ಚಾಮುಂಡೇಶ್ವರಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ನಿಗಮ ನಿಯಮಿತ
(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸ್ವಾಮ್ಯಕ್ಕೆ ಒಳಪಟ್ಟಿದೆ)
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Guidelines for installation of Grid connected Solar Roof Top Photovoltaic (SRTPV) System for the applications registered on or after 01.04.2023.

This document describes the general conditions and technical requirements for connecting Solar Rooftop Photovoltaic (SRTPV) system to CESC, Mysuru grid in accordance with the provisions provided by Indian Electricity Act 2003, Karnataka Solar policy 2014-21 dated: 22.05.2014 & its amendments, the KERC (Implementation of Solar Rooftop Photovoltaic Power Plants) Regulations, 2016 and Tariff orders issued by KERC as amended from time to time and distribution code approved by KERC.

A. Procedure for commissioning SRTPV system of capacity 1kW-2000kW (excluding 1kW to 10kW domestic consumers):

1. **Registration of Application:**

   i. All the consumers (excluding 1kW to 10kW domestic consumers) shall submit applications to install SRTPV plant of capacity ***1kWp to upto 2000kWp***, with their own investment, with the capacity equivalent to the sanctioned load of the respective consumer's installation ***either by net metering arrangements or gross metering arrangements.***

   ii. The application can be downloaded from CESC, MYSORE website **(https://cescmysore.karnataka.gov.in) i.e. *Format-1: Application form for Grid connectivity Solar Roof Top PV Generation system on Gross/Net Metering Basis*.**

   iii. An applicant shall submit the application along with necessary documents to concerned O&M sub-division, CESC, Mysuru by paying the prescribed fees.

   iv. The fee details are as follows:

Sl.No.	Capacity	Registration fee	Facilitation fee
1.	>1 kWp upto 5 kWp	Rs.500/-	Rs.1000/-
2.	> 5kWp upto 50kWp	Rs.1000/-	Rs.2000/-
3.	> 50 kWp upto 2000 kWp.	Rs.2000/-	Rs.5000/-

   Note: In case of cancellation of the Application, the application fee and facilitation fee are non-refundable.

   v. If the applicant is not the owner of the property or authorized person and the property is in the name of the Company, Trust, Co-operatives /partnership firms, then authorization shall be assigned to a person for correspondence, paperwork, execution of agreements, etc. in the ***Format-1A: Letter of***

Authorization. Such person must be authorized by the management of the organization.

vi. In case of partnership firms, the authorized signatory must be one of the partners, to whom written consent has been given by the other partners in the ***Format-1B: Letter of Authorization***.

vii. If the consumer has availed MNRE Subsidy, sanctioned copy of ***MNRE Subsidy*** shall be submitted at the time of submission of application.

viii. The applicant shall furnish the self-certification in the ***Format - 1C: Certificate for not availing subsidy from MNRE,*** if he is not availed MNRE Subsidy.

2. The Sub-Divisional Officer (SDO) shall be **Nodal point of contact** for solar RTPV system.

3. Separate Application Register shall be maintained at sub-divisional office for Solar Rooftop installations as prescribed in the ***Format-2: Solar Rooftop Photovoltaic Systems application register***.

4. After registration, application shall be forwarded to Revenue Section for verification. SA/AAO of the SDO shall furnish the details such as Name, RR No., sanctioned load, tariff, arrears if any, etc in the ***Format-3 : Revenue Report***.

5. a) After verification of the application by Revenue section, the application shall be forwarded to concerned Section Office **(for LT installations of capacity upto 150 kWp)** for spot inspection and the concerned Section Officer shall inspect the spot & submit the ***Format – 4: Technical feasibility report for LT installations of capacity upto 150 kWp.***

   b) The SDO shall inspect the spot and submit ***Format – 4 :Technical feasibility report*** *for capacity* ***above 150kWp & upto 2000 kWp.***

Note: Following shall be verified while furnishing the Technical Feasibility report.

i. The Solar rooftop PV Power plants shall be connected to the distribution network at the connectivity level as specified below.

