

ಚಾಮುಂಡೇಶ್ವರಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು  
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(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸ್ವಾಮ್ಯಕ್ಕೆ ಒಳಪಟ್ಟಿದೆ)  
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Company Identity Number[CIN]:- U40109KA2004SGC035177

No: CESC/GM(Coml)/DGM(RA-1)/AGM(RA-1)/2024-25/ *cys-988* Dated: 17 AUG 2024

**Preamble:** With respect to the Solar Rooftop projects in the State, as per the directions of Hon'ble Energy Minister, GoK in the GO No: ENERGY/ 346/VSC/ 2023/ Bengaluru dated: 11.01.2024, Expert Committee under the Chairmanship of MD BESCOM was formed to study and simplify the current procedures and Online billing software system and to submit a report to the Government.

In the GO dated: 24.05.2024, the BESCOM was directed to develop the procedure and standard operating procedure (SoPs) for SRTPV implementation and circulate to all other ESCOMs, who in turn should follow without any deviation.

In the circular no: BESCOM/BC-51/GM(DSM)/2024-25/Cys-23 dated: 04.07.2024, BESCOM has issued the "Common Standard Operating Procedure for BESCOM, HESCOM, GESCOM, CESC & MESCOM for implementation of Solar Roof Top Projects". **Hence this circular.**

### **CIRCULAR**

**Sub: Common Standard Operating Procedure for implementation of Solar Rooftop Projects -reg**

**Ref:** 1. GO No: ENERGY/ 346/VSC/ 2023/ Bengaluru dated: 11.01.2024  
Government  
2. BESCOM circular on SRTPV no: BESCOM/BC-51/GM(DSM)/2024-25/Cys-23 dated: 04.07.2024

As per the directions of the Hon'ble Energy Minister, GoK, BESCOM has issued the "Common Standard Operating Procedure for BESCOM, HESCOM, GESCOM, CESC & MESCOM for implementation of Solar Roof Top Projects". The same has been uploaded in CESC website in "Solar Roof Top Scheme".

**This Common Standard Operating Procedure shall be strictly adhered for implementation of Solar Rooftop Projects.**

General Manager (Commercial) 17/8  
Corporate office, CESC, Mysore

**Copy to:**

1. The Chief Engineer Ele., O&M Zone, Mysuru/Hassan, CESC.
  2. The Chief General Manager (I/A), Corporate office, CESC for information.
  3. The Superintending Engineer (Ele), O&M Circle, CESC, Mysuru/Mandya/Hassan/ Chamarajanagara & Kodagu for information.
  4. All Executive Engineer Ele., O&M/Meter Testing/Vigilance Division CESC for needful action.
  5. Deputy General Manager, MIS to publish in the CESC website.
  6. All Asst. Executive Engineer Ele., O&M Sub-division, CESC for needful action.
  7. EA/TA/PS to the Managing Director/ Director (Technical)/ Director (Finance) with a request to place it before Managing Director/ Director (Technical)/ Director (Finance).
- OC/ MF.

## Common Standard Operating Procedure for implementation of Solar Rooftop Projects

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***Common Standard Operating  
Procedure for BESCOM,  
HESCOM, GESCOM, CESC &  
MESCOM for implementation  
of Solar Rooftop Projects***

# **COMMON STANDARD OPERATING PROCEDURE FOR IMPLEMENTATION OF SOLAR ROOFTOP PROJECTS**

**No: BESCOM/BC-51/GM(DSM)/** *CYS-24*

*Date -> 04-07-2024*

Ref: G.O No: ENERGY 346 VSC 2023 BENGALURU, Dated 24.05.2024

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## **I. PREAMBLE:**

The Energy Department, Government of Karnataka, has issued directives for implementation of Solar Rooftop Projects in the Karnataka State vide Government Order cited under ref.

As per the directives, "BESCOM to develop the procedure and standard operating Procedure (SoPs) for SRTPV implementation and circulate to all other ESCOMs, who in turn should follow without any deviation."

Hence, in accordance with directions issued by the Energy Department, Government of Karnataka to BESCOM, the following procedure is defined for implementation of solar rooftop projects and the same has to be adopted by all ESCOMs.

The procedure and SOP defined below are in accordance with following Regulation and Orders;

<b>Sl. No</b>	<b>Issued By</b>	<b>Reference &amp; Date</b>
1	Karnataka Electricity Regulatory Commission	The KERC (Implementation of Solar Rooftop Photovoltaic Power Plants), Regulations 2016 dated 15.12.2016.
2	Karnataka Electricity Regulatory Commission	Modifications to the order dated 2 <sup>nd</sup> May 2016 in respect of Determination of tariff and other norms for Solar Rooftop and small Photovoltaic power plants dated 19.09.2016.



