” means a mechanism whereby energy exported to the Grid from the Grid-Interactive Solar Rooftop Photovoltaic system of an individual Prosumer is adjusted from energy imported from the DISCOM in units (kWh/kVAh) to arrive at the net imported or exported energy from/to the Distribution licensee during the applicable billing period/cycle using a Net Meter at the point of supply. The net energy imported by the prosumer is billed by the distribution licensee on the basis of the applicable retail tariff as per the Tariff Order. The net energy

exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as fixed by the Commission.;

Provided that in case the prosumer is in the ambit of the Time of Day (ToD) tariff, the exported energy of such prosumer under individual net metering shall be netted off against his/her electricity consumption during only off-peak hours.

- (xiv) **“Interconnection point”** means the interface of the Solar Rooftop Photovoltaic System with the network of distribution licensee/Transco;
- (xv) **“Net Meter”** means a Bi-directional meter used for accounting and billing of electricity supplied to and from the prosumer(s) by a Distribution licensee.
- (xvi) **“kWp”** means kilo Watt peak;
- (xvii) **“Prosumer”** means a person who consumes electricity from the grid and also injects electricity into the grid of a distribution licensee.
- (xviii) **“RESCO” means** the Renewable energy service company.
- (xix) **“Solar Rooftop Photovoltaic Power Plant” or “Solar Rooftop Photovoltaic System” “(SRTPVS)”** means the Grid Interactive Solar Photovoltaic Power Plant that uses the sunlight for direct conversion into electricity through photovoltaic technology, which is owned and operated by a prosumer(s) with his/her/their own investment/third-party investment installed on his/her/their rooftops or walls or open land/space within their premises or any open land outside the premises of the consumer(s) in case of group and virtual net metering.
- (xx) **“Tariff Order”** means the Retail Supply Tariff Order issued by the Commission from time to time.
- (xxi) **“Third-party investment”** means an investment by any third party developer for exporting the energy from the Grid Interactive Solar Rooftop Photovoltaic system under the gross/net metering/net billing or net feed-in on a rooftop/wall/open space within the consumer’s premises or any open space outside the consumer(s) premises through a commercial agreement between such consumer(s) and third party.
- (xxii) **“Feed in Tariff ”** means the tariff fixed by the Commission at which the exported energy under Net/Gross metering or Net billing/Net feed-in arrangement shall be paid by the distribution licensee to the prosumers;
- (xxiii) **“Net-billing or Net feed-in”** means a single bidirectional energy meter used

for net-billing or net feed-in at the point of supply wherein the energy imported from the Grid and energy exported from Grid-Interactive Rooftop Solar photovoltaic system of a Prosumer are valued at two different tariffs, where-

- (i) the monetary value of the imported energy is based on the applicable retail tariff;
- (ii) the monetary value of the exported solar energy is based on a feed-in tariff determined by the Commission;
- (iii) the monetary value of the exported energy is deducted from the monetary value of the imported energy to arrive at the net amount to be billed (i.e., credited);

2.1 The words and expressions used and not defined in this Regulation but defined in the Act, shall have the meanings assigned to them in the Act. Expressions used herein but not specifically defined in this Regulation or in the Act but defined under any regulations made by the Commission or under any law passed by a competent legislature and applicable to the electricity industry in the State shall have the meaning assigned to them in such law.

3. **General**

3.1 The Solar **Rooftop Photovoltaic Power Plant**” or “**Solar Rooftop Photovoltaic System**” shall be hereinafter referred to as “**S RTPVS**”

3.2 The distribution licensee shall offer the provision of net metering /gross metering / Net billing or Net feed-in arrangement to the consumer, who intends to install the grid-interactive S RTPVS, in its area of supply on a non-discriminatory and first come first serve basis.

3.3 The consumer is eligible to install the grid-interactive **S RTPVS** of the rated capacity as specified under these Regulations; A Minimum vacant roof area of 10 sq mtr or 100 sq. ft is required for the installation of 1 KWp system.

3.4 The consumer may install an S RTPVS with or without Battery storage.

Provided that the battery charging shall be either from an S RTPVS or from DISCOMS’s supply.” In the later case, the consumer shall pay charges for the power consumed at the DISCOM’s tariff.

3.5 The consumers of the EHT network shall approach the Transco through the DISCOM for connecting the S RTPVSs under the Gross Metering.

- 3.6 The prosumer shall be responsible for the safe operation, maintenance, and rectification of any defect in the **SRTPVS** up to the point of Net/Gross Meter.
- 3.7 The Distribution Licensee shall have the right to disconnect the SRTPVS from its network at any time in the event of any threat of accident or disturbance from such System to its distribution system so as to avoid any accident or damage to it or the prosumer violating any of the terms of this regulation or the terms of the agreement between it and the DISCOM.

When SRTPV is disconnected, the Distribution Licensee shall within 24 hrs of such disconnection call upon the prosumer to rectify the defect and immediately on such rectification the licensee shall restore connection to the SRTPV concerned.

- 3.8 The Grid Interactive SRTPVS must have appropriate protection for islanding the SRTPVS from the Distribution Licensee's network to prevent any power feeding into the grid in case of failure of incoming supply from the Grid. The protection scheme shall be installed such that when there is no incoming supply owing to an outage in the network or load shedding by the DISCOM, under no circumstances, there be any power injection from the Solar Rooftop Plant or Battery System connected thereto into the Grid, to prevent back feeding of supply and thus accidents.”
- 3.9 In the case of the establishment of the **SRTPVS** by an individual consumer/Group of consumers/Society with the Third Party Investment through a commercial agreement, a copy of such commercial agreement shall be furnished to the DISCOM before synchronization of such **SRTPVS** to the Grid.

4. **Eligibility**

- 4.1 All consumers of AP Discom(s) are eligible for setting up of the Grid-Interactive SRTPVS with/without a Battery Energy Storage System with their investment or through third party investment.
- 4.2 The Consumer(s) are free to choose Net metering or Gross Metering or Net Billing/Net Feed-in option for the sale of power to DISCOM.

5. **Capacity of Rooftop Systems**

- 5.1 The capacity of a Grid-Interactive SRTPVS with/without Battery Energy

Storage System under Net/Gross metering or net billing mechanism or net feed-in to be installed at the premises of any individual prosumer shall not be less than 1 kWp.”.

- 5.2 The capacity of the Grid-Interactive SRTPVS with/ without Battery Energy Storage System under the multiple services of an individual consumer under Group Net Metering, and a group of consumers under the virtual net metering framework to be installed shall not be less than 5 kWp.”
- 5.3 The capacity of the Grid-Interactive SRTPVS with/ without Battery Energy Storage System by any prosumer(s) under the Net Metering framework shall not be more than 500 kWp and under the net billing/net feed in framework to be installed shall not be more than 1000 kWp or the contracted maximum demand(s)(CMD) whichever is less.
- 5.4 The capacity of the Grid-Interactive SRTPVS with/ without Battery Energy Storage System under the Gross Metering framework to be installed by any consumer(s) shall not be more than 5000 kWp or the contracted demand(s) whichever is less.
- 5.5 Projects of capacity up to **5000 kWp** at a single location shall be permitted.
- 5.6 The summary of the capacities that are permissible under the Net/Gross metering is shown in the table below

Particulars	Capacity that can be availed		
	Min	Max	Capped Up to
<i>Individual Net Metering</i>	<i>1kWp</i>	<i>500 kWp</i>	<i>Contracted Load/ Contract ed Maximum Demand (CMD) of the consumer</i>
<i>Group Net Metering</i>	<i>5kWp</i>	<i>500 kWp</i>	
<i>Virtual Net Metering</i>	<i>5kWp</i>	<i>500 kWp</i>	
<i>Gross Metering</i>	<i>1kWp</i>	<i>5000 kWp</i>	
<i>Net Billing or Net feed-in</i>	<i>1kWp</i>	<i>1000 kWp</i>	

- 5.7 The permissible capacity of the Grid-Interactive SRTPVS at various voltage levels where the SRTPVS is connected directly to the grid is shown in the table below.

Sl No.	Voltage	Phase	Capacity
1	LT, 240V	Single Phase	upto to 3kWp
2	LT, 415V	Three Phase	3kWp to 75kWp
3	HT, 11kV	Three Phase	76kWp to 1500kWp
4	HT, 33kV	Three Phase	1501kWp to 5000kWp
5	EHT, 132 kV and above	Three Phase	5000kWp

Note: Where the SRTPVS is integrated with consumers' load bus bar such as in net-metering or net billing, the above table does not apply.

5.8 The cumulative capacity of all Grid-Interactive SRTPVSs under Net/Gross Metering Arrangements connected to a particular Distribution Transformer shall not exceed 80% of its rated capacity and 100 % in respect of the feeder capacity.

5.9 The Distribution Licensee shall provide information on its website regarding the capacity available on each Distribution Transformer and 11/33 kV feeder of a substation for connecting the **SRTPVSs** under the Net/Gross Metering arrangements within three months from the notification of this Regulation. The Distribution Licensee shall thereafter update this information quarterly and also provide the Distribution Transformer-wise, 11/33 kV feeder-wise the cumulative capacity of the **SRTPVSs** installed under the Net/Group Metering arrangements category-wise at all voltage levels.

6. **Interconnection with the Grid**

6.1 The Distribution Licensee/Transco shall ensure that the inter-connection of the **SRTPVS** with their Network complies with the CEA (Technical Standard for Connectivity of the Distributed Generation Resources) Regulations, 2013, the CEA (Measures relating to Safety and Electric Supply), Regulations, 2010, and Andhra Pradesh State Electricity Regulatory Commission State Electricity Grid Code Regulation or any other relevant regulation, and amendments issued to all these regulations from time to time.