Sl. No.	Installed Capacity of SRTPV	Voltage level
1.	Upto 5kWp	230V-Single Phase LT
2.	Above 5kWp and upto 150kWp	400V- Three Phase LT
3.	Above 150kWp and upto 2000kWp	11kV HT

ii. Each **SRTPV plant of less than 150kW capacity** shall be connected only to the existing distribution transformer through which the eligible consumers are being supplied electricity. In such cases, the total capacity of the existing and proposed SRTPV plants on that distribution transformer shall not exceed 80% of the rated capacity.

iii. Every **SRTPV plant of more than 150kW** shall be connected only to the existing 11kV Distribution System. In such cases, the total capacity of the existing and proposed SRTPV plants on that feeder shall not exceed 80% of the rated current carrying capacity of that line.

iv. The Distribution Licensee while evaluating the technical feasibility of any

proposed SRTPV plant shall ensure that the above said parameters are adhered to and **any system improvement works beyond interconnection point shall be taken up by the Distribution Licensee for the purpose of connecting the SRTPV plant with the grid**.

6. The Sub-divisional officer (SDO)/Divisional Officer (DO) shall issue the ***Format-5 : Intimation letter*** for execution the Power Purchase Agreement (PPA) after verifying the Technical feasibility Report.

7. **A) For SRTPV capacity upto and inclusive of 1000 kWp** : The SDO/DO shall execute the PPA with the Applicant on non-judicial Rs.200/- stamp paper in the KERC approved format.

   The SDO/DO shall issue the ***Format-6 : Approval letter*** to the applicant to install the SRTPV installation **(for capacity upto and inclusive of 1000 kWp).**

   B) For SRTPV capacity above 1000kWp: The PPAs for a capacity above 1000 kW shall be submitted to the Commission for approval.

   The Divisional Officer shall execute the PPA with the applicant on non-judicial Rs.200/- stamp paper as per the approved standard PPA format and forward the same to General Manager (Commercial), Corporate Office, CESC for onward submission to KERC for approval along with the following documents.

   1. Application Form **(Format-1).**
   2. **Format-1C** if the applicant is not availing MNRE Subsidy.
   3. Sanctioned copy of **MNRE Subsidy** if the applicant is availing MNRE Subsidy.
   4. Technical feasibility Report **(Format-4).**
   5. Original PPA.
   6. Detailed Project Report (DPR).
   7. DD of Rs.5000/- per MW or part thereof of contracted capacity shall be drawn in favour of **The Secretary, KERC payable at Bengaluru towards processing fee for approval of PPA**.

   C) The GM (Commercial), Corporate Office, CESC shall forward the PPA to Hon'ble Commission for Approval.

   D) After receiving the approval for PPA of SRTPV capacity above 1000kWp from the Commission, the DO shall issue the ***Format-6 : Approval letter*** for installing Solar RTPV system.

8. **The Power Purchase Agreement(PPA) Execution Authority for SRTPV installations:**

Sl.No.	Capacity of SRTPV Plant	PPA execution Authority
1.	For all LT Installations	Assistant Executive Engineer(Ele) of concerned O & M Sub-Division
2.	For all HT Installations	Executive Engineer(Ele) of concerned O & M Division

9. The Applicant/System installer of SRTPV system shall submit the following documents along with ***Format-7 : Work completion report*** to the approving authority (O&M, AEE/EE of CESC, MYSORE):

   a) Specifications of all equipment's and manufacturer's test reports and test certificate of modules and inverters.

   b) Test certificates of bi-directional meter from MT division, CESC, MYSORE.

10. The SDO/DO shall inspect the plant for commissioning the project after receipt of work completion report from the consumer and furnish the checklist for solar rooftop PV grid safety qualification as ***Format-8: Checklist for Solar Rooftop PV grid safety qualification.***

11. The SDO/DO along with MT staff shall commission and synchronize the SRTPV Plant after submission of work completion report by the applicant, after ensuring that the SRTPV applicant has attended all the observation made by SDO/DO/MT staff, if any and verification of the documents said in the Sl.No.10 submitted by the applicant.