Sl. No	Issued By	Reference & Date
3	Energy Department	Notification No: EN 106 EBS 2018, Bengaluru dated 19.07.2018 regarding tax on self-consumption.
4	Karnataka Electricity Regulatory Commission	Net metering arrangement for eligible consumers of Solar Rooftop Photovoltaic (SRTPV) plant dated 18.07.2022.
5	Ministry of New & Renewable Energy, Gol.	Guidelines for simplified procedure dated 10.06.2022
6	Ministry of New & Renewable Energy, Gol.	OM for empanelment of Vendors dated 17.05.2023
7	Karnataka Electricity Regulatory Commission	Evacuation / Utilization of Solar Energy Generation at LT/HT Voltage and connect to their LT/HT system dated 02.03.2023.
8	Energy Department	GO No: ENERGY/ 346/VSC/2023 Bengaluru dated 11.01.2024- Formation of Expert Committee.
9	Energy Department	Report of the Expert Committee No: BESCOM/DSM/GM/DGM/AGM-5/284 dated 04.05.2024
10	Karnataka Electricity Regulatory Commission	Determination of tariff for SRTPV plants for FY-2025 dated 11.06.2024

## II. THE GIST OF FREQUENTLY REFERRED KERC ORDERS DURING IMPLEMENTATION OF SOLAR ROOFTOP PROJECTS ARE AS DETAILED BELOW:

### 1. **Allowed area for installation of Solar Rooftop Plant:**

The Consumers are allowed to install solar rooftop plants on the roof of the building constructed as per building norms. For all non-residential category Consumers and installations of Apartment owner associations, the solar panels installed on the carport will be considered as part of solar rooftop plant.

### 2. **Definition of Solar Rooftop Plant Capacity:**

Solar rooftop plant capacity is the DC capacity i.e. Arithmetic sum (total wattage) of Maximum Power Rating of all the solar modules/panels.

### 3. **Minimum Plant Capacity:**

The minimum permitted capacity of solar rooftop plant is 1kW and the solar rooftop plant capacity should be equal to or less than sanctioned load of the Consumer installation.

Note: If the sanctioned load is in KVA, the same shall be converted to KW by multiplying the KVA by 0.85 and If the sanctioned load is in HP, the same shall be converted to KW by multiplying it by 0.746.

### 4. **Hybrid Systems:**

The Consumers are allowed to install solar rooftop plant using hybrid inverters with battery storage system.

### 5. **Application & Facilitation Fees:**

The application and facilitation to be paid by Consumer are as tabulated below;

Sl. No	Capacity of the proposed SRTPV system	Registration Fee	Facilitation Fee	Total Amount
1	From 1kWp Upto and inclusive of 5kWp	Rs.500/-	Rs.1000/-	Rs.1,500/- plus applicable GST
2	Above 5kWp Upto and inclusive of 50kWp	Rs.2000/-	Rs.3000/-	Rs.5,000/- plus applicable GST
3	Above 50kWp and Upto 1000kWp	Rs.5000/-	Rs.10000/-	Rs.15,000/- plus applicable GST
4	Above 1000kWp and Upto 2000kWp	Rs.5000/-	Rs.25000/-	Rs.30,000/- plus applicable GST



**6. Subsidy Option for Domestic Category Consumers:**

The Domestic Category Consumers have option of availing the subsidy for installation of solar Rooftop plants under PM Surya Ghar Scheme. For Consumers other than domestic category, no subsidy is available. Hence the applications are broadly considered into following 02 categories;

- I. Without Subsidy (Non-Subsidy)
- II. With Subsidy (Subsidy)

**7. Feasibility for LT installations:**

Every SRTPV plant of less than 150 kW 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.

**Note:** This is applicable only for LT installations.

**8. Feasibility for HT installations:**

Every SRTPV plant of more than 150 kW capacity shall be connected only to the existing 11 kV distribution system. In such cases, the total capacity of the existing and proposed SRTPV plants shall be limited so that line current does not exceed 80 % of the rated current capacity of the line

**Note:** This is applicable only for HT installations.

**9. Installation of More than 150kW plant capacity for LT Consumer:**

If a LT consumer requests for installation of solar rooftop plant of capacity more than 150 kW, the consumer shall convert to HT system i.e., the billing meter shall be HT meter with metering cubicle and solar generation meter shall be 3 phase LT CT Operated meter (For net meter arrangement only).

**10. Installation of More than 150kW plant capacity for HT Consumer:**

If a HT consumer requests for installation of solar rooftop plant of capacity more than 150 kW, the billing meter shall be bi-directional HT meter and solar generation meter will be 3 phase LT CT Operated meter (For net meter arrangement only).