6.2 The Solar rooftop developers/ Vendors of SRTPVS/MNRE channel partners may be allowed to attend the departmental procedures on behalf of the applicant, except in the case of signing the agreement.

- 6.3 The SRTPVS to be connected to the network as per this regulation at any voltage level under gross metering at the same point of supply shall be provided the gross meter in the upstream network of the supply grid of the distribution licensee after the regular billing meter of the consumer concerned by making suitable modification without insisting a separate service wire/feeder. The modification expenditure is to be borne by the consumers.

7. **Metering**

- 7.1 All meters installed under Gross/Net metering at the **SRTPVS** shall comply with the CEA (Installation and Operation of Meters) Regulations, 2006, and subsequent amendments thereof.
- 7.2 All the consumers installing the SRTPVS have to bear the cost of Gross/Net Meter. The DISCOMS shall provide the information on the cost of the meter/metering equipment (CTPT sets etc,) with detailed specifications, applicable to SRTPVSs on their website within one month from the date of notification of this Regulation. The DISCOMS should provide the Gross/Net meter on payment of cost. When the meters are not available with the DISCOMS, the same shall be informed to the consumers at the time of communicating technical feasibility so that the consumers may procure the meter complying with the CEA (Installation and Operation of Meters) Regulations, 2006, and subsequent amendments thereof. All meters procured by the consumers may be installed after testing by the DISCOMs preferably in their meter testing laboratories or on verification of a third-party testing certificate from NABL. There shall be no requirement for the meter testing to be witnessed either at DISCOMS's or NABL's meter testing lab.
- 7.3 All HT consumers shall be provided with main and check meters under Gross/Net metering.
- 7.4 The consumers shall raise a request as per the format shown in ANNEXURE-X for metering equipment through online mode/ Mee seva by paying the requisite amount. The DISCOM shall subject to clause 7.2 deliver the metering equipment within 15 working days in case of LT/within 30 working days in case of HT/ within 90 working days in case of EHT. The consumers shall be responsible for the safekeeping of the metering equipment during the interim period until grid synchronisation.

7.5 Meter reading shall be done as per the prevailing procedure.

8. **Feed-in Tariff**

8.1 Feed-in Tariff as fixed by the Commission will be applicable for 25 years or the life of the SRTPVs whichever is less under both Net metering, net billing/net feed in and Gross metering for all categories of consumers.

8.2 The feed-in tariff shall be Rs.2.09 per unit under net metering/net billing or net feed-in.

8.3 The feed-in tariff shall be Rs.3.13 per unit under Gross metering in LT Supply.

8.4 The feed-in tariff shall be Rs.2.92 per unit under Gross metering in HT Supply up to 1500 kW of plant capacity.

8.5 The feed-in tariff shall be Rs.2.71 per unit under Gross metering in HT/EHT Supply of plant capacity up to 5000 kW.

8.6 The feed-in tariff shall be Rs.4.17 per unit under Gross metering in HT/EHT Supply if SRTPVs supply the power during the peak hours as decided in the Tariff order with Battery Storage as per the requirement of the DISCOMS.

8.7 The feed-in tariff shall be the same for the total agreement period and shall not be subject to any variation.

9. **Transmission and Distribution (Wheeling) Charges & losses.**

No Transmission and Wheeling charges & losses shall be collected from the prosumers under the Gross/Net Metering, wherever the SRTPVs and Consumption are at the same point of the grid. However, the applicable T&D losses and charges as per MYT orders of the Commission applicable for relevant periods from the injection point to the drawal point shall be deducted while adjusting the generation against the consumption where the generation and consumption are at different points on the Grid. Further, in case the prosumer(s) is/are in the ambit of the Time of Day (ToD) tariff, the share of exported energy of such prosumer(s) under virtual net metering shall be netted off against his/their electricity consumption during off-peak hours. Furthermore, The Grid support charges as determined by the Commission in the tariff orders from time to time shall be applicable. In any case, the CSS is

not applicable to the prosumers for the energy availed from SRTPVS established under this Regulation.

10. **Subsidies**

The consumers are entitled to avail of the applicable subsidies as per MNRE notifications/guidelines from time to time. The feed-in tariff fixed by the Commission under Gross/Net metering shall be after taking into account the subsidy provided by MNRE.

11. **Application**

11.1 The consumer shall make an application to Discom for setting up the SRTPVS by paying the requisite application fee either on AP Discoms websites and/or through designated mee seva centres or through National Portal for Solar Rooftop <https://solarrooftop.gov.in/>. The DISCOMS shall make ready their websites accordingly and also shall register at the National Portal for Solar Rooftop. The prescribed format for application is shown in the ANNEXURE-I of this Regulation. The Consumers intending to apply through the National Portal for Solar Rooftop shall use the applications in the portal.

11.2 The application fee as specified below shall be collected;

Capacities upto 5 kWp	: Rs. 1 000/-
Capacities above 5 kWp and up to 100 kWp	: Rs. 5 000/-
Capacities above 100 kWp to 1000 kWp	: Rs. 10 000/-
Capacities above 1000 kWp	: Rs. 1 00 000/-

11.3 The Discom shall intimate the consumers for incomplete details if any in the application as per the format is shown in the ANNEXURE-II of this regulation within 7 working days. The Discom shall provide the acknowledgement as shown in ANNEXURE-III of this regulation indicating that it has received all the documents required for the establishment of **SRTPVS** within 7 working days if the information furnished in the application is as required. The DISCOMS shall provide a link on their website to track the application in respect of the establishment of **SRTPVS** right from registration to extension of subsidy till the commissioning of the project.

12. **Technical Feasibility:**

12.1 DISCOMS officers shall carry out and communicate the technical feasibility

study on the application submitted by the consumers. This study shall be carried out and the technical feasibility approval shall be communicated to the applicants in the format shown in the ANNEXURE-IV within 7 working days in the case of the LT network, 15 working days for 11 kV and 33 kV networks, and 30 working days for the EHT network from the date of submission of the application in full shape. After undertaking the study as stated above, if technical feasibility is not possible, the same shall be communicated to the consumer by letter as per the format shown in ANNEXURE-V.

12.2 DISCOM shall communicate technical feasibility approval to consumers on a first come first serve basis duly following the capacity limits specified in this regulation. In case of deficiencies for issue of technical feasibility, the Distribution Licensee shall communicate to the consumer:

- (a) Particulars of deficiencies (as per the format shown in (ANNEXURE-VI) with reference to the interconnection of the proposed **SRTPVS** with the Distribution System of the Licensee/Transco;
- (b) Cost estimate for removal of such deficiencies including augmentation of the transformer, distribution or transmission system as the case may be if required.

12.3 The Distribution Licensee/Transco, on receipt of the willingness of the consumer in the format shown in the ANNEXURE-VII and the estimated amount, shall promptly take steps to remove the deficiencies in the distribution system/ Transmission system including augmentation as per the timelines stipulated in the standards of performance regulation notified by the Commission.

Provided that if the consumer is not willing to bear the estimated amount /not paid by the consumer from the date of receipt of such communication, the application shall stand cancelled and the application fee shall be forfeited.

12.4 On removal of deficiencies if any in the system including augmentation of the distribution/transmission network, the distribution licensee shall immediately convey the approval for interconnection of the proposed **SRTPVS** to the consumer. A copy of such approval shall also be forwarded to the State Nodal Agency and the Chief Electrical Inspector if necessary by the distribution licensee for necessary action by them as per this

Regulation.

- 12.5 In the absence of any intimation from the DISCOM on technical feasibility within the timelines specified in this regulation, the application shall be considered as deemed approval. The feasibility so communicated shall be valid for a period of four (4) months unless extended by the Distribution Licensee for a reasonable cause.

Provided that the feasibility communicated by the Distribution Licensee shall not exceed a period of Ten (10) months including the extended time from the date of the first feasibility communication.

- 12.6 In the case of the requirement of APSLDC permission for synchronization of any **SRTPVS**, such permission shall be given by APSLDC within 7 working days from the date of request received from the DISCOM/Consumer.
- 12.7 Before rejecting any application for setting up an SRTPVS at a particular location of the consumer for any defects in his installation, the Distribution Licensee shall serve the applicant with a notice to rectify the defects in the consumer's installation within 15 working days or such longer period as may be necessary as per the format shown in ANNEXURE-VIII.

13. **Agreement and Completion time of the project**

- 13.1 The agreement (Annexure-IX (A) /(B) as applicable) duly filled and signed in by the consumer shall be submitted to DISCOM within four months from the date of receipt of the technical feasibility and DISCOM shall provide the acknowledgement for the same. The agreement is deemed to have come into force if there are no remarks communicated by DISCOM within two weeks from the date of receipt of the agreement. In case, within four months of issuing Technical feasibility, if the Agreement is not submitted by the consumer, the application is deemed to be cancelled. The officers designated for the release of new services of supply as per present DISCOMS's orders in vogue shall sign the agreement.
- 13.2 The SRTPVS by the consumer shall be installed within three (3) months from the date of the Agreement up to 100 kWp, (6) months from 101 kWp to 1 000 kWp, and one year from 1001 kWp to 5000 kWp. In case of any delay, a one-time extension of another three months for plants up to 1000 kWp and 6 months from 1001 kWp to 5000 kWp shall be provided after which

the agreement shall be deemed to be terminated without any reason.

- 13.3 The agreement shall be in force for 25 years or up to the life of the project whichever is earlier, from the date of commencement of the agreement for all categories of consumers.

Provided that If the agreement of Consumer for supply with Discom is terminated, then the agreement of Consumer for SRTPVS is deemed to have been terminated. For the bill stopped service with SRTPVS to be restored, the consumer shall enter a new agreement with DISCOM for the balance agreement period from the date of first commissioning of the project”.

