ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION HYDERABAD.

Draft

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 proposes to bring in a comprehensive 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. Therefore, 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 draft 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:**

- 2.1 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 decided by the Commission.
 - (xi) **"Group 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 city/town 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 Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as decided by the Commission.

- (xii) "Net Metering for multiple services of individual consumer" 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 city/town 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 Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as decided by the Commission.
- (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 Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as decided by the Commission.;
- (xiv) **"Interconnection point"** means the interface of the Solar Rooftop Photo Voltaic 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.

- (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 a third party (RESCO/ESCO/Any Developer) for exporting the energy from the Grid Interactive Solar Rooftop Photovoltaic system under the gross/net metering on a rooftop/wall/open space within the consumer's premises through a commercial agreement between such consumer(s) and third party.
- (xxii) "Feed in Tariff" means the tariff decided by the Commission at which the exported energy under Net/Gross metering shall be paid by the distribution licensee to the prosumers;
- 2.2 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 "SRTPVS"
 - 3.2 The distribution licensee shall offer the provision of net/gross metering arrangement to the consumer, who intends to install the grid-interactive **SRTPVS**, 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 **SRTPVS** 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 **SRTPVS** with or without Battery storage.

Provided that the battery charging shall be done from only an **SRTPVS**

- 3.5 The consumers of the EHT network shall approach the Transco through the DISCOM for connecting the **SRTPVS**s 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 damage 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.

Provided that the Distribution Licensee, considering the criticality, may call upon the prosumer to rectify the defect within a reasonable time/to refrain from indulging in such violations in the future.

- 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 supply or grid.
- 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 registered companies, Government entities, partnership companies/ firms/ individuals, who are the consumers of AP Discom(s) are eligible for setting up of the Grid-Interactive **SRTPVS** with/ without Battery Energy Storage System.
- 4.2 Group of persons/Societies who are the consumers are also eligible for setting up the Grid Interactive **SRTPVS** with/ without Battery Energy Storage Systems.

5. Capacity of Rooftop Systems

- 5.1 The capacity of a Grid-Interactive **SRTPVS** with/ without Battery Energy Storage System under Net/Gross metering 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/Group Net Metering framework to be installed by any consumer(s) shall not be less than 5 **kWp**.
- 5.3 The capacity of the Grid-Interactive **SRTPVS** with/ without Battery Energy Storage System under the Net Metering framework to be installed by any consumer(s) shall not be more than **500 kWp or the contracted demand(s) 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 |
| Individual Net Metering | 1 kWp | 500 <u>kWp</u> | Contracted load /Contracted |
| Net Metering of Multiple Services of an individual | 5 kWp | 500 kWp | demand of the consumer |
| Group Net Metering | 5 kWp | 500 kWp | |
| Gross Metering | 1 kWp | 5000 kWp | |

5.7 The permissible capacity of the Grid-Interactive **SRTPVS** at various voltage levels is shown in the table below:

| Sr. No. | Voltage | Phase | Capacity |
|---------|--------------------------|--------------|--|
| 1 | LT, 240 V | Single Phase | Up to 3 kWp |
| 2 | LT, 415V | Three Phase | 3 kWp to 56 kWp |
| 3 | HT, 11kV | Three Phase | 56 kWp to 1500 kWp |
| 4 | HT, 33 kV | Three Phase | 1501 <u>kWp</u> to 5000 <u>kWp</u> |
| 5 | EHT, 132 kV and above | Three Phase | 5000 kWp |

- 5.8 The cumulative capacity of all Grid-Interactive **SRTPVSs** under Net/Gross Metering Arrangements connected to a particular Distribution Transformer/feeder of the Licensee shall not exceed 80% of its rated capacity:
 - Provided that the Distribution Licensee may allow Net Metering/ Gross Metering exceeding 80% of such rated capacity upon consideration of a detailed load study carried out by it.
- 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/ 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 DSICOMS shall provide the information on the cost of the meter/metering equipment applicable to **SRTPVS**s on their website within one month from the date of notification of this regulation. The DISCOMS shall provide the Gross/Net meter. Where the meters are not available with the DISCOMS, 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 may be installed after testing by the DISCOMs or on verification of a thirdparty testing certificate from NABL.
- 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 its availability 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 synchronization.
- 7.5 Meter reading shall be done as per the prevailing procedure.