**11. Power Purchase Agreement:**

The duration of Power Purchase Agreement is for a period of 25 years and the Power Purchase Agreement (PPA) Execution Authority on behalf of ESCOMs are as tabulated below;

Sl. No.	S RTPV plant Capacity	PPA Execution Authority
1	From 1kWp to 500kWp	Assistant Executive Engineer(Ele), O & M Sub-Division
2	Above 500kWp	Executive Engineer(Ele) O & M Division

**12. PPAs for additional capacity installation**

If a Consumer requests for installation of additional solar capacity, the present PPA shall be canceled and new PPA shall be executed for 25 years with new PPA rate being 90% of PPA tariff or present tariff, whichever is lower,

**Note:** In case of additional S RTPV capacity, for deciding the PPA authority, the total of already commissioned and proposed plant capacity shall be considered.

**13. Metering arrangement:**

The Metering arrangement shall be as tabulated below;

Sl. No.	Type of Metering	Eligible Consumers
1	Gross Metering & Net Metering	Domestic Category consumers, Hospital and Educational institutions consumers. <b>Note:</b> Commission vide order dated 19.09.2016 has allowed one time irrevocable option of either Gross or Net metering for consumers at the time of signing of PPA.
2	Net Metering	Industrial, Commercial and all categories of consumers other than Domestic consumers.

- 14.** For any change in the sanctioned load of the connected Consumer installation or any change in the tariff category of the connected Consumer installation, the existing PPA shall be cancelled and new PPA shall be entered with Consumer at a tariff of 90% of the PPA rate or present tariff whichever is lower for balance duration of PPA term.

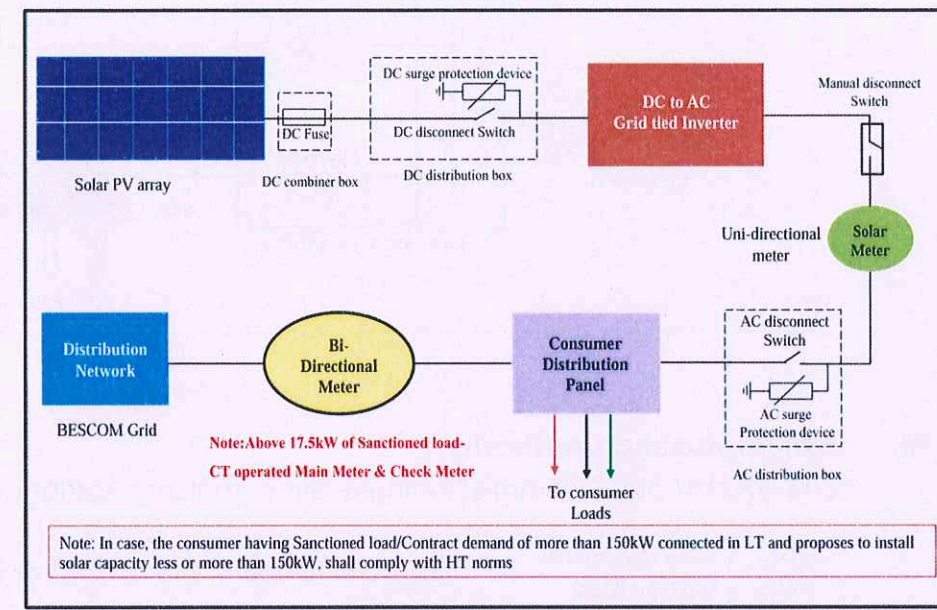


## 15. Schematic Diagrams:

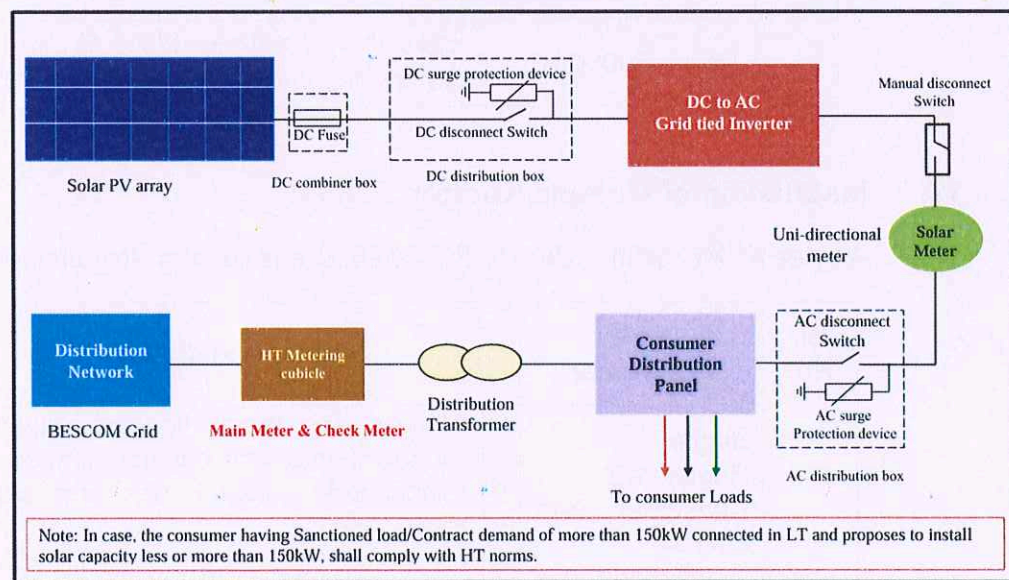
The Schematic Diagram for Net & Gross Metering arrangement is as below and same arrangement shall be ensured at the time of synchronization.