14. **Pre-commissioning check and commissioning of the SRTPVSSs**

- 14.1 Post installation of the SRP, the consumer shall make an online request for inspection as per the format shown in ANNEXURE-XI along with the work completion report in the format shown in ANNEXURE-XII. The DISCOM personnel shall inspect the system within 10 working days, decide and communicate approvals or otherwise as the case may be. In the absence of the response within the stipulated time, it shall be considered as deemed inspection approval. In case, any deficiency is identified by the Discom, the same shall be intimated to the consumer as per the format specified in ANNEXURE-XIII

Provided that Post installation of SRP and receipt of the request for inspection from the concerned if the DISCOM fails to take further action as stipulated in this Regulation, the same may be treated as the SRP being installed behind the meter under Section 9 of the Electricity Act, 2003 with intimation to the DISCOM. If any energy is injected into the grid during such period from such SRP, the same shall be treated as inadvertent energy.

- 14.2 The SRP shall be synchronized within seven (7) working days of inspection approval. Before synchronization of the SRP with the grid, the DISCOM shall test-check the meter, seal the meter, and ensure the installation of safety features/precautions. A commissioning certificate would be issued by DISCOM as per the format shown in ANNEXURE-XIV after synchronisation.
- 14.3 The officers concerned shall send commissioning reports of the SRP along with the agreement to the concerned ERO. The billing process shall start within one month/ next Billing cycle of commissioning of the SRP. In the

case of HT services, Dy.EE/EE operation shall send the Commissioning Report to the Senior Accounts Officer of the concerned circle.

- 14.4 DISCOMs have reserved the right to inspect the **SRTPVS** routinely at any time during the term of the Agreement.

15. **Provisions applicable to prosumers**

Subject to the present regulation, all the provisions of GTCS, Supply Code, and other relevant regulations /guidelines applicable to the consumers, in general, shall also be applicable to prosumers. The SRTPVS behind the Consumer's meter, not involving either Net Metering Arrangement or Net Billing Arrangement, shall not be installed without prior intimation to the DISCOM concerned.

Provided that the prosumer shall furnish an undertaking to pay the applicable charges as determined by the Commission from time to time for such capacity of SRTPVS installed behind the meter.

Provided also that in case the Consumer installs SRTPVS behind the Consumer's meter without prior intimation to the DISCOM concerned, or such installation does not conform to Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013 the SRTPVS shall be disconnected from the Grid after notice to the prosumer."

For SRTPVS behind the meter already connected to the electricity system on the date of commencement of this regulation, the consumer shall take all necessary steps to meet the technical standards specified by CEA within sixty days of the coming into force of this Regulation and intimate the same to the DISCOM concerned.

16. **Energy Settlement and Billing:**

- 16.1 Energy settlement and Billing shall be done on a monthly basis.

- 16.2 The Distribution Licensee shall show, separately, the energy units exported, the energy units imported, and the net energy units billed to the prosumers in their bill for the respective billing period.

- 16.3 All prosumers have to submit their bank details and payments shall be

made through electronic transfer by APDISCOMs. The prosumer shall submit a cancelled cheque with bank a/c No. & IFSC Code along with Application form.

- 16.4 **Net Metering:** The energy exported from the **SRTPVS** shall be adjusted against the consumption of energy from the DISCOM in every billing month. In the case of different rooftops belonging to a single owner in a city or town, the combined energy exported from **SRTPVSs** shall be adjusted against the combined consumption recorded in various multiple connections of the same consumer. In the case of a group of persons/societies setting up **SRTPVSs**, the generation from such SRP shall be treated as a collective generation for the supply of power to the households of each society /group member. Such energy generated from **SRTPVSs** shall be prorated as per the installed capacity share indicated in the Agreement between the group/society and DISCOM. This computed energy share shall be adjusted against the consumption of energy for each consumer of such group in every billing month. In the case of Apartments/Group Houses, a common service meter may be used for net metering.

- 16.5 In case of excess import/consumption over the export of energy in any billing month, payment shall be made by the prosumers for the net import energy at the applicable retail supply tariff as determined by the Commission. In case of excess export of energy over the import of energy in any billing month, payment shall be made by the Discom monthly for such net Export excess energy at the Feed-in Tariff as fixed by the Commission”

Provided that in case the net energy drawn by the prosumers is less than the minimum energy specified in RST Orders issued from time to time, then payment shall be made by the prosumers for minimum energy at the applicable retail supply tariff as determined by the Commission from time to time.

- 16.6 The quantum of electricity units exported by the prosumers shall be measured in kVAh in case the applicable tariff to the respective prosumers provides for energy billing on a kVAh basis.
- 16.7 Where a prosumer is within the ambit of the Time of Day (ToD) tariff, the electricity consumption in each time block during the off-peak hours in the billing month is netted off with the total export quantum of electricity

injected during the billing month divided by the number of time blocks during the off-peak hours in a billing month”

16.8 In case of net billing, the billing shall be done as defined in the definitions.

16.9 Gross Metering: The payment for energy exported from the SRTPVSs will be computed at Feed-in Tariff as fixed by the Commission. This shall be adjusted against the total billing demand for consumption of energy by the prosumers from DISCOM in every billing month. In case gross energy exported from SRP billing amount exceeds the billing demand of the DISCOMS during any billing month, such an excess amount shall be paid by the Discom to the prosumers.”

17. **Capacity Targets to DISCOMS**

As the DISCOMS’ overall RE power procurement is over and above the RPO specified by it, the Commission is not inclined to fix any capacity-specific targets under Group/Net Metering. However, the Commission will review the cumulative capacities of **SRTPVSs** from time to time based on the information furnished by the DISCOMS on the cumulative capacities achieved during each financial year keeping in view its advantages to the overall power system and future energy requirements.

18. **Power to Relax**

The Commission may, by general or special order, for reasons to be recorded in writing and after giving an opportunity of hearing to the parties likely to be affected, relax or waive any of the provisions of these Regulations on its own motion or on an application made to it by any interested person.

19. **Issue of orders and practice directions:**

Subject to the provisions of the Electricity Act, 2003 and this Regulation, the Commission may, from time to time, issue orders and practice directions about the implementation of the Regulation and procedure to be followed and various matters which the Commission has been empowered by this Regulation to specify or direct.

20. **Power to Remove difficulties:**

If any difficulty arises in giving effect to any of the provisions of this

Regulation, the Commission may, by a general or special order, do or undertake or direct the Licensees to do or undertake things which in the opinion of the Commission are necessary or expedient for removing the difficulties.

21. **Power to Amend:**

- (1) The Commission may at any time, vary', alter, modify, or amend any provisions of the Regulation.
- (2) In particular the Commission may review after three years from the date of notification of this regulation or at any other time if considered necessary. However, This Regulation shall continue to be in force until it is modified based on such review.

22. **Repeal and Savings**

The **SRTPVS**s already Commissioned and those under various stages of construction including the cases wherein a feasibility report was issued under the provisions of earlier/existing Guidelines shall stand governed by those guidelines till the completion of the term of such agreements in all respects including the feed-in tariff. However, in the cases, where after the issue of technical feasibility the projects are not completed as per the timelines stipulated in the existing guidelines as of the date of this Regulation coming into force, all such projects shall come under the purview of this Regulation. The internal procedures of the DISCOMS specified in existing guidelines on **SRTPVS**s by EPDCL letter dated 04.01.2019 that are approved by the Commission by its order dated 25.05.2019 and are not in conflict with the present regulation shall stand saved.

23. The Commission will review this Regulation in all aspects after one year from the date of notification in the Gazette.

(BY ORDER OF THE COMMISSION)

Place: Hyderabad
Date: 22.02.2024

P. MURALI KRISHNA,
Commission Secretary (I/c).

ANNEXURE-I: APPLICATION FORM**APPLICATION FORM FOR GRID INTERACTIVE SOLAR ROOF-TOP
PHOTOVOLTAIC SYSTEM**

**Affix recent Passport
size photo of the
Applicant**

For Office Use:
Reg. No.:

Date:

Application fee details:
DD No.:

**To.
The**

(Designated Officer)

1	Name of the applicant	
2	Applicant full Address	H.No.: Street Name: Village Name Mandal name District Name Pin code
3	Phone/Mobile No	
4	Email ID	
5	Social Group	(SC/ST/BC/Others)
6	Applicant has to submit self-attested photo ID proof (Voter ID card/ Passport /PAN card/Aadhar card/ Driving licence & etc.,)	
	Type of ID card submitted	
	ID card No.	

Site details		
7	Address of the site for installation	H.No.:
		Street Name:
		Village Name
		Mandal name
		District Name
		Pin code
8	SCNo.	
9	Category	
10	Contracted Load	----- KW
11	Distribution/Section	
12	If Non-Domestic, Specify type of building (Shop/ Industry/ Govt./ Educational/ others (specify))	
13	Pole No. if known	
14	DTR Code/Location if known	
15	a) Shade free area available for installation for solar panel (Minimum requirement is nearly 15 m ²)	----- m ²
	b) Proposed Capacity of SRTPVs	-----KWp
16	Average monthly consumption of electricity	----- Units
17	Applying for Net Metering/Net Billing or Net Feed-in/Gross Metering.	

DECLARATION

I hereby declare that the information furnished above is true to the best of my knowledge and behalf. If false,(DISCOM) has the right to reject/cancel the application. Further, I hereby agree with the specifications, terms and conditions stipulated by(DISCOM)for the selection and installation of roof-top solar power plant.