8. Feed-in Tariff

- 8.1 Feed-in Tariff as decided by the Commission for the year during which the **SRTPVS** is commissioned will be applicable for 25 years under both Net metering and Gross metering in case of domestic prosumers and for other categories, such feed-in tariff shall be for 12 years. Whenever the feed-in tariff is not decided for any financial year, the tariff of the latest feed-in tariff shall be applicable till a feed-in tariff for that particular year is determined and accordingly the billing shall be reconciled.
- 8.2 The feed-in tariff shall be 50 percent of the Average Pooled power Purchase cost of the financial year as determined by the Commission during which the **SRTPVS** is commissioned under net metering.
- 8.3 The feed-in tariff shall be 75 percent of the Average Pooled Power Purchase cost of the financial year as determined by the Commission during which the **SRTPVS** is commissioned under Gross metering in LT Supply.
- 8.4 The feed-in tariff shall be 70 percent of the Average Pooled Power Purchase cost of the financial year as determined by the Commission during which the **SRTPVS** is commissioned under Gross metering in HT Supply up to 1500 kWp of plant capacity.
- 8.5 The feed-in tariff shall be 65 percent of the Average Pooled power Purchase cost of the financial year as determined by the Commission during which the **SRTPVS** is commissioned under Gross metering in HT/EHT Supply of plant capacity from 1501 kWp to 5 000 kWp.
- 8.6 The feed in tariff shall be the 100 percent of the Average Pooled power Purchase cost of the financial year as determined by the Commission during which the **SRTPVS** is

commissioned under Gross metering in HT/EHT Supply if it supplies the power during the day with Battery Storage as per the requirement of the DISCOMS.

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**s and Consumption are at the same point of the grid. In other cases, 5% of energy injected into the grid by **SRTPVS**s in kind shall be collected/adjusted towards T&D charges and losses. The Grid support charges as determined by the Commission in the tariff orders from time to time shall be applicable.

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 decided by the Commission under Gross/Net metering is 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 centers or through National Portal for Solar Rooftop https://solarrooftop.gov.in/. The DISCOMS shall make their websites accordingly have provisions and also shall register at National Portal for Solar Rooftop. The prescribed format for application is shown in the ANNEXURE-I of this Regulation. The application for the Consumers intended to apply through National Portal for Solar Rooftop, the application in the portal shall be used.

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 acknowledgment 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 communicate the technical feasibility approval in the format shown in the ANNEXURE-IV to consumers 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 non-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 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 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 a Renewable Energy Generating System 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 consumers shall enter into an agreement with the DISCOMS concerned within four months as per the format shown in the ANNEXURE -IX (A) & ANNEXURE- IX (B) from the date of receipt of the technical feasibility approval. In case, within four months of issuing Technical feasibility, if the Agreement is not entered by the consumer, the application is deemed to be cancelled.
- 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 beyond three months, 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 will be in force for a period of 25 years or up to the tenure of the project whichever is earlier from the date of commencement of the agreement in respect of Domestic Consumers and 12 years in respect of the other categories.

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 and provide approval. In the absence of the response within the stipulated time, it shall be considered as deemed inspection approval. In case, any

deficiency identified by the Discom shall be intimated to the consumer as per the format specified ANNEXURE-XIII

- 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 above 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. Erection of **SRTPVS**s behind the meter without the permission of the DISCOMs by any existing consumer shall be treated as a violation of the present regulation. In such cases, the DISCOMS shall disconnect the **SRTPVSs**

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
- 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 for 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.

- 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 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 excess energy at the Feed-in Tariff as decided by the Commission.
- 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 billing month is netted off with the total export quantum of electricity injected during the billing month divided by the time blocks in a billing month.
- Gross Metering: The payment for energy exported from the **SRTPVS**s will be computed at Feed-in Tariff as decided 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 made 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 **SRTPVS**s 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. Sharing of Clean Development Mechanism (CDM) benefits if any

The Consumer shall retain the entire proceeds of CDM benefits in the first year after the date of commissioning of SRP. In the second year, the share of the Distribution Licensees shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, after that, the proceeds shall be shared in equal proportion by the Consumer and the Distribution Licensees.

19. 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.

20. 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.

Power to Remove difficulties: 21.

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.

22. 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.

23. Repeal and Savings

The **SRTPVS**s commissioned under the provisions of earlier/existing Guidelines shall

stand governed by those guidelines till the completion of the term of such agreements

regarding the feed-in tariff. The internal procedures of the DISCOMS specified in

existing guidelines on **SRTPVS**s by EPDCL letter dated 18.02.2019 that are approved

by the Commission by its order dated 25.05.2019 which are not in conflict with the

present regulation shall stand saved.