Note:

i. O&M, AEE/EE shall inspect the PV modules connections, earthing, isolating switches, functions of inverter, sealing of the energy meters, meter boxes, recording of readings, preparation of testing and commissioning reports.

ii. Equipment earth:

- All the non-current carrying metal parts are bonded together and connected to earth to prevent shocks to the manpower and protection of the equipment.
- Earthing shall be done in accordance with IS 3043-1986, provided that earthing conductors shall have a minimum size of 6.0 mm^2 copper or 10 mm^2 aluminum wire or 3 mm^2 X 70 mm^2 hot dip galvanized steel. Unprotect aluminum or copper-clad aluminum conductors shall not be used for final underground connections to earth electrodes.
- A minimum of two separate dedicated and interconnected earth electrodes must be used for the earthing of the solar PV system support structure with a total earth resistance not exceeding 5 ohm.
- The earth electrodes shall have a pre-cast concrete enclosure with a removal lid for inspection and maintenance. The entire earthing system shall comprise non-corrosive components**.**

iii. Surge Protection:

- Surge protection shall be provided on the DC side and the AC side of the solar system.
- The DC surge protection devices (SPDs) shall be installed in the DC distribution box adjacent to the solar grid inverter.
- The AC SPDs shall be installed in the AC distribution box adjacent to the solar grid inverter.
- The SPDs earthing terminal shall be connected to earth through the above mentioned dedicated earthing system. The SPDs shall be of Type 2 as per IEC 60364-5-53.

- The PV module structure components shall be electrically interconnected and shall be grounded

12. The Commissioning & Synchronizing report of SRTPV system shall be as per the prescribed format i.e. **Format-9.**
13. The SDO/DO shall issue Synchronization certificate to the Applicant in **Format-9A**.
14. The SRTPV plant Commissioning & Synchronizing Authority:

Sl.No.	Capacities	Commissioning & Synchronizing Authority
1.	All LT installations	Assistant Executive Engineer(Ele), Concerned O & M Sub-Division in Coordination with Meter Testing (MT) staff
2.	All HT installations	Executive Engineer(Ele), Concerned O & M Division in Coordination with Meter Testing (MT) staff

15. The Applicant can select any system installer to install the SRTPV System who has experience in design, supply and installation of SRTPV system.
16. The cost of distribution network upto the interconnection point shall be borne by the applicant as per KERC (Implementation of Solar Rooftop Photovoltaic Power Plants) Regulations, 2016, Clause 6 (1) (d).
17. **SRTPV applicant shall be totally responsible for planning, design, construction, reliability, protection and safe operation of all the equipment's subject to the regulations for construction, operation, maintenance, connectivity and other statutory provisions as per KERC notified PPA clause 1.6 (a).**
18. The Technical, Safety, Grid Connectivity standards are to be followed as per KERC notified PPA as below:

    a) **Clause-1, Technical and Interconnection requirement,**
    b) **Clause-2 (Safety) &**
    c) **Clause-7 (Metering)**

19. **CESC reserves the right to inspect the entire plant routinely at any time as per the Conditions of Supply to the Distribution Licensees clause 18, access to Consumer Premises.**

20. **The check meter shall be provided for SRTPV systems capacity of more than 20kWp.**

21. As per Government of Karnataka Notification No. EN 135 EBS 2018 dated: 27.08.2018, Generating units having capacity to produce electricity above 1 MW from Solar Rooftop sources of energy shall be inspected by the Electrical Inspector before commissioning.

22. **Solar Rooftop generation units installed as per the KERC (Implementation of Solar Rooftop Photovoltaic Power plants) Regulations, 2016 shall be inspected periodically by the Electrical Inspectorate as per Regulations 30 of Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010.**

23. The Commission has decided to allow net metering arrangement for the multiple registered consumers/single registered consumer in the same premises having an existing SRTPV plant and willing to enhance the capacity of the plant within the sanctioned load or increase the sanctioned load to enhance the capacity of SRTPV plant, by executing a separate PPA and connected to the same load. The tariff for the enhanced capacity will be the prevailing tariff as on the date of execution of the second PPA. The billing arrangement will be on prorata basis with reference to the generated energy and tariff as per the respective PPAs.

24. The SRTPV Consumer shall pay the Electricity tax and other statutory levies pertaining to SRTPV generation as levied from time to time.

25. **Periodical inspections:**
    - The meters, both uni-directional and bi-directional, are to be tested as per Schedule by MT staff once in 6 months as per KERC norms.
    - The inverter functionality of every installation is to be checked by MT staff of CESC, MYSURU once in 6 months.
    - Periodical test reports/inspection reports shall be submitted to the concerned O&M sub-divisional office.