### A. Net Metering Diagrams:

Single Line Diagram of Rooftop Facility for Net Metering Interconnection (LT consumers)

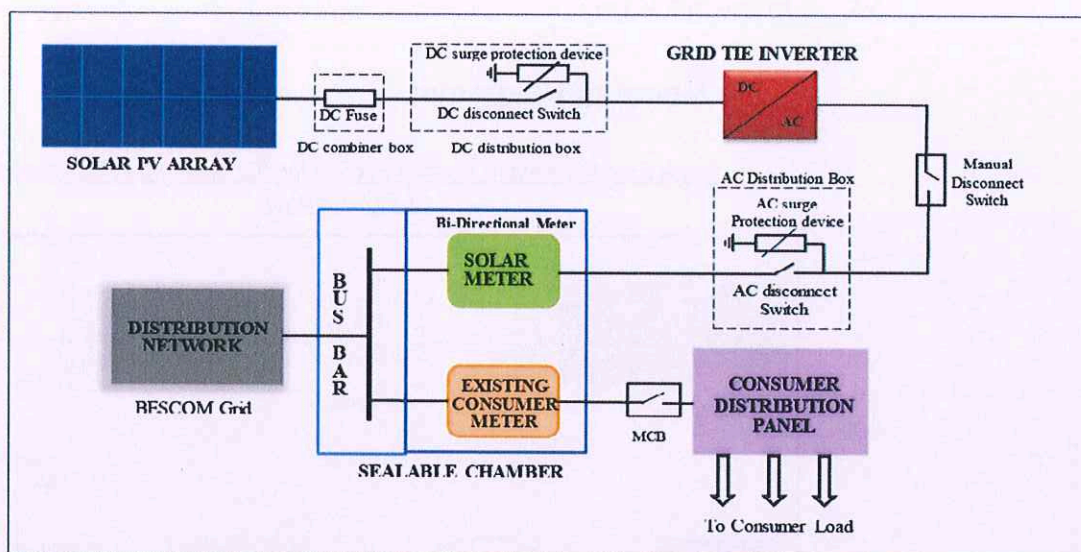


Single Line Diagram of Rooftop Facility for Net Metering Interconnection (HT consumers)



## B. Gross Metering Arrangement:

*Schematic Diagram of Rooftop Facility for Gross Metering Interconnection*



## 16. Synchronization Authority:

The SRTPV plant Commissioning & Synchronizing Authority:

Sl. No.	SRTPV Plant Capacities	ESCOM Officers authorized for synchronization
1	1kW to 17.5kWp	Assistant Executive Engineer(Ele), O & M Sub-Division and MT staff not required.
2	Above 17.5kW to upto 500kWp	Assistant Executive Engineer(Ele), O & M Sub-Division in co-ordination with Meter Testing (MT) staff.
3	Above 500kWp	Executive Engineer(Ele) O & M Division in Co-ordination with Meter Testing (MT) staff

## 17. Installation of Multiple Rooftop Plants:

As per KERC tariff order for FY-2025, the following are allowed;

Sl. No.	Type Consumer	SRTPV installation	Allowed Metering arrangement
1	Single Registered Consumer with multiple installations in a same premise with or without existing SRTPV.	a Allowed for Installation of multiple rooftop plants with capacity limited to sanctioned load of individual installation.	Net
		b Allowed for Installation of single rooftop plant for combined capacity i.e. upto a capacity equal to sum of sanctioned load of all installations.	Gross



Sl. No.	Type Consumer	SRTPV installation		Allowed Metering arrangement
2	Multiple Registered Consumers with multiple installations in a same premise with or without existing SRTPV.	a	Allowed for Installation of multiple rooftop plants with capacity limited to sanctioned load of individual installation.	Net
		b	Allowed to install additional SRTPV unit.	Gross

**Note:**

The Commission has allowed the single or multiple registered Consumers to opt for installing SRPV plant /plants with respect to each RR No. separately, under net metering or gross metering as per Commission's order dated 19.09.2016.