Place:

Signature:

Date:

Name:

CHECK LIST:

- | | | |
|----|-------------------------------------|----------|
| 1. | Copy of photo ID card | (YES/NO) |
| 2. | Copy of electricity bill | (YES/NO) |
| 3. | Demand Draft | (YES/NO) |
| 4. | Self-addressed Rs. Stamped envelope | (YES/NO) |

ANNEXURE-I (A) : DECLARATION FOR GROUPS/SOCIETIES**DECLARATION FOR GROUPS/SOCIETIES**

We hereby declare that the information furnished above is true to the best of my knowledge and belief. If found false,(DISCOM) has the right to reject/cancel the application. Further, I hereby agree with the specifications, terms and conditions stipulated by(DISCOM) for the selection and installation of roof-top solar power plant.

Place:

Date:

S. No.	Consumer Name	Installation capacity share (%)	Consumer Service Number	Signature for consent

ANNEXURE-II: FORMAT FOR REMOVAL DEFICIENCY IN APPLICATION**Intimation for Removal of Deficiency in the Application**

(To be filled by DISCOM)

To:

(Consumer applicant's name) M/S / Mr. / Mrs. ____

Date: _____

Ref: Your application No. _____ dated _____

Subject: Intimation for Removal of Deficiency in Application

This is to inform you that we have received your above mentioned application and on scrutiny have found that:

The application is not complete and the following are the lacunae observed:

-
- ____
- (others, if any)

Please complete the application formality by fulfilling the above lacunae within 7 working days of receipt of this letter. In case you have not completed the formality within this period your application shall stand cancelled and paid fees, if any, shall not be refunded.

Based on this communication, the applicant can:

1. Either submit the above details;
2. Or, withdraw the application.

Signature of Officer:

Designation

ANNEXURE III: ACKNOWLEDGEMENT FORMAT**ACKNOWLEDGEMENT by the Distribution Licensee**

Your application for setting up of Grid Interactive solar rooftop system under the APREC (The Grid Interactive Solar Rooftop Photovoltaic System under Gross/Net Metering) Regulation, 2023 and amended from time to time, has been received along with registration fee.

The following Registration Number has been allotted to your application.

Registration Number	
Date of Registration	

Designated Officer/DISCOM

ANNEXURE IV: TECHNICAL FEASIBILITY APPROVAL LETTER FORMAT

**Approval Letter for Consumer with respect to the Application for Net Metering
/Net Billing or Net Feed in/Gross Metering for Grid Connectivity of Grid
interactive Solar PV System
(To be filled by the DISCOM)**

Date:

To:

(Applicant's name) M/s / Mr. / Mrs. _____

(Consumer

No.) _____

Ref: Your application No. _____ dated _____

With reference to your above mentioned application number, approval is herewith accorded for installing Grid Interactive Solar Rooftop Photovoltaic System of _____ KWp Capacity in your premises under Net Metering/Net Billing or Net Feed-in / Gross Metering (as applied for) as per following terms and conditions;

1. It is recommended that you select an empanelled system installer of your choice to install the SRTPV system from the list of empanelled installers of grid-connected SRTPVS with MNRE/NREDCAP/DISCOMS. "The list of vendors registered is available under the 'Vendors in my area' tab of the beneficiary interface at National Portal after login.
2. All components of the SRTPV system must comply with applicable BIS/IEC standards.
3. Applicant must submit a copy of Manufacturers Test Certificates for all components for having complied with relevant BIS/IEC standards of the selected model along with a work completion report.
4. In case of any changes required at the premises of the proposed site due to this proposed installation, these shall be performed by the applicant at his /her own cost.
5. The grid connectivity of the system shall be in accordance with the Solar Rooftop Regulations of the APERC and any amendments thereof from time to time.
6. The required meter for the installation of SRTPVS is available with the DISCOM. The Cost of the meter is Rs. _____/- (in words).

The consumer should intimate the same to DISCOM by filling Format in ANNEXURE-X along with the meter fee at least 30 days prior to the expected installation (fee details & technical specifications can be found on the website of

DISCOM).

(or)

The required meter for the installation of SRTPVS is not available with the DISCOM. The consumers may procure the meter which shall comply with the CEA (Installation and Operation of Meters) Regulations, 2006, and subsequent amendments thereof. All meters procured by the consumers shall be installed after testing by the DISCOMs or on verification of a third-party testing certificate from NABL.

7. The Discom shall follow the same procedure in respect of SRTPVS as being followed in the release of New Services in respect of safety aspects.
8. Installed systems must comply with safety requirements as stated in CEA/APERC Regulations and all standards referred to in those regulations.
9. Please submit the following documents after installation of the SRTPV system:
 - a. Work Completion report in the provided format;
 - b. Test Certificate of Net meter if applicable;
 - c. Copy of signed Net Metering/Net billing or Net feed-in/Gross Metering Interconnection Agreement.
 - d.Any other document required as per APERC Regulation.

This approval is valid for 120 days from the date of this letter and the SRTPV system is to be commissioned within this period, failing which the approval will be treated as cancelled.

You may download all technical specifications, standards and other requirements of the solar rooftop system from the website of MNRE.

Signature of Officer:

Designation:

Date & Stamp:

ANNEXURE-V: FORMAT FOR INTIMATION FOR NON-FEASIBILITY**Intimation for Non-Feasibility and termination of the Application***(To be filled by DISCOM)*

To:

(Consumer applicant's name) M/S / Mr. / Mrs. _____

Date: _____

Ref: Your application No. _____ dated _____

Subject: Intimation for Non-feasibility and termination of Application

This is to inform you that we have received your above mentioned application and on Technical scrutiny have found that:

The application is not feasible at this stage due to the following reasons:

- _____
- (others, if any)

The application hereby stands terminated. The application fee shall be refunded within 7 days from the date of issue of this letter.

Signature of Officer:

Designation:

ANNEXURE-VI:**FORMAT FOR INTIMATING DEFICIENCIES for issue of TECHNICAL FEASIBILITY***(To be filled by DISCOM)*

To:

(Consumer applicant's name) M/S / Mr. / Mrs. ____

Date: _____

Ref: Your application No. _____ dated _____

Subject: Intimation for Removal of Deficiency

This is to inform you that we have received your above mentioned application and on technical feasibility verification have found that:

The following deficiencies are observed/augmentation is required for technical feasibility:

-
-
- (others, if any)

Further, it is found that due to above mentioned constraints it is not feasible for the DISCOM to provide connectivity. However, the above deficiencies can be removed if you are ready to bear the costs approximately

Based on this communication, the applicant can either approach the DISCOM (Division Office) to process the case Or, withdraw the application. If you withdraw the application, the fee paid by you will be refunded within 7 working days from the date of the withdrawal letter.

Signature of Officer:
Designation

**ANNEXURE VII: RESPONSE FOR REMOVAL OF DEFICIENCIES
FORMAT****Response of the Applicant for Removal of Deficiencies/system
augmentation***(To be filled by Applicant)*

To:

The Concerned Engineer of DISCOM

_____ (Distribution Licensee Name)

_____ (Name of the Division)

_____ (Name / Address of office)

Date:

Subject: Willingness to bear the costs for removal of deficiencies or
augmentation of the system.

I accept the connectivity by paying the costsas intimated by you for removal
of deficiencies/ augmentation of the system and request the DISCOM to process
the application for technical feasibility;

Name and Signature of Applicant:

Application Number:

**ANNEXURE-VIII: INTIMATION FOR REMOVAL OF DEFICIENCIES IN
CONSUMER'S INSTALLATION****(To be filled by the DISCOM)**

To:

(Consumer applicant's name) M/S / Mr. / Mrs. _____

Date: _____

Ref: Your application No. _____ dated _____

Subject: Intimation for Removal of Deficiency in consumer installation

With reference to your application dated For the installation of _____ kWp system, inspected your installation and we have found the following deficiencies in the the installation:

a)

b)

c)etc

We request you to attend to the above deficiencies within 15 working days and submit a request for inspection to issue technical feasibility certificate.

Signature of Officer:

Designation

ANNEXURE -IX (A): AGREEMENT FOR INDIVIDUAL CONSUMER**(Individual Consumer)**

Solar Rooftop Net Metering/Net billing or Net Feed-in /Gross Metering
Connection Agreement

(On Non-Judicial stamp paper worth Rs. 100/-)

This Agreement is executed and entered into at (location) _____ on this (date)____ day _____ of____(month)____(Year)between _____ the _____ consumer, M/s/Mr./Mrs._____ S/o, D/o, W/o _____ residing at _____(address) _____ which means their/his/its/ theirs, successors as first party AND _____Power Distribution Company Ltd. (hereinafter called as Discom) and having its registered office at _____(address) _____ as a DISCOM incorporated under the provisions of Companies Act 1956 consequent to the AP Electricity Reforms Act, 1998 (Which means its authorized representatives assigns, executors and its successors) as other party hereinafter called the 'Discom'.

Whereas, the consumer has taken the responsibility to set up or facilitate the requisite Photovoltaic system and injection of Power into the Discom's grid

And whereas, the Discom agrees to benefit the consumer for the electricity generated and as per conditions of this agreement and Solar rooftop Regulations of the APERC.

Both the party hereby agrees to as follows:

1. Eligibility

- 1.1 All consumers of AP Discom(s) are eligible for setting up of the Grid-Interactive SRTPVS with/ without Battery Energy Storage System with their investment or through third party investment.
- 1.2 The Consumer(s) are free to choose Net metering or Gross Metering or Net Billing/Net Feed-in option for the sale of power to DISCOM.