26. After commissioning the SRTPV System, SDO/DO shall submit copy of the following **documents to the General Manager (Commercial), Corporate Office, CESC, MYSORE.**

    1. Application Form **(Format-1)**
    2. PPA **(Format-6A/Format-6B)**
    3. Approval Letter **(Format-7)**
    4. Synchronization and Commissioning Certificate **(Format-9 & Format-9A).**

27. **The consumers are allowed to install Solar panels and other equipment confirming to standards specified by IEEE/BIS, without insisting on procurement from the ESCOM's empanelled vendors**

B. Procedure for commissioning SRTPV system of capacity 1kW to 10kW domestic consumers:

1. All the domestic consumers shall submit applications along with PPA in the KERC approved format, to install solar roof top PV plant of capacity 1kWp to 10kWp with their own investment either by net metering arrangements or gross metering arrangements. No separate PPA is required to be executed. The submission of application is deemed to be the approval to commence the work.

   Provided that, the capacity of the SRTPV plant should not exceed sanctioned load of the respective consumer's installation.

2. The letter of approval shall be issued on the day of submission of application.

3. The Applicant/Consumer of SRTPV plant shall submit the following documents along with ***Format-7: Work completion report*** to the approving authority (O&M, AEE/EE of CESC, MYSORE) within 150 (one hundred and fifty) days from the date of uploading/ submission of application.

   a) Specifications of all equipment's and manufacturer's test reports and test certificate of modules and inverters.

   b) Test certificates of bi-directional meter from MT division, CESC, MYSORE.

4. The SDO/DO shall inspect the plant for commissioning the project after receipt of work completion report from the consumer and furnish the checklist for solar rooftop PV grid safety qualification as ***Format-8: Checklist for Solar Rooftop PV grid safety qualification.***

5. The SDO/DO along with MT staff shall commission and synchronize the SRTPV Plant after submission of work completion report by the applicant, after ensuring that the SRTPV applicant has attended all the observation made by SDO/DO/MT staff, if any and verification of the documents said in the Sl.No.10 submitted by the applicant.

Note:

i. O&M, AEE/EE shall inspect the PV modules connections, earthing, isolating switches, functions of inverter, sealing of the energy meters, meter boxes, recording of readings, preparation of testing and commissioning reports.

ii. Equipment earth:

- All the non-current carrying metal parts are bonded together and connected to earth to prevent shocks to the manpower and protection of the equipment.
- Earthing shall be done in accordance with IS 3043-1986, provided that earthing conductors shall have a minimum size of 6.0 mm^2 copper or 10 mm^2 aluminum wire or 3 mm^2 X 70 mm^2 hot dip galvanized steel. Unprotect aluminum or copper-clad aluminum conductors shall not be used for final underground connections to earth electrodes.
- A minimum of two separate dedicated and interconnected earth electrodes must be used for the earthing of the solar PV system support structure with a total earth resistance not exceeding 5 ohm.

- The earth electrodes shall have a pre-cast concrete enclosure with a removal lid for inspection and maintenance. The entire earthing system shall comprise non-corrosive components**.**

iii. Surge Protection:

- Surge protection shall be provided on the DC side and the AC side of the solar system.
- The DC surge protection devices (SPDs) shall be installed in the DC distribution box adjacent to the solar grid inverter.
- The AC SPDs shall be installed in the AC distribution box adjacent to the solar grid inverter.
- The SPDs earthing terminal shall be connected to earth through the above mentioned dedicated earthing system. The SPDs shall be of Type 2 as per IEC 60364-5-53.
- The PV module structure components shall be electrically interconnected and shall be grounded

6. The Commissioning & Synchronizing report of SRTPV system shall be as per the prescribed format i.e. **Format-9.**
7. The SDO/DO shall issue Synchronization certificate to the Applicant in **Format-9A**.
8. The Applicant can select any system installer to install the SRTPV System who has experience in design, supply and installation of SRTPV system.
9. The cost of distribution network upto the interconnection point shall be borne by the applicant as per KERC (Implementation of Solar Rooftop Photovoltaic Power Plants) Regulations, 2016, Clause 6 (1) (d).
10. **SRTPV applicant shall be totally responsible for planning, design, construction, reliability, protection and safe operation of all the equipment's subject to the regulations for construction, operation, maintenance, connectivity and other statutory provisions as per KERC notified PPA clause 1.6 (a).**
11. The Technical, Safety, Grid Connectivity standards are to be followed as per KERC notified PPA as below:

    a) Clause-1, Technical and Interconnection requirement,
    b) Clause-2 (Safety) &
    c) Clause-7 (Metering)