**18. Metering arrangement for Open Access Consumers:**

As per KERC order dated 18.07.2022, the facility of Net Metering in respect of SRTPV plants shall not be available to the Consumer availing power supply from other sources / captive sources through open access mechanism. The Consumers may opt for Gross Metering arrangement or may opt for establishing Captive Plant for self-consumption.

**19. Option for installation of multiple generation Meters for HT Consumers:**

The KERC vide order dated 02.03.2023 has issued order for Evacuation / Utilization of Solar Energy Generation at LT/HT Voltage and connect to their LT/HT system.

Through this order, the Commission has approved Net Metering arrangement in respect of SRTPV installed on the rooftop of several buildings with different capacities within the same premises, having HT connection with distribution licensees and to evacuate the solar generated energy connecting to the LT voltage bus of each building. This is optional for HT Consumers and is not compulsory.

**20. Third Party Investment Models:**

The Commission has allowed net or gross metering arrangements irrespective of type of investment.

**21. Procurement of Bi-directional Meters:**

Provision has been made for Empanelment of Vendors for supply of bi-directional meters. The Consumer has the option purchasing meters from any of the empaneled meter vendors. The Consumer can get bi-directional meter tested at any one of the ESCOM MT labs and same shall be accepted by all ESCOMs.

**22. Provision of Check Meter:**

The check meter shall be provided for SRTPV systems of capacity of more than 17.5 kW.

**23. Procurement of CTs, PTs & Metering Cubicle:**

CT's, PT's and Metering Cubicle shall be procured from ESCOM approved Vendors only.

**24. Applicable Tariff:**

The PPAs shall be executed as per the Generic Tariff Orders issued by KERC from time to time for every FY / Control Period.

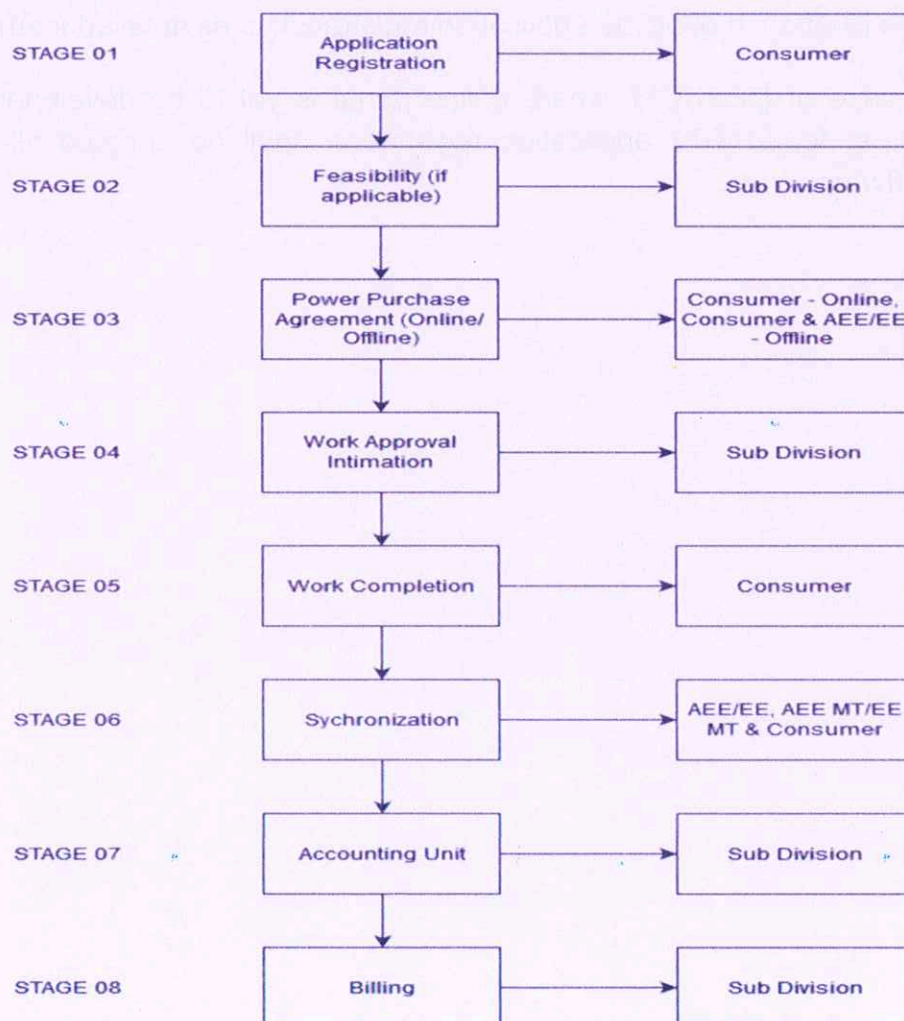


### III. PROCEDURE FOR INSTALLATION OF SOLAR ROOFTOP PLANTS

The general work flow to be followed for SRTPV application consists of following stages:

1. Application Registration
2. Providing Feasibility (If applicable)
3. Execution of Power Purchase Agreement
4. Work Approval Intimation
5. Work Completion Intimation
6. Synchronization
7. Accounting & Billing

The flow char for the work flow for processing of SRTPV applications and detailed procedure to be followed at each step is as below;



## **STAGE -01: APPLICATION REGISTRATION**

**Responsibility:** Consumer

**Documents Required:** Electricity Bill (Scanned copy)

- a. The Consumer shall be provided with option to raise request for installation of Solar Rooftop Plant through online mode only by applying through online SRTPV Portal.
- b. Only Account ID and Mobile Number of the Consumer are required for application registration.
- c. The capacity of proposed Solar Rooftop Plant shall not be less than 1kW and should be equal to or less than the sanctioned load of the installation.
- d. Solar rooftop plant capacity is the DC capacity i.e. Arithmetic sum (total wattage) of maximum Power Rating of all the solar modules/panels.

**Note:**

The Illustration of online application registration is as detailed in Annexure-1

In case of MESCOM, where online portal is yet to be developed, the following format for SRTPV application registration shall be adopted till deployment of software;

**BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED**

Wholly owned Govt. of Karnataka Undertaking

**Summary of SRTPV Application No. 1000254011**

Applicant contact details	
Email Id	
Mobile Number	

Payment Details	
Transaction ID	YHMP1701329094
Transaction Date	28-Jan-2023 11:25:15 PM
Transaction Reference Number	347047577953
Amount Paid	1770.0 (inclusive of taxes)
Taxes (CGST & SGST)	270.0
Payment Mode	Credit Card
Status	Success
Remarks	PGS10001-Success
GSTIN	29AACCB1412G1Z5
GST Service Account Code Number	998631

Application details	
Application No	1000254011
Type of scheme	Own investment
Type of Grid connectivity	Net Metering
Solar Proposed in kWp	3.0
Minimum Shadow free area in Sq. mtr	250.0
Type of connection	3 Phase LT
PAN	
Aadhar Number	
Pin code	560034
Latitude	12.87894885995952
Longitude	77.71362984429399
MNRE Subsidy sanctioned or not?	No

Account details	
Account ID	4894240559
Applicant Name	
Applicant address	
City	
Pincode	
Subdivision code	140019
Subdivision Name	S11 Subdivision
RR Number	S11DL89909
Sanctioned Load	7.0 kW
Connection Type	THREE Phase
Tariff category	Domestic - LT2A



## **STAGE -02: FEASIBILITY**

**Responsibility:** Sub division

The Category of Consumers for feasibility approval is as below;

- Category –I : Deemed Feasible Applications
- Category – II: Non- Deemed Applications

### **Category-I:**

All SRTPV applications with proposed capacity upto 150kW are considered deemed feasible and it is not required to provide feasibility for these applications.

### **Category-II:**

- a) Feasibility shall be provided by sub divisions for all SRTPV applications of capacity more than 150 kW.
- b) For providing the feasibility, the designated officer shall visit the proposed SRTPV installation premises and verify technical details and shall issue feasibility report.
- c) The technical feasibility shall be provided in accordance with the following;
  - i. Every SRTPV plant of less than 150 kW 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. This applicable only for LT installations.

**Note:** If a LT consumer requests for installation of solar rooftop plant of capacity more than 150 kW, the consumer shall convert to HT system i.e., the billing meter shall be HT meter with metering cubicle and solar generation meter will be 3 phase LT CT Operated meter (For net meter arrangement only).

- ii. Every SRTPV plant of more than 150 kW shall be connected only to the existing 11 kV distribution system. In such cases, the total capacity of the existing and proposed SRTPV plants shall be limited so that line current does not exceed 80 % of the rated current capacity of the line. This applicable only for HT installations

**Note:** If a HT consumer requests for installation of solar rooftop plant of capacity more than 150 kW, the billing meter shall be bi-directional HT meter and solar generation meter will be 3 phase LT CT Operated meter (For net meter arrangement only).

iii. If the application is not technically feasible, the SDO shall cancel the Application and intimate the same to the Applicant.