2. Capacity of the Solar Rooftop Photovoltaic System and Maximum Contracted Load of the Premises

The consumer is proposing to install a rooftop solar power plant of ____kWp capacity under Solar _____Net metering/Net billing or Net Feed-in/ Gross metering facility at D.No. ____, Street____, ____ (V), ____ (M), ____ (Dist) having electrical service Connection No.____, Category____, Distribution____ for a contracted load of ____kW/HP/KVA.

3. Governing Provisions

The consumer hereby undertakes to comply with all the requirements of the Electricity Act, 2003, the Rules and Regulations framed under, provisions of the tariffs, applicable Charges and General Terms and Conditions of Supply prescribed by the Discom with the approval of the Andhra Pradesh Electricity Regulatory Commission hereinafter called as "Commission" from time to time and agree not to dispute the same.

4. Technical and Interconnection Requirements

- 4.1 The consumer hereby agrees to comply with CEA (Technical Standard for Connectivity of the Distributed Generation Resources) Regulations, 2013, the CEA (Measures relating to Safety and Electric Supply), Regulations, 2010, CEA (Grid Standards) Regulations, 2010 and Andhra Pradesh State Electricity Regulatory Commission State Electricity Grid Code Regulation or any other relevant regulation, and amendments issued to all these regulations from time to time.

5. The consumer hereby inter alia agrees that Metering and synchronization of Solar Rooftop Photovoltaic System, feed-in tariff, Energy Settlement and Billing as per the APERC (Grid Interactive Rooftop Solar Photovoltaic System Regulations, 2023 and its amendments thereof.

6. Liabilities

- 6.1 The consumer and Discom will indemnify each other for damages or adverse effects from either party's negligence or intentional misconduct in the connection and operation of the photovoltaic system or Discom's distribution system.

- 6.2 Discom and the consumer will not be liable to each other for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for indirect, consequential, incidental or special damages, including, but not limited to, punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, or otherwise.
- 6.3 Discom shall not be liable for delivery or realization by the consumer for any fiscal or other incentive provided by the central / State government.

7. Duration of the Agreement

The agreement shall be in force for 25 years or up to the life of the project whichever is earlier, from the date of commencement of the agreement for all categories of consumers.

Provided that If the agreement of Consumer for supply with Discom is terminated, then the agreement of Consumer for SRTPVS is deemed to have been terminated. For the bill stopped service with SRTPVS to be restored, the consumer shall enter a new agreement with DISCOM for the balance agreement period from the date of the first commissioning of the project.

8. Dispute Resolution

Any disputes arising under/ out of this agreement entered into in accordance with APERC (Grid Interactive Solar Rooftop Photovoltaic System Gross/Net Metering) Regulation, 2023 shall be resolved promptly in good faith and in an equitable manner by both the parties. Failing resolution of the dispute, the party may approach the Commission under Section 86 (1) (f) of EA 2003.

9. Termination

- 9.1 Discom has the right to terminate the Agreement on 30 days prior written notice, if the consumer breaches a term of this Agreement and does not remedy the breach within 30 days of receiving written notice from Discom of the breach.
- 9.2 The consumer can terminate the agreement at any time by providing Discom with 90 days prior notice.
- 9.3 The consumer agrees that upon termination of this Agreement, he must disconnect the photovoltaic system from Discom's distribution system in a timely manner and to Discom's satisfaction. However, he is not prevented from connecting his system under any other applicable provisions of the Electricity Act, 2003.

10. Re-Sale of Electric Power

The consumer shall not sell electricity generated from his solar rooftop plant under this agreement to any party without the sanction in writing obtained from the DISCOM.

11. Obligation of Consumer to pay all charges levied by DISCOM

The Consumer shall abide by the rules and shall pay the Maximum Demand Charges, energy charges, surcharges and other charges, if any, to the DISCOM in accordance with the notified Tariff besides the applicability of the General Terms and Conditions of Supply prescribed by the APERC from time to time.'

The consumer shall also abide by any other charges applicable with respect to the Connection of the Solar Rooftop Power Plant to the grid as per APERC Regulations.

12. Theft of electricity or unauthorized use of electricity

The consumer found indulging in theft of electricity or unauthorized use of electricity shall pay the penal/additional charges as may be levied by the DISCOM besides disconnection of supply as per the provisions of IE Act 2003 and General Terms and Conditions of supply.

13. Knowledge of facts and rules

Knowledge of Facts and Rules The consumer shall be deemed to have full knowledge of the provisions of the Electricity Act, 2003, the A.P. Electricity Reform Act, 1998 and all regulations and notifications made thereunder, as also all laws relating to the supply of electricity.

In the witness, where Mr. _____ for and on behalf of _____
(consumer) and Mr. _____ for and on behalf of _____
(Discom) agree to this agreement.

Signature of the Consumer

Signature of the Discom Representative

Date:

Date:

Witness 1:

Witness 2:

Signature:

Signature:

Name & Address:

Name & Address:

Date:

Date:

**ANNEXURE-IX (B) : AGREEMENT FOR GROUP OF CONSUMERS/
SOCIETIES****(Group of Consumers/ Societies)**

Solar Rooftop Net Metering/Net billing or Net Feed-in /Gross Metering
Connection Agreement

(On Non-Judicial stamp paper worth Rs. 100/-)

This Agreement is made and entered into at (location) _____ on this (date) ____ day of _____(month) ____ (Year) between The Group of persons/society (herein after called as Eligible /Consumer), Represented by Sri/Smt _____ S/o, _____ residing at _____ (address) _____ as first party AND _____ Power Distribution Company of Andhra Pradesh Ltd. (herein after called as Discom) and having its registered office at _____ (address) _____ as a DISCOM incorporated under the provisions of Companies Act 1956 consequent to the AP Electricity Reforms Act, 1998 (Which means its authorized representatives assigns, executors and its successors) as other party here in after called the "DISCOM".

Whereas, the consumer has taken the responsibility to set up or facilitate the requisite Solar Photovoltaic system and injection of Power into the Discom's grid

And whereas, the Discom agrees to benefit the consumer for the electricity generated and as per conditions of this agreement and Solar rooftop Regulations of the APERC.

Both the party hereby agrees to as follows:

1. Eligibility

- 1.1 All consumers of AP Discom(s) are eligible for setting up of the Grid-Interactive SRTPVS with/ without Battery Energy Storage System with their investment or through third party investment.
- 1.2 The Consumer(s) are free to choose Net metering or Gross Metering or Net Billing/Net Feed-in option for the sale of power to DISCOM.

2. Capacity of the SPV Plant and Maximum Contracted Load of the Premises

2.1 The Group of persons/society is proposing to install a rooftop solar power plant of ____kWp capacity under Solar _____Net metering/Net billing or Net Feed-in/ Gross metering facility at D.No. ____, Street____, ____V, ____ (M)____ (Dist) against Common Service Connection No_____, Category____, Distribution_____ and having individual electrical service connections details furnished in the table below for a total contracted load of ____kW/HP/KVA and individual installed capacity share.

2.2 The installed capacity shares of members of the Group of persons/societies are as follows:

Sl.No.	Consumer Name	Installed Capacity share	Consumer Service number
--------	---------------	--------------------------	-------------------------

2.3. The Share can be revised only once in a financial year.

3. Governing Provisions

The consumer hereby undertakes to comply with all the requirements of the Electricity Act, 2003, the Rules and Regulations framed under, provisions of the tariffs, applicable Charges and General Terms and Conditions of Supply prescribed by the Discom with the approval of the Andhra Pradesh Electricity Regulatory Commission hereinafter called as "Commission" from time to time and agree not to dispute the same.

4. Technical and Interconnection Requirements

The consumer hereby agrees to comply with CEA (Technical Standard for Connectivity of the Distributed Generation Resources) Regulations, 2013, the CEA (Measures relating to Safety and Electric Supply), Regulations, 2010, CEA (Grid Standards) Regulations, 2010 and Andhra Pradesh State Electricity Regulatory Commission State Electricity Grid Code Regulation or any other relevant regulation, and amendments issued to all these regulations from time to time.

5. The consumer hereby agrees that Metering and synchronization of Solar Rooftop Photovoltaic System, feed-in tariff, Energy Settlement and Billing as per the

APERC (Grid Interactive Rooftop Solar Photovoltaic System Regulations, 2023 and its amendments thereof.

6. Liabilities

- 6.1 The consumer and Discom will indemnify each other for damages or adverse effects from either party's negligence or intentional misconduct in the connection and operation of the photovoltaic system or Discom's distribution system.
- 6.2 Discom and the consumer will not be liable to each other for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for indirect, consequential, incidental or special damages, including, but not limited to, punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, or otherwise.
- 6.3 Discom shall not be liable for delivery or realization by the consumer for any fiscal or other incentive provided by the central /State government.

7. Duration of the Agreement

The agreement shall be in force for 25 years or up to the life of the project whichever is earlier, from the date of commencement of the agreement for all categories of consumers.

Provided that If the agreement of Consumer for supply with Discom is terminated, then the agreement of Consumer for SRTPVS is deemed to have been terminated. For the bill stopped service with SRTPVS to be restored, the consumer shall enter a new agreement with DISCOM for the balance agreement period from the date of the first commissioning of the project.

8. Dispute Resolution

Any disputes arising under/ out of this agreement entered into in accordance with APERC (Grid Interactive Solar Rooftop Photovoltaic System Gross/Net Metering) Regulation, 2023 shall be resolved promptly in good faith and in an equitable manner by both the parties. Failing resolution of the dispute, the party may approach the commission under Section 86 (1) (f) of EA 2003.

9. Termination

- 9.1 Discom has the right to terminate the Agreement on 30 days prior written notice, if the consumer breaches a term of this Agreement and does not remedy the breach within 30 days of receiving written notice from Discom of the breach.
- 9.2 The consumer can terminate the agreement at any time by providing Discom with 90 days prior notice.