12. **CESC reserves the right to inspect the entire plant routinely at any time as per the Conditions of Supply to the Distribution Licensees clause No.18, access to Consumer Premises.**
13. **The check meter shall be provided for SRTPV systems capacity of more than 20kWp.**

14. **Solar Rooftop generation units installed as per the KERC (Implementation of Solar Rooftop Photovoltaic Power plants) Regulations, 2016 shall be inspected periodically by the Electrical Inspectorate as per Regulations 30 of Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010.**

15. The Commission has decided to allow net metering arrangement for the multiple registered consumers/single registered consumer in the same premises having an existing SRTPV plant and willing to enhance the capacity of the plant within the sanctioned load or increase the sanctioned load to enhance the capacity of SRTPV plant, by executing a separate PPA and connected to the same load. The tariff for the enhanced capacity will be the prevailing tariff as on the date of execution of the second PPA. The billing arrangement will be on prorata basis with reference to the generated energy and tariff as per the respective PPAs.

16. The SRTPV Consumer shall pay the Electricity tax and other statutory levies pertaining to SRTPV generation as levied from time to time.

17. **Periodical inspections:**

    - The meters, both uni-directional and bi-directional, are to be tested as per Schedule by MT staff once in 6 months as per KERC norms.
    - The inverter functionality of every installation is to be checked by MT staff of CESC, MYSURU once in 6 months.
    - Periodical test reports/inspection reports shall be submitted to the concerned O&M sub-divisional office.

18. After commissioning the SRTPV System, SDO/DO shall submit copy of the following **documents to the General Manager (Commercial), Corporate Office, CESC, MYSORE.**

    1. Application Form **(Format-1)**
    2. PPA **(Format-6A/Format-6B)**
    3. Approval Letter **(Format-7)**
    4. Synchronization and Commissioning Certificate **(Format-9 & Format-9A).**

19. **The consumers are allowed to install Solar panels and other equipment confirming to standards specified by IEEE/BIS, without insisting on procurement from the ESCOM's empanelled vendors**

C. Commission approved timelines for various activities involved in implementation of SRTPV projects:

A) For 1kW-10kW (Domestic Consumers) :		
Activity	**Responsibility**	**Timeline**
Submission of Application which includes PPA. No separate PPA is required to be executed. The submission of application is deemed to be the approval to commence the work.	Consumer/ ESCOM	Zero Date
Directions: ESCOMs are directed to provide facilities for submission of online application. The PPA and letter of approval to execute the work shall form part of the application. The application format shall be submitted to the Commission for approval within 7 days. The consumer will upload the work completion report within the timelines.		
Online uploading of Work Completion Report by the Consumer.	Consumer	150 (one hundred and fifty) days from the date of uploading/ submission of application.
Inspection by ESCOM officials for commissioning the project, after receipt of work completion report from the consumer.	ESCOM	Within 5 (five) working days from the receipt of work completion report, after ensuring satisfactory completion of work. ***If the plant is not commissioned within 5 days from the date of work completion report, the concerned officer shall be liable to pay penalty of Rs.1000 per day, till the date of commissioning, to the applicant.*** After five days of work completion, in case the plant is not commissioned, the consumers are entitled to deemed generation benefit.
Commissioning of Rooftop Solar System in case work completion is delayed by the Consumer	Consumer/ ESCOM	Within six months from the date of uploading the application. In case of delay of more than six months, the tariff payable will be as per the terms of PPA.
Billing Process	ESCOM	30 days from the date of commissioning of the Solar plant.
B) For 1kW-2000kW (All other consumers excluding 1kW to 10kW domestic consumers):		
Submission of Application online	Consumer	Zero Date
Acknowledgment of Application by distribution licensee (ESCOM)	ESCOM	Within 03 (three) working days from zero date
Site verification / Technical Feasibility & issuance of Letter of Approval / Rejection of application.	ESCOM	Within 10 (ten) working days from the date of acknowledging the application
Execution of PPA (including countersignature by the controlling officer, up to and inclusive of 1000 kW SRTPV projects)	ESCOM & Consumer	Within 5 (five) working days from the date of issuance of Letter of Approval
Submission for approval of the PPA to the ESCOM, less than 1000kW and to the Commission, for more than 1000 kW.	ESCOM	Within 07 (Seven) working days from the date of execution of PPA