(By Order of the Commission)

Place: Hyderabad

Date: 06.06.2023

Commission Secretary (I/C)

Bapaiah

14

ANNEXURE-I: APPLICATION FORM

APPLICATION FORM FOR GRID INTERACTIVE SOLAR ROOF-TOP PHOTOVOLTAIC SYSTEM

| | ix recent Passport size oto of the Applicant | For Office Use: Reg. No.: Date: Application fee details: DD No.: |
|--------------------------|---|--|
| To. | | |
| (Des | ignated Officer) | |
| 1 | Name of the applicant | |
| | | H.No.: |
| 2 Applicant full Address | | Street Name: |
| | | Village Name |
| | | Mandal name |
| | | District Name |
| | | Pin code |

Phone/Mobile No

Email ID

3

4

| 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 | | |
|--------------|---|---------------|
| | | H.No.: |
| | | Street Name: |
| 7 | Address of the site for installation | 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) | m² |

| | b) Proposed Capacity under this policy | KW |
|----|--|-------|
| 16 | Average monthly consumption of electricity | Units |

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)

| То: | |
|----------------------------------|---|
| (Consumer ap | plicant's name) M/S / Mr. / Mrs |
| Date: | |
| Ref: | Your application No dated |
| Subject: Intim | ation for Removal of Deficiency in Application |
| | rm you that we have received your above mentioned application and ave found that: |
| The applicatio | n is not complete and following are the lacunae observed: |
| • | - |
| • | (others, if any) |
| working days | ete the application formality by fulfilling the above lacunae within 7 of receipt of this letter. In case you have not completed the formality riod your application shall stand cancelled and paid fees, if any, shall ed. |
| | communication, the applicant can: |
| 1. 2. | Either submit the above details; Or, withdraw the application. |
| Signature of C Designation (A | |

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 and Grid Connectivity of Grid interactive Solar PV System

(To be filled by the DISCOM)

| Date: | | |
|--------|---|---------------------------------------|
| То: | | |
| (Appli | icant's name) M/s / Mr. / Mrs | <u> </u> |
| | | (Consumer No.) |
| Ref: | Your application No | _ dated |
| With | reference to your above mentioned app | lication number, approval is herewith |
| accor | ded for installing Grid Interactive Solar | Rooftop Photovoltaic System of |
| | p in your premises as per following term | - v |

- 1. It is recommended that you select an empanelled system installer of your choice to install the SRTPV system. A list of empanelled installers of grid-connect PV systems by MNRE (Ministry of New and Renewable Energy, Government of India) / NREDCAP (New & Renewable Energy Development Corporation of Andhra Pradesh Ltd.) is available.
- 2. All components of SRTPV system must comply with applicable BIS/IEC standards.
- 3. Applicant must submit the copy of Manufacturers Test Certificates for all components for having complied with relevant BIS/IEC standards of the selected model along with work completion report.
- 4. In case of any changes required at the premises of 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 Solar Rooftop Regulations of the APERC and any amendments thereof from time to time
- 6. In case applicant desires to procure Net meter from DISCOM, he/she needs to intimate the same to DISCOM by filling Format in <u>ANNEXURE-VII</u> along with Net meter fee at least 30 days in prior to expected installation (fee details & technical specifications can be found on website of DISCOM)
- 7. In case the applicant desires to purchase the Net meter on its own (with prior permission from DISCOM), the meters procured by the consumers may be installed after testing by the DISCOMs or on verification of a third-party testing certificate from NABL.
- 8. The DISCOM shall install meter and synchronize the SRTPV system with the grid only on receiving NOC from CEI/EI. For systems exempt from NOC from CEI/EI, consumer need to submit safety certificate issued by a concerned DISCOM

engineer vide G.O.Ms 21.

- 9. Installed system must comply with safety requirements as stated in CEA/APERC Regulations and all standards referred to in those regulations.
- 10. Please submit the following documents after installation of SRTPV system:
 - a. Inspection Report by Chief Electrical Inspector/ Electrical Inspector, Government of A.P., safety certificate issued by Chartered Engineer, as applicable;
 - b. Work Completion report in provided format;
 - c. Test Certificate of Net meter from DISCOM;
 - d. Copy of signed Net Metering Interconnection Agreement.