- 9.3 The consumer agrees that upon termination of this Agreement, he must disconnect the photovoltaic system from Discom's distribution system in a timely manner and to Discom's satisfaction. However, he is not prevented from connecting his system under any other applicable provisions of the Electricity Act, 2003.

10. Re-Sale of Electric Power

The consumer shall not sell electricity generated from his solar rooftop plant under this agreement to any party without the sanction in writing obtained from the DISCOM.

11. Obligation of Consumer to pay all charges levied by DISCOM

The Consumer shall abide by the rules and shall pay the Maximum Demand Charges, energy charges, surcharges and other charges, if any, to the DISCOM in accordance with the notified Tariff besides the applicability of the General Terms and Conditions of Supply prescribed by the APERC from time to time.'

The consumer shall also abide by any other charges applicable with respect to the Connection of the Solar Rooftop Power Plant to the grid as per APERC Regulations.

12. Theft of electricity or unauthorized use of electricity

The consumer found indulging in theft of electricity or unauthorized use of electricity shall pay the penal/additional charges as may be levied by the DISCOM besides disconnection of supply as per the provisions of IE Act 2003 and General Terms and Conditions of supply.

13. Knowledge of facts and rules

Knowledge of Facts and Rules The consumer shall be deemed to have full knowledge of the provisions of the Electricity Act, 2003 the A.P. Electricity Reform Act, 1998, and all regulations and notifications made thereunder, as also all laws relating to the supply of electricity

In the witness, where of Mr. _____ for an on behalf of _____ (Eligible consumer) and Mr. _____ for and on behalf of _____ (Discom) agree to this agreement.

Signature of the Office-bearer
of Group/ Society

Signature of the Discom
Representative

Date:

Date:

Witness 1:

Witness 2:

Signature:

Signature:

Name & Address:

Name & Address:

Date:

Date:

ANNEXURE-X : INTIMATION FOR METER PROCUREMENT**Intimation of Meter Procurement**

(To be filled by Applicant)

To,

_____(Concerned Authority)

_____(Name of the DISCOM)

_____(Date)

Ref: Application No. _____ dated _____

Dear Sir,

With reference to above- mentioned my Application number and receiving the Letter of the technical feasibility, I/we intend to install _____KWp of RTSPV system. In this regard, I/we request DISCOM to provide a meter/metering equipment _____for SRTPV installation. The meter shall be as per the Net metering/Net Billing or Net Feed-in/ Gross metering clause in Solar Rooftop Regulations of the APERC.

I/We agree to pay fee of INR _____ - as mentioned in DISCOM website via online mode/ DD _____/ cheque _____.

Name of Consumer/Sign

ANNEXURE-XI: INTIMATION TO DISCOM FOR READINESS OF SYSTEM CHECK**Intimation to the DISCOM for readiness of the system for System Check Synchronisation with the DISCOM grid and Installation of Meters.**

(To be submitted by the Applicant)

To,
The Executive Engineer
----- (Name of the Division)
----- (Name of the DISCOM)
----- (Address of the Division Office)

Sir/Madam,

Sub:

1. System Checks;
2. Synchronisation with the DISCOM Grid;
3. Installation of Meter(s);

Ref: Our Application No.: _____

With reference to the above, I hereby confirm to you that the Solar Rooftop Photovoltaic System has been installed as per the technical and safety standards laid out by CEA/ APERC/ DISCOM.

The system is ready for synchronisation with the DISCOMs grid and installation of meter(s).

Name of the Applicant: _____

Signature: _____

Enclosures:

1. NOC from CEI/EI, if applicable
2. A copy of the Work Completion Report along with the details of all components of SRTPVS
3. Manufacturer's test certificate of all the components used in the installation of the Solar Rooftop Photovoltaic System.

ANNEXURE-XII: WORK COMPLETION REPORT**Work Completion Report***(To be submitted by the applicant for systems inspection)***To,****Sir/Madam,**

Sub: Submission of work completion report (to be submitted by the applicant) for system documentation requirements.

Ref: Our Application No.: _____ dated: _____

With reference to the above, I hereby confirm to you that we have completed the work of installation of the renewable energy system and submit the following basic information for your perusal and request you to arrange to Inspect and Commission the system at the earliest:

A. Details of the Solar PV module

1.	Model No.	
2.	Name and address of manufacturer	
3.	Capacity of each Module (Wp)	
4.	No. of Modules	
5.	Total Capacity (kWp)	
6.	Date of Installation	
7.	Applicable Standard (BIS/IEC)	

B. Details of the Inverter

1.	Name and address of the inverter manufacturer	
2.	Brand Name of the inverter	
3.	Model No.	
4.	AC capacity of individual inverter (kW)	
5.	No. of inverters installed	
6.	Total AC capacity of inverter (kW)	
7.	Serial Nos.	

8.	Date of Installation	
9.	Applicable Standard (BIS/IEC)	
10.	Is anti-islanding protection provided?	Yes/No

C. Module Mounting Structure

1.	Does the Module Mounting Structure withstand wind capacity up to 150 kmph?	Yes/No
2.	Is the total load of the structure + panel less than 60 kg/m ² ?	Yes/No
3.	Applicable Standard (BIS/IEC)	

D. Details of the Cables: DC

1.	Make / Name of manufacturer	
2.	Size & Type	
3.	Applicable Standard (IEC)	

E. Details of the AC wiring

1.	Make / Name of manufacturer	
2.	Size & Type	
3.	Applicable Standard (IEC)	

F. Details of the DC distribution box

1.	Make / Name of manufacturer	
2.	Sl. No.	
3.	High quality suitable capacity MOVs/ SPDs along with suitable reverse blocking diodes	
4.	MCB / Isolator quantity & capacity	
5.	Size & Type	
6.	Applicable Standard (IEC)	

G. Details of the AC distribution box

1.	Make / Name of manufacturer	
2.	Sl. No.	
3.	AC Surge Protection Device	
4.	MCB / MCCB quantity & capacity	
5.	Size & Type	
6.	Applicable Standard (IEC)	

H. Details of the Earthing

1	Earth resistance (shall be less than 5 ohms)	
2	Size of the Earth wire / flat*	
3	Three separate Earthing points	Yes / No
	Modules, mounting structure & DC Surge protection device	Yes / No
	Inverter, AC Surge protection device	Yes / No
	Lightening Arrester	Yes / No
4	Size & Type	
5	Applicable Standard (BIS/IEC)	

Note:*Earthing shall be done in accordance IS 3043-1986, provided that Earthing conductors shall have a minimum size of 4 mm² copper wire or 10 mm² aluminium wire or 3 mm² X 70 mm² hot dip galvanized iron flat strip.

I. Details of the Net/Gross meter details, if purchased by the consumer (please enclose the test report of the net meter tested at the laboratory of the DISCOM/designated agency)

1.	Make	
2.	Serial No.	
3.	Procured from DISCOM/ Outside Agency	
4.	Manufacturer's Name	
5.	Capacity	
6.	Type / Model	

7.	Single ph./Three ph.	
8.	Rated Current & CT Ratio	
9.	Reference Voltage & PT Ratio	
10.	Date of Test by MT, DISCOM	
11.	Applicable Standard (BIS/IEC)	
12.	Month & Year of Manufacture	
13.	Class of meter	

J. Details of the Caution Signage**K. Provision of manual and automatic switches: Yes / No****L. G.P.S. Coordinates of the SRTPV System Installation**

(i) Latitude:

(ii) Longitude:

M. Whether Operation and Maintenance Manual provided to the consumer: Yes/ No

Certified that the above said SRTPV system was installed and the equipment used comply with the Technical and Safety standards as specified by the MNRE/ CEA/ DISCOM under net metering program.

Signature of the Applicant

Name and Signature of the System Installer

Name:

Name of the firm and address:

Address

Seal

Date:

Date:

Enclosures:

1. Test report of net/gross meter tested at the laboratory of the DISCOM.
2. Copy of the IEC/IS Test certificates of PV modules, Inverter, Cable etc.
3. Data sheets/Drawing for the array mounting System.
4. Staad Pro report – Module mounting structure. (If required)
5. Actual Single line wiring diagram (SLD) of the Solar Rooftop Photovoltaic System and estimated energy generation report.
6. Copy of Maintenance & Operation information manual provided by the System Installer
7. Copy of commercial agreement with the third party if any.
8. Certificate from CEI / EI, if applicable.

ANNEXURE-XIII: INTIMATION FOR REMOVAL OF SYSTEM DEFICIENCY**Intimation for Removal of Deficiency in the system installed****(To be filled by the DISCOM)**

To:

(Consumer applicant's name) M/S / Mr. / Mrs. _____

Date:_____

Ref: Your application No._____ dated _____

Subject: Intimation for Removal of Deficiency found during inspection

As requested by you in the letter dated to carry out inspection & synchronization of your_____KWp system, inspected the premises and we have found the following deficiencies in the system:

- a)
- b)
- c)etc

We request you to attend the above deficiencies within 15 working days and submit a re-request for inspection.