Activity	Responsibility	Timeline
Submission of Work Completion Report by the Consumer	Consumer	150 (one hundred and fifty) days from the date of execution of PPA.
Inspection by ESCOM officials for commissioning the project, after receipt of work completion report from the consumer.	ESCOM	Within 5 (five) working days from the receipt of work completion report, after ensuring satisfactory completion of work. ***If the plant is not commissioned within 5 days from the date of work completion report, the concerned officer shall be liable to pay penalty of Rs.1000 per day, till the date of commissioning, to the applicant.*** After five days of work completion, in case the plant is not commissioned, the consumers are entitled to deemed generation benefit.
Commissioning of Rooftop Solar System	Consumer/ ESCOM	Within six months from the date of approval or deemed approval of PPA .
Billing Process	ESCOM	30 days from the date of commissioning of the Solar plant.

D. Other Issues:

1. As per GoK Letter No. EN 70 VSC 2015 dated: 17-08-2016 Solar Roof Top PV plants must be mandatorily mounted in the space available on the roof of any residential, commercial, institutional, industrial and other buildings which are as per the building construction acts/norms.

   Solar panels installed on the ground/ground mounted by constructing structures using Steel/iron/wooden/concrete supports are not be considered as SRTPV plants.

   Further, the Commission has **allowed the Non-Residential consumers such as Educational Institutes, Hospitals, IT parks, Industries to implement the SRTPV plant on their rooftops of the building and also on the roof of the carport,** duly limiting the capacity of the SRTPV plant to the sanctioned load of the consumer.

2. In the order dated: 09th December 2019 *"In the matter of: Decision on Various Models and Guidelines for Solar Rooftop Photovoltaic Plants allowed to be installed on rooftops of the consumers' buildings",* the Commission has allowed various models on the third party investments with the Generic tariff as determined by the Commission from time to time. **In this Order net metering is allowed only in respect of Domestic consumers and gross metering to all the other consumers.**

3. All the SRTPV projects of LT Domestic (Residential) consumers, under third party investment schemes are exempted from the payment of Cross Subsidy Surcharge and Additional Surcharge if any, for a period of three years from the date of Commercial Operation Date (CoD) in respect of projects Commissioned within 31.03.2024.

4. The Hon'ble Commission has issued order vide No.: S/03/1 dated 15th September 2017, in the matter of: ***"Tariff and other Operational procedures applicable in respect of Multiple/Combined Solar Rooftop Photovoltaic (SRTPV) installations in a single premises".***

   In the Tariff Order dated: 01.06.2023, the Hon'ble Commission decides to continue the existing scheme with the generic tariff of 90% as determined by the Commission. **For any change in sanction load/ tariff of the consumer, applicable SRTPV tariff will be 90% of tariff as per PPA or the prevailing tariff, whichever is lower.**

5. In the Tariff Order dated: 01.06.2023, the Hon'ble Commission has allowed net metering arrangement for the multiple registered consumers/single registered consumer in the same premises having an existing SRTPV plant and willing to enhance the capacity of the plant within the sanctioned load or increase the sanctioned load to enhance the capacity of SRTPV plant, by executing a separate PPA and connected to the same load. The tariff for the enhanced capacity will be the prevailing tariff as on the date of execution of the second PPA. **The billing arrangement will be on prorata basis with reference to the generated energy** a**nd tariff as per the respective PPAs.**

6. The Commission**,** in its Order dated 09.12.2019 has allowed various models on the third party investments for installing SRTPV on the Consumers' buildings, with the Generic tariff as determined by the Commission from time to time. In this Order net metering was allowed only in respect of Domestic consumers and gross metering to all the other consumers.

7. The Commission**,** in its Order dated: 18.07.2022 has decided not to allow net metering facility in respect of SRTPV plants to the consumers availing power from the other sources/captive sources through open access mechanism and the consumer may opt for Gross Metering Arrangements or may opt for establishing captive plant for self-consumption.

8. Grid **support** charges are not applicable to SRTPV installations. However, **in respect of captive plants, the existing arrangement of collecting demand charges in lieu of grid support charges as per W & B agreement would continue.**

9. **Off Grid Solar Generating Plants**: The solar generating plant installed in the existing conumer's premises for their own captive use and which is completely **i**solated from the CESC's grid and having battery backup for reference voltage, such plants will be treated as Standalone/Off-Grid project, for such plants, CESC's approval is not necessary but Consumer has to obtain electrical safety clearance certificate from Department of Electrical Inspectorate & installation of such plants shall be in co-ordination with the CESC's officer. The monthly progress report of such solar plants has to be sent to KPTCL/Concerned ESCOMs/Karnataka Renewable Energy Development Limited (KREDL).