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:

Name and Designation (AE/ADE): Date:Stamp:

1As per G.O. Order 36 and 38 dated 01.11.2016 & 20.12.2016 respectively government has exempted mandatory inspection by CEI up to 33 KV

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 (AE/ ADE): | | | |

ANNEXURE-VI:

FORMAT FOR INTIMATING DEFICIENCY IN TECHNICAL FEASIBILITY

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)

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 pad by you will be refunded within 7 woring days from the date of the withdrawal letter.

Signature of Officer: Designation (AE/Dy.EE) as applicable

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 Divisional Engineer |
| (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 installation ofkWp system, inspected your installation and we have found the following deficiencies in the the installation: |
| a) b) |
| c)etc |
| We request you to attend the above deficiencies within 15 working days and submit a request for inspection to issue technical feasibility certificate. |
| Signature of Officer: Designation (AE/ADE) or any officer as the case may be |

ANNEXURE -IX (A): AGREEMENT FOR INDIVIDUAL CONSUMER

(Individual Consumer)

| Solar | Rooftop | Net, | /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 their/his/its/ means theirs, Power Distribution Company Ltd. (herein after successors as first party AND _ called Discom) and having its registered office (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 herein after 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 registered companies, Government entities, partnership companies/ firms/ individuals, who are the consumers of AP Discom(s) are eligible for setting up of Grid-Interactive Rooftop Solar Photovoltaic system with/ without Battery Energy Storage System.
- 1.2 Group of persons/societies who are the consumers are also eligible for setting up Grid Interactive rooftop Solar Photovoltaic systems with/ without Battery Energy Storage Systems.

| 2. | Capacity of the Solar Rooftop Photovoltaic System and Maximum Contracted Load |
|----|---|
| | of the premises |

| The consumer is p | proposing to install re | ooftop solar pov | wer plant of | kWp capacity |
|-------------------|-------------------------|-------------------|---------------|--------------|
| under Solar | (Net/ Gross) met | tering facility a | t D.No | ,Street,(V), |
| (M),(Dist) | having | electrical | service | Connection |
| No,Category | ,Distribution | for a contrac | ted load of _ | kW/HP/KVA. |

3. Governing Provisions

The consumer hereby undertake 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 herein after called as "Commission" from time to time and agree not to dispute the same.

4. Technical and Interconnection Requirements

- 4.1The 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, 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 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 consumer for any fiscal or other incentive provided by the central /State government.

7. Duration of the Agreement

This agreement will be in a force for a period of 25 years or up to the tenure of the project whichever is earlier from the date of commencement of the agreement in respect of Domestic Consumers and 12 years in respect of the other categories.

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, party may approach the Commission under Section 86 (1) (f) of EA 2003.

9. Termination

- 9.1 Discom has the right to terminate Agreement on 30 days prior written notice, if 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 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 roof top 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 Connection of Solar Rooftop Power Plant to the grid.

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.

| | for an on behalf of (Discom) |
|---------------------------|---|
| 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)

1. Eligibility

System.

Solar Rooftop Net/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 ANDPower Distribution Company of Andhra Pradesh Ltd. (herein after | | | |
| called as Discom) and having its registered office at 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: | | | |

1.1 All registered companies, Government entities, partnership companies/ firms/

individuals, who are the consumers of AP Discom(s) are eligible for setting up of Grid-Interactive Rooftop Solar Photovoltaic system with/ without Battery Energy Storage

1

1.2 Group of persons/societies who are the consumers are also eligible for setting up Grid Interactive rooftop Solar Photovoltaic systems with/ without Battery Energy Storage Systems.

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

| 2.1 The Group of persons/society is proposing to install rooftop solar power plant of |
|--|
| kWp capacity under Solar(Net/ 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 share of members of the Group of persons/societies are as follows:
- Sl.No. Consumer Name Installed Capacity share Consumer Service number

3. Governing Provisions

The consumer hereby undertake 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 herein after 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, 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 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 consumer for any fiscal or other incentive provided by the central /State government.

7. Duration of the Agreement

This agreement will be in a force for a period of 25 years or up to the tenure of the project whichever is earlier from the date of commencement of the agreement in respect of Domestic Consumers and 12 years in respect of the other categories.

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, party may approach the commission under Section 86 (1) (f) of EA 2003.

9. Termination

- 9.1 Discom has the right to terminate Agreement on 30 days prior written notice, if 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 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 roof top 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 Connection of Solar Rooftop Power Plant to the grid.