- d) If a LT consumer requests for installation of solar rooftop plant of capacity more than 150 kW, the consumer shall convert to HT system i.e, the billing meter shall be HT meter with metering cubicle and solar generation meter will be 3 phase LT CT Operated meter. (For net meter arrangement only).
- e) If a HT consumer requests for installation of solar rooftop plant of capacity more than 150 kW, the billing meter shall be bi-directional HT meter and solar generation meter will be 3 phase LT CT Operated meter. (For net meter arrangement only).
- f) For HT installations, if the existing metering system is 3 phase 3 wire, it shall be converted to 3 phase 4 wire.
- g) Metering cubicle replacement and meter replacement to be indicated in feasibility report. It shall form a part of feasibility report. The existing meter shall be checked and suitable meter change shall be recorded in feasibility report in accordance with following table;

Sl. No	Sanctioned Load	Bi-directional Meter (Billing Meter)	Solar Rooftop Plant Capacity	Uni-directional Meter (Solar Generation Meter)	Inverter Type
1	1kW to 5kW	1 Phase or 3 phase	1kWp to 5kWp	1 Phase or 3 phase	1 Phase or 3 phase
2	More than 5kW & upto 17.5 kW	3 Phase, whole current	More than 5kW & upto 17.5 kW	3 Phase, whole current	3 phase
3	More than 17.5 kW & upto 150 kW	3 phase LT CT Operated meter	More than 17.5 kWp & upto 150 kWp	3 phase LT CT Operated meter	3 phase
4	More than 150kW	3 phase CT PT Operated HT meter	More than 150 kWp	3 phase LT CT Operated meter	3 phase



MESCOM shall adopt the following feasibility approval format till deployment of software;



**BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED**

Wholly owned Govt. of Karnataka Undertaking

Ref:

Asst. Executive Engineer (Ele.),(Com.  
O&M),BESCOM, SLN Complex, Bus Stand,  
Kengeri, Bangalore-560060

**Feasibility Report for SRTPV Application No. 1000052853**

Proposed solar capacity: 3.0

*This application is registered under SOURA GRUHA YOJANE (SGY) - 2019-2020*

DT Information	
DTC Location	VBHCS LAYOUT-6
DT Code	111060401 063
DT Capacity in kVA	250.0
Connected Load on DT in kW	179.0
SRTPV Capacity already connected in kW	0.0
SRTPV Capacity under progress in kW	0.0

Feeder Information	
Substation Name	RAJARAJESHWARINAGAR_66
Feeder Name	F07-BEML-LAYOUT
Feeder MDM code	1140204901010301
Feeder conductor size in sq. mm	400.0
Rated current carrying capacity in Amps	286.0
SRTPV capacity already connected in Amps	113.0
SRTPV capacity under progress in Amps	0.0
SRTPV capacity proposed in Amps	13.0

Feasibility	
Proposed Application is	Feasible
Allowable SRTPV Capacity	3.0
Remarks	ITS FEASIBLE

**Note:**

The Illustration of online feasibility process is as detailed in Annexure-1



### **STAGE -03 – EXECUTION OF POWER PURCHASE AGREEMENT (PPA)**

**Responsibility:** Consumer & O&M AEE /EE

The Power Purchase Agreement has to be executed in either of the following ways;

a) Online PPA

b) Offline PPA

#### **a) Online PPA:**

The online PPA shall be executed by the Consumer for all the SRTPV applications which are considered as deemed feasible i.e. for all applications upto 150kW capacity. The online PPA shall be executed in online mode by the Consumer.

#### **b) Offline PPA:**

- The offline PPAs shall be executed for SRTPV applications of more than 150kW capacity. The PPAs are to be executed on Rs. 500 value non-judicial stamp paper in Commission approved format.
- The Consumer shall co-ordinate with designated ESCOM officer for PPA execution.
- The PPAs shall be uploaded in the online SRTPV portal by designated officers for auto generation of work approval letter.

The Power Purchase Agreement (PPA) Execution Authorities on behalf of ESCOMs for SRTPV installations are as tabulated below;

Sl. No.	SRTPV plant Capacity	PPA Execution Authority
1	From 1kWp to 500kWp	Assistant Executive Engineer(Ele) , O & M Sub-Division
2	Above 500kWp	Executive Engineer(Ele), O & M Division

#### **PPA Approval Authority:**

- I. For capacities upto 500kWp, Assistant Executive Engineer(Ele) of O & M Sub-Division is the PPA approval authority.
- II. For capacities above 500kWp and upto & inclusive of 1000kWp, PPAs shall be approved by Corporate Office of the respective ESCOMs.

- III. The approval of the KERC shall be obtained for all PPAs of SRTPV applications with capacities of above 1000kW.
- IV. In case of any deviation from the standard format of PPA, the approval for the same shall be obtained from KERC.

### **PPAs for additional capacity installation**

If a Consumer requests for installation of additional solar capacity, the present PPA shall be canceled and new PPA shall be executed for 25 years with PPA rate being 90% of PPA tariff or present tariff, whichever is lower,

**Note:** In case of additional SRTPV capacity, for deciding the PPA authority, the total of already commissioned and proposed plant capacity shall be considered.

### **Intimation for change of HT Metering Cubicle:**

In case, if the change of HT Metering Cubicle is required, the sub division officers shall prepare estimate and intimate to the Consumer the supervision charges to be paid, within 07 days of PPA execution.