   Note: Necessary action shall be taken by the consumer in order to avoid the back feeding.

10. **Transfer of solar roof top installations:**

    a) In the case of death and the transfer of property to the legal heirs of the deceased, the transfer of PPA may be allowed as per the terms and conditions of the original PPA.

    b) In the case of sale of property, on transfer of SRTPV, PPA shall be submitted to the Hon'ble Commission for approval on case to case basis.

E. Billing procedure:

1. For Single SRTPV installations in a premise:

a) The consumer shall receive a monthly net import/export bill indicating either net export to the grid or net import from the grid.

   i. **"Import"-** means energy supplied by CESC, MYSORE grid.

   ii. **"Export"-** means energy delivered to CESC, MYSORE grid.

b) The AE/JE of the concerned section has to read/record present reading of Uni-directional meter/ generation meter provided at solar side.

c) The AE/JE of the concerned section has to read/record import & export energy and other billing parameters recorded in the bi-directional meter.

d) In case of net metering, the consumer shall pay the bill for import energy at the prevailing tariff rate.

e) In case, the export energy is more than the import energy, AEE, O&M sub division will arrange for the payment through NEFT for energy exported as per the PPA.

f) Minimum charges/Electricity dues/Statutory levies, if any, shall be adjusted against the energy purchase bill.

g) The amount payable by CESC, MYSORE to the Seller for energy injected to CESC, MYSORE grid (excluding self-consumption) during the billing period becomes due for payment, which shall be settled within 30 days from the date of meter reading and credited to the bank account through NEFT.

**** Note: It is mandatory to read the uni-directional meter/ generation meter provided at solar generation side.**

2. **The multiple registered consumers/single registered consumer in the same premises having an existing SRTPV plant, may enhance the capacity of the plant within the sanctioned load or by increasing the sanctioned load by executing a separate PPA at prevailing tariff rate and connected to the same load. The billing arrangement will be on prorata basis with reference to the generated energy and tariff as per the respective PPAs.**

For example:

Consumer "A" has installed a SRTPV plant of capacity 100kWp on the roof of existing installation having sanctioned load of 150kW during 2022 at tariff of Rs.3.19/-. Further he enhanced its SRTPV plant capacity upto 50kWp by executing second PPA as per the order dated: 01.06.2023 at prevailing tariff i.e Rs.3.74/-in the same premise.

Sl. No.	Particulars	Generation from SRTPV plant of capacity 100kWp (a)	Generation from SRTPV plant of capacity 50kWp (b)
1	Tariff Rate as per PPA in Rs.	3.19	3.75
2	Generation recorded in the Solar Generation Meter in Units (Approximately)	10500	5250
3	**Total Generation in Units (a)+(b)**	**15750**	
4	Ratio of Generation (2/3*100)	66.67%	33.33%
5	Energy consumed by the consumer (Import) Approximately)	12500	
6	Energy Exported in Units (Approximately) **(3-5)**	3250	
7	Payment for the export Energy	**Rs.6912/- =3250*66.67%*3.19**	**Rs.4063/- =3250*33.33%*3.75**

a) The AE/JE of the concerned section has to read/record present reading of Uni-directional meter/Generation meter provided at solar side.

b) The AE/JE of the concerned section has to read/record import & export energy and other billing parameters recorded in the bi-directional meter.

c) In case, the export energy is more than the import energy, **for the exported energy billing will be on prorata basis as explained above** and AEE, O&M sub division will arrange the payment through NEFT.

d) In case of net metering, the consumer shall pay the bill for import energy at the prevailing tariff rate.

e) Minimum charges/Electricity dues/Statutory levies, if any, shall be adjusted against the energy purchase bill.

f) The amount payable by CESC, MYSORE to the Seller for energy injected to CESC, MYSORE grid (excluding self-consumption) during the billing period becomes due for payment, which shall be settled within 30 days from the date of meter reading and credited to the bank account through NEFT.

**** Note: It is mandatory to read the uni-directional meter/ generation meter provided at solar generation side.**