Signature of Officer:

Designation

ANNEXURE-XIV: SYNCHRONISATION CERTIFICATE**Synchronisation with the DISCOM grid, Installation of Meter(s) and COD.***(To be filled by the DISCOM)***To,**

(Applicant's name) M/s / Mr. / Mrs. _____

(Consumer No.) _____

Ref: Your application No. _____ dated _____

Sir/Madam,**Sub:**

1. Synchronization with the DISCOM Grid;
2. Installation of Meter(s);
3. Commercial Operation Date.

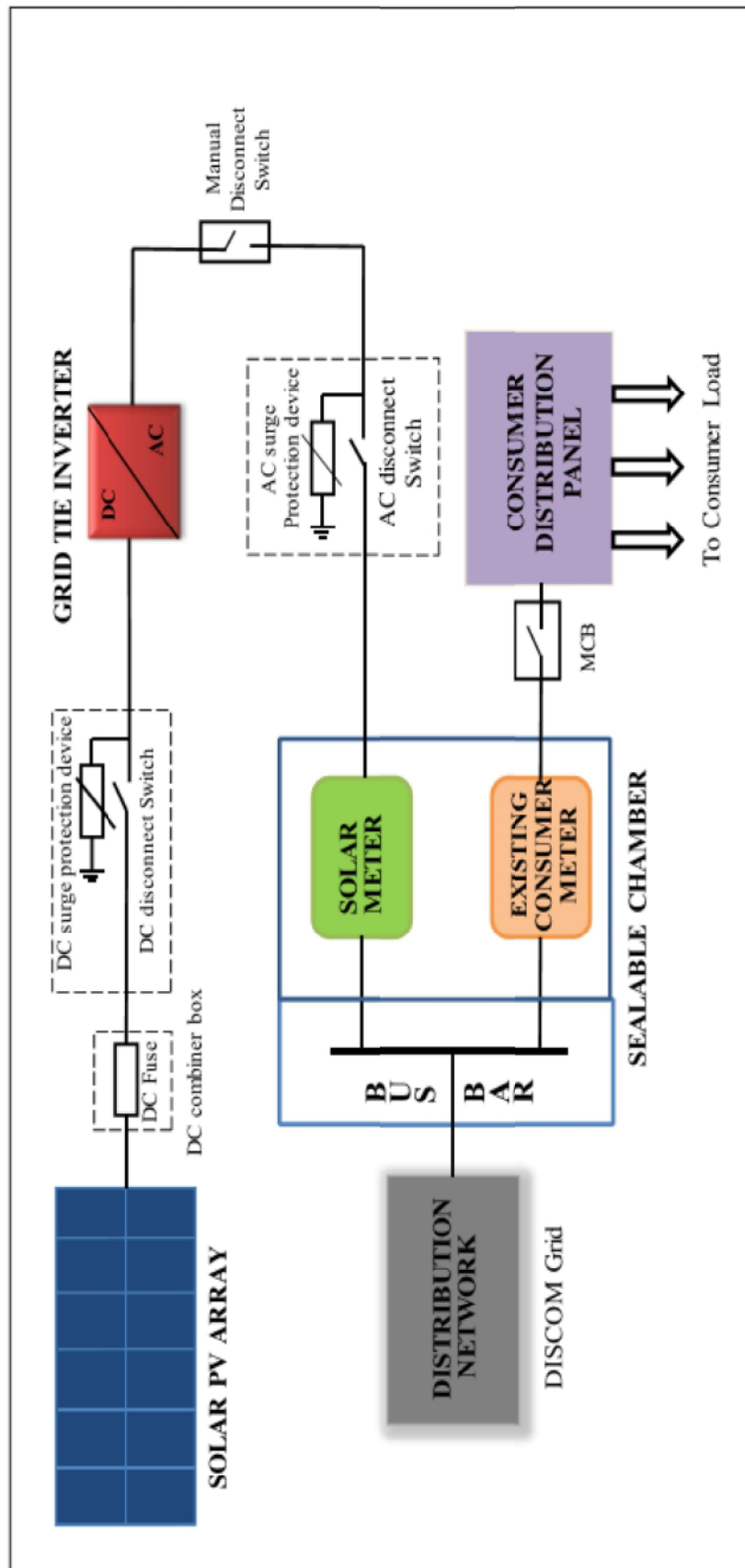
Synchronization test of Solar Rooftop PV system of _____ kWp, installed on the roof of your installation bearing Application No _____ has been conducted and your RTSPV system found satisfactory and successfully synchronized with the grid. Meter with no has been installed and sealed.

Yours faithfully,

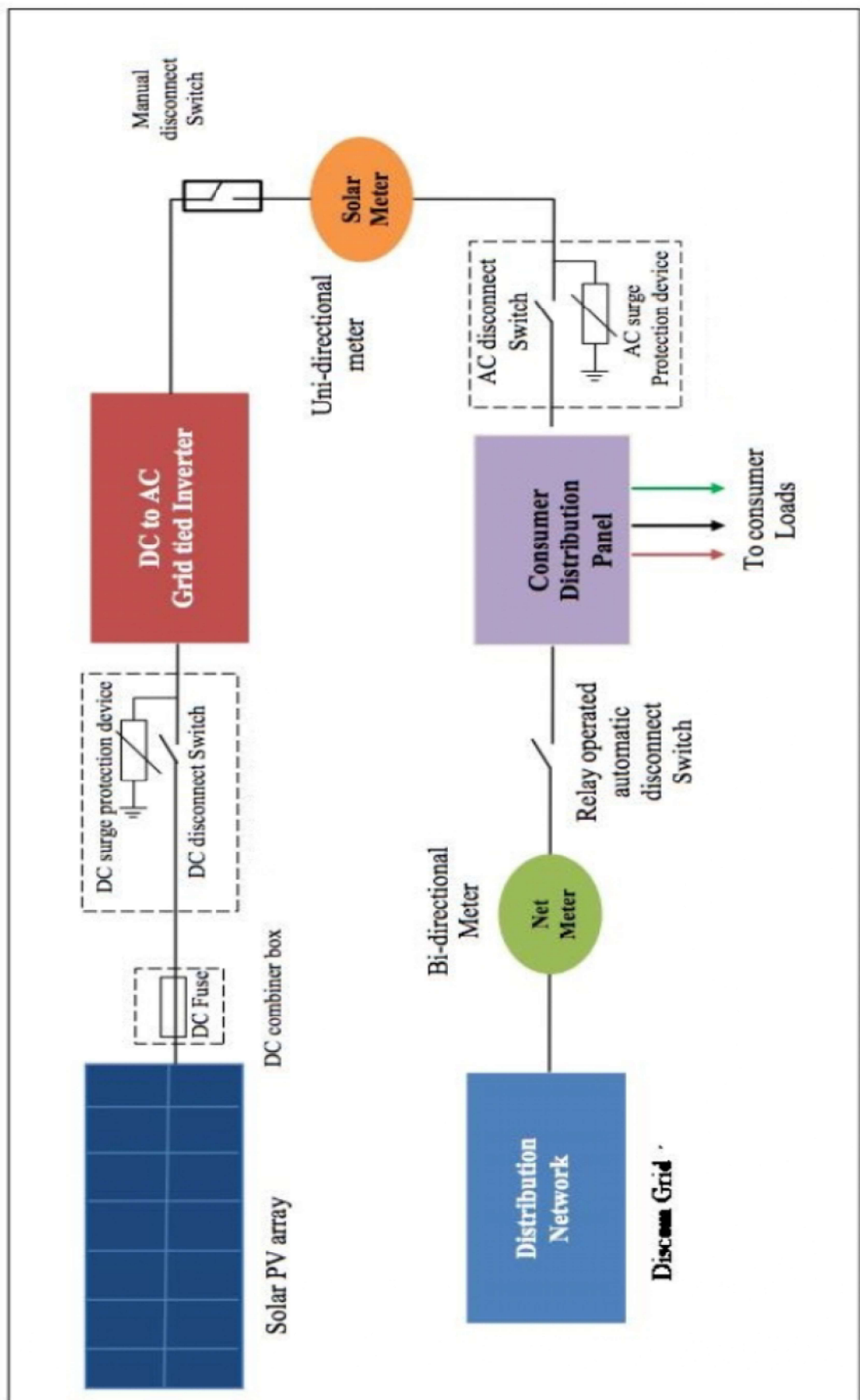
Signature of Officer:

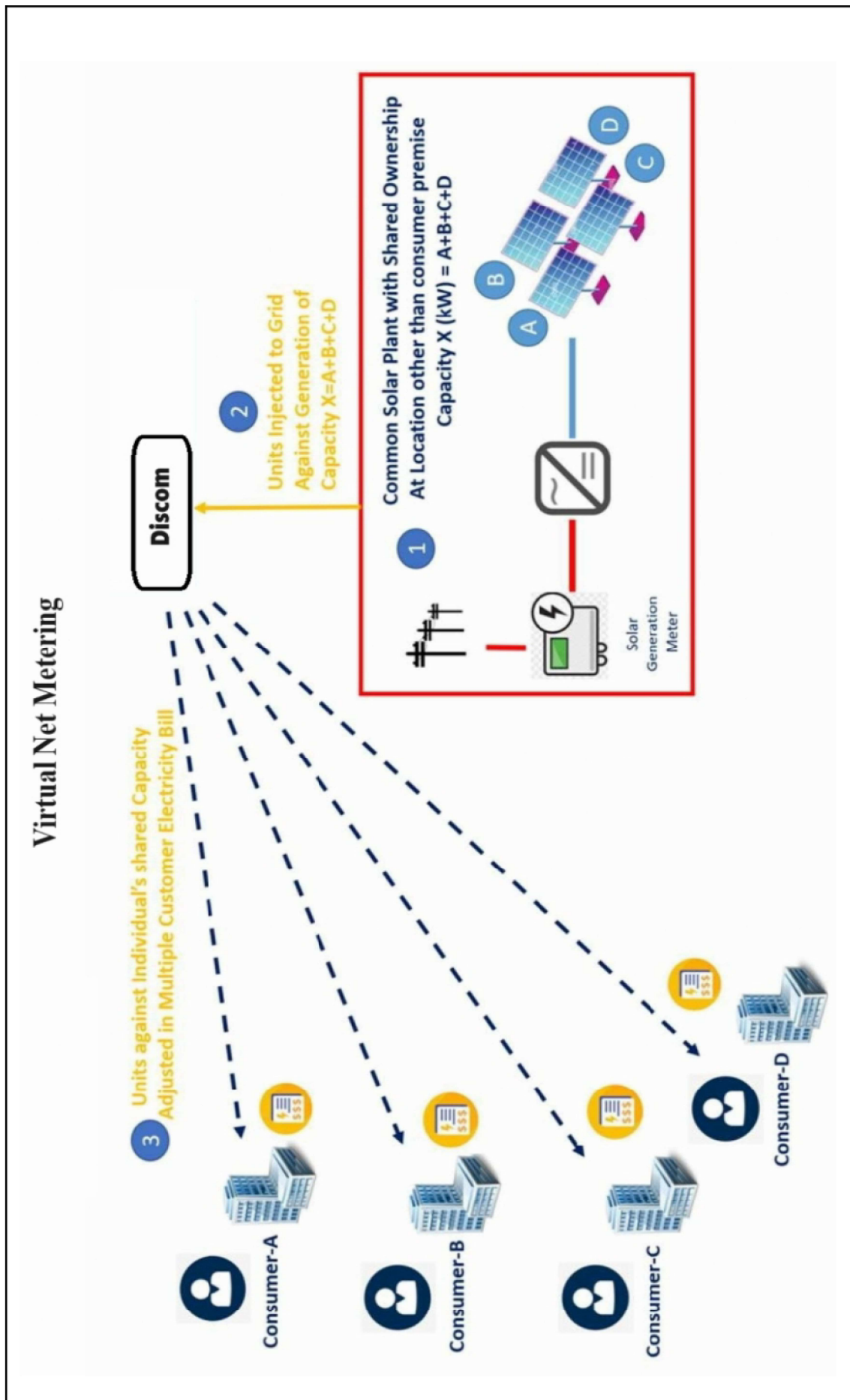
Designation

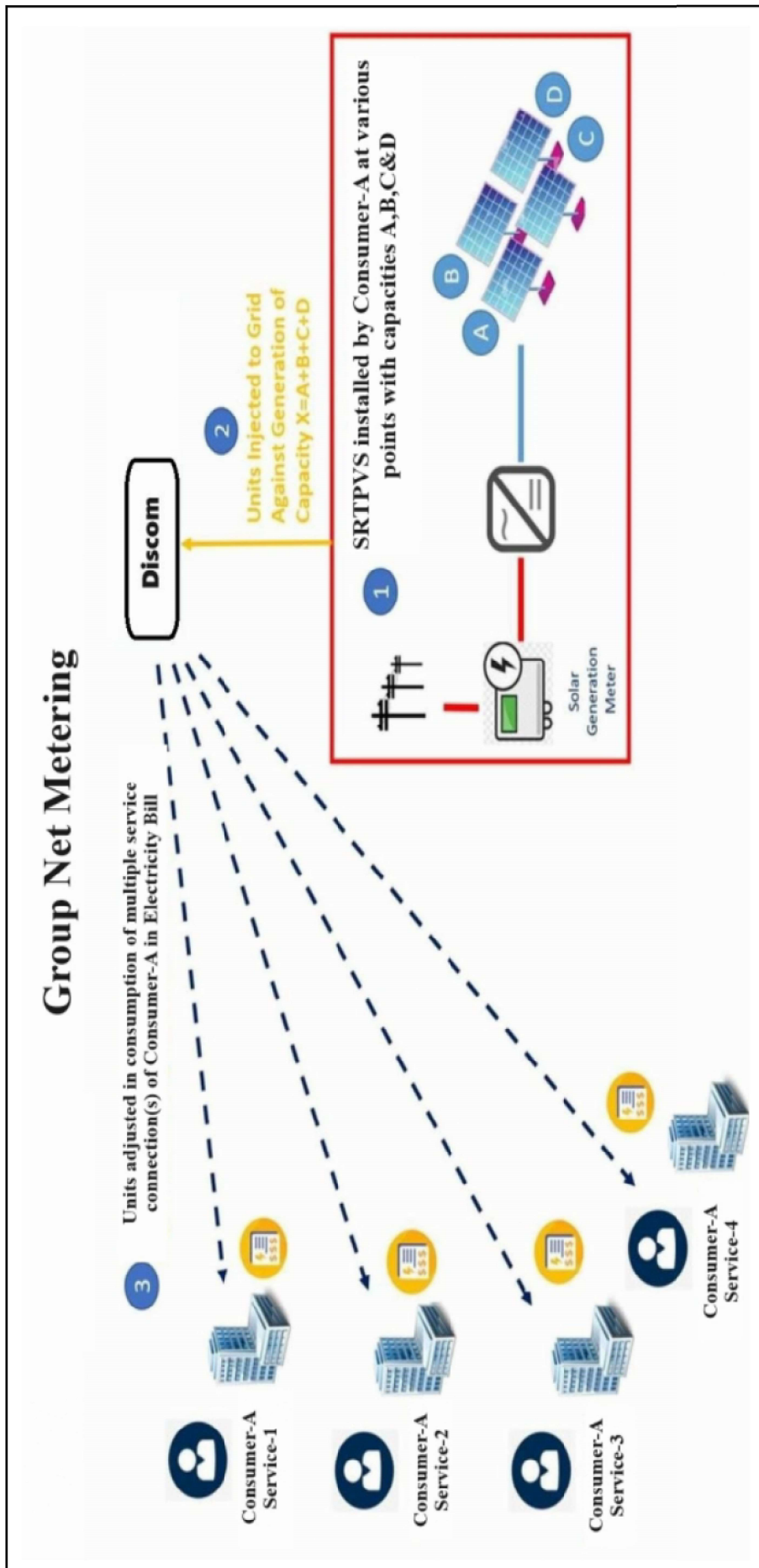
Schematic Diagram of Rooftop Facility for Gross Metering Interconnection



Single Line Diagram of Rooftop Facility for Net Metering Interconnection







Illustrations of Net Metering/Net Billing or Net Feed In/Gross metering

Assumption-1: Applicable Retail Tariff as per TO FY 2023-24

Assumption 2: Feed In Tariff

For Net Metering/Net Billing projects	2.09
Gross Metering at LT Supply	3.13
Gross metering in HT Supply up to 1500 kWp	2.92
Gross metering in HT/EHT Supply of plant capacity from 1501 kWp to 5000 kWp	2.71
Gross metering in HT/EHT Supply with Battery Storage	4.17

Assumption 3: 65% of Energy Generated from SRTPVS is exported to the grid in case of Net Metering and Net Billing.

Assumption 4: This illustration is for individual cases under LT Supply, whereas, the losses and charges as per the Orders of the Commission shall be accounted for while netting of the energy/bill in the Case of Group/Virtual Net Metering.

Prior to SRTPVs installation

Month	Energy Requirement of Consumer (i.e., Energy Consumption from Discom prior to installation of SRTPVS)	Retail Supply Tariff for LT-III (A) Industrial-General Category	Actual Energy Charges without SRTPV System (Rs)
Jan	425	6.70	2,848
Feb	525	6.70	3,518
Mar	575	6.70	3,853

Case 1: Net Metering

Energy Generated by S RTPVS	Self Consumption	Exported Units by S RTPVS to DISCOM (Units)	Billed Demand/Consumption from DISCOM (Units)	# Net Energy (Units)	FIT (Rs./kWh)	Net Monthly Payment by DISCOM to Consumer in Bill (Rs.)	Retail Supply Tariff for LT-III (A) Industrial-General Category	Net Monthly Payment by Consumer to DISCOM in Bill (Rs.)
A	B	C=A-B	D	E=D-C	F	G=E*F (if C>D)	H	I=D*H (if C<D)
500	175	325	250	-75	2.09	156	6.70	-
500	175	325	350	25	2.09	0	6.70	168
500	175	325	400	75	2.09	0	6.70	503
#If +VE, Consumer has to pay to DISCOM vice versa								

Case 2: Net Billing or Net Feed-In

Month	Energy Generated by S RTPVS	Self Consumption	Energy injected to DISCOM at Net Meter (Units)	Consumption from DISCOM recorded at net Meter (Units)	Retail Supply Tariff for LT-III (A) Industrial-General Category	Monetary value of the Imported Energy by the Consumer (Rs.)	FIT (Rs./kWh)	Monetary Value of the Exported Energy @ FIT (Rs)	Net Monthly Payment by Consumer to DISCOM in Bill (Rs.)#
	A	B	C=A-B	D	E	F=D*E	G	H=C*G	I=F-H
Jan	500	175	325	250	6.70	1,675	2.09	678	997
Feb	500	175	325	350	6.70	2,345	2.09	678	1,667
Mar	500	175	325	400	6.70	2,680	2.09	678	2,002
#If +VE, Consumer has to pay to DISCOM vice versa									

Case 3: Gross Metering

Month	Energy Generated by S RTPVS and injected to DISCOM through Gross Meter (Units)	Consumption from DISCOM (Units)	FIT (Rs./kWh)	Retail Supply Tariff for LT-III (A) Industrial-General Category	Monthly Credit Amount to be paid by DISCOM to Consumer (Rs.)	Monthly Bill Amount to be paid by Consumer to DISCOM (Rs.)	Net Monthly Payment by Consumer to DISCOM in Bill (Rs.)
	A	B	C	D	E=A*C	F=B*D	G=F-E
Jan	500	425	3.13	6.70	1,564	2,848	1,284
Feb	500	525	3.13	6.70	1,564	3,518	1,954
Mar	500	575	3.13	6.70	1,564	3,853	2,289

- All the Figures rounded off up to two decimals