**Note:**

The Illustration of PPA execution process is as detailed in Annexure-1



## **STAGE -04 – WORK APPROVAL INTIMATION**

**Responsibility:** Sub division

- a. Work approval intimation shall be auto generated and emailed to registered email after online execution of PPA/Uploading of PPA document in case of off-line PPA.
- b. The work approval intimation shall also include intimation for change of meter and if required change of HT metering cubicle.

MESCOM shall adopt the following format for work approval intimation till deployment of software:



**BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED**

Wholly owned Govt. of Karnataka Undertaking

Ref:

Date: 13.06.2024

To, PUTTAMADAI AH M#51 5TH CROSS OPPOSITE GURUKUL SCHOOL AVALAHALLI

Madam/Sir, Sub: Approval for the PPA and start of SRTPV work - regRef:

1. Application Reg No. 1000410848 dated 17.04.2024
2. PPA executed date: 13.06.2024

With reference to your SRTPV application, Approval is herewith accorded for installation work of SRTPV, as per following conditions:

1. As per CEA guide lines, you are 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.
2. You can select a reputed system installer of your choice, who have experience in design, supply, installation and commissioning of " + SRTPV system.
3. Only BESCOM empaneled meter shall be used. The empaneled list of meters are available in BESCOM website.
4. Upgradation of infrastructure, if required, (service main, meter with CT, upgrade) upto the grid connectivity point is to be done at your cost.
5. All the other components of Solar RTPV system such as PV modules, grid tied inverter shall comply with applicable IS/IEC standards. The Technical specification of each equipment's is available in BESCOM website.
6. The work of grid connectivity shall be carried out in accordance with the Net- metering / Gross metering schematic diagram available in BESCOM website
7. Bi-directional meter (whole current/ CT operated) shall be provided before the point of interconnection and the existing meter shall be shifted to the generation side of SRTPV plant to measure solar power generation.
8. Both the meters shall be within the same proximity and easily accessible for taking monthly reading by the meter reader.

9. The Applicant shall provide Bi-directional check meter in series with the proposed Bi-directional meter (Main meter) when the SRTPV system capacity is more than 17.5kWp.

10. You should complete the SRTPV installation work before dd/mm/yyyy

11. After completion of the work in all respects, you have to submit the work completion report along with following documents

a. To submit consent letter in the SRTPV online portal obtained from system installer stating the equipments installed comply with safety and necessary technical standards.

b. First sheet of Bank pass book containing details of Name of the Bank, Type of account, Account No, Name of the Branch, IFSC code etc.

12. If for any reason the date of commissioning is delayed beyond the date of commissioning agreed, the tariff payable by the BESCOM shall be lower of the:

I. Tariff agreed to in this agreement OR

II. Any revised tariff, determined by the Commission, prevailing on the date of commissioning OR

III. 90% of the tariff agreed to in this agreement.

Please note that BESCOM will not be held responsible for any legal disputes between the applicant and SRTPV system installer arising out of the contract.

Yours Faithfully

sd/-

Assistant Executive  
Engineer(Ele)

**Note:**

The Illustration of work approval intimation is as detailed in Annexure-1



## **STAGE -05 – WORK COMPLETION INTIMATION**

**Responsibility:** Consumer

- a) The Consumer shall upload the Work Completion details in online SRTPV portal for enabling the sub division offices to process the application for synchronization.
- b) Along with solar panel and inverter details, the Consumer shall also enter Bank details and upload copy of the PAN card and cancelled cheque in online portal.
- c) The Supplementary PPA (SPPA) shall be executed if the installed capacity is different from PPA capacity and is within the sanctioned load of the Consumer installation.
  - In case deemed feasible applications, online SPPA has to be done.
  - In case of other applications, the SPPA has to be executed in offline mode.

The MESCOM will facilitate Consumers to entry work completion details in following format till deployment of software:

:

## Work Execution details of of SRTPV Application No. 1000410848

### Solar PV Module

Sl No	Make	Type	Capacity of each module in kWp	No. of Modules	Sl. No of Modules (Comma separated)	Total capacity of this make, type & capacity
1	Innovative	Poly	0.32	9	2024-2549, 2024-2553, 2024-2544, 2024-2552, 2024 12/14-2550, 2024 2548, 2024 -2547, 2024 12/14-2551, 2024-2546	2.88

### Inverter

Sl No	Make	Type	Capacity of Inverter (VA)	No. of Inverters	Sl. No of Inverters (Comma separated)	Total capacity of this make, type & capacity
1	Coodwe	String	0.003	1	53000SSX22CW4126	0.003

### Bidirectional Main Meter

Make	M/s Genus Power Infrastructures Limited
Type	ELECTRO STATIC METER