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

| | for an on behalf of _ for and on behalf of |
|--|---|
| 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 | d Authority) |
| (Name of the | he DISCOM) |
| (Date) | |
| Ref: Application No | dated |
| | |
| Dear Sir, | |
| Letter of the technic | ntioned my Application number and receiving the al feasibility, I/we intend to install KWp of RTSPV system. In this regard, |
| I/we request DISCOM | to provide a meter/metering equpement for SRTPV installation. The meter shall |
| | etering clause in Solar Rooftop Regulations of the |
| I/We agree to pay fee of INR mode/ DD/ cheque | as mentioned in DISCOM website via online |
| | |
| 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 | e 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 App | lication No.: |
| out by CEA/ | System has been installed as per the technical and safety standards laid APERC/ DISCOM. s ready for synchronisation with the DISCOMs grid and installation of |
| Name of the | Applicant: |
| Signature: | |
| Enclosures: | |
| 1. | NOC from CEI/EI, if applicable |
| 2. | A copy of Work Completion Report along with the details of all |
| _ | of SRTPVS as submitted to the CEI/ EI, as applicable. |
| 3. | Manufacturer's test certificate of all the components used in |

installation of the Solar Rooftop Photovoltaic System.

ANNEXURE-XII: WORK COMPLETION REPORT

Work Completion Report (To be submitted by the applicant for systems inspection)

| То, | | | |
|-----------------------|----------------------------|--|--|
| Sir/ | Madaı | m, | |
| | Su | ab: Submission of work completion report (by the applicant) for system document requirements. | |
| | Re | ef: Our Application No.:dated: _ | |
| comj subr to ar | pleted nit the range | rence to the above, I hereby confirm to ye the work of installation of the renewable e following basic information for your peruse to Inspect and Commission the system at the stalls of the Solar PV module | nergy system and al and request you |
| | 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) | |
| В | . Det | ails 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) | |
| 1 0 | 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 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 | |

| • | | |
|-----------------|--|--|
| E. D | Petails of the AC wiring | |
| 1 . | Make / Name of manufacturer | |
| 2 | Size & Type | |
| 3 | Applicable Standard (IEC) | |
| F. Det a | ails of the DC distribution box | |
| 1 . | Make / Name of manufacturer | |
| 2 | Sl. No. | |
| 3 | High quality suitable capacity MOVs/SI along with suitable reverse blocking dioc | |
| 4 | MCB /Isolator quantity & capacity | |
| 5 | Size & Type | |
| 6 | Applicable Standard (IEC) | |
| G | 3.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 | |
| | | |

3

Applicable Standard (IEC)

| 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 Modules,mounting structure & DC Surge protection device Inverter, AC Surge protection device Lightening Arrester | Yes / No Yes / No 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 meter details, if purchased by 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 | 0 | |
|---|---|--|--|
| 9. | Reference Voltage & PT R | Ratio | |
| 10. | Date of Test by MT, DISC | COM | |
| 11. | Applicable Standard (BIS | S/IEC) | |
| 12. | Month & Year of Manufa | cture | |
| 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 | | | |
| equipment | nat the above said SRTPV s used comply with the Tech | ystem was installed and the nnical and Safety standards as / DISCOM under net metering | |
| Signature of the Applicant Name and Signature of the System Installer | | | |
| Name and | Address with Seal | | |
| Name: Name of the firm and address: | | Name of the firm and | |

Enclosures:

- 1. Test report of net meter tested at the laboratory of the DISCOM.
- 2. Copy of the IEC/IS Test certificates of PV modules, Inverter, Cable

Date:

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. (PVsyst/ PVSol/ etc.)
- 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, wherever applicable.

ANNEXURE-XIII: INTIMATION FOR REMOVAL OF SYSTEM DEFICIENCY

Intimation for Removal of Deficiency in the system installed (To be filled by the DISCOM)

ANNEXURE-XIV: SYNCHRONISATION CERTIFICATE

Synchronisation with the DISCOM grid, Installation of Meter(s) and COD. (To be filled by the DISCOM)

| To | ο, | |
|-----------|--|---|
| | nt's name) M/s / Mr. / M ner No.) | rs |
| Ref: You | r application No | dated |
| Sir/Mad | am, | |
| ; | Sub: | |
| 2. | Synchronization with th Installation of Meter(s); Commercial Operation I | |
| of your i | installation bearing Applic SPV system found satisf | top PV system of kWp, installed on the roof cation No has been conducted and actory and successfully synchronized with the has been installed and sealed. |
| Yours fai | ithfully, | |
| Signatur | e of Officer: | |
| Name an | d Designation (Dy.EE/EF | c) or any officer as the case may be |
| Date: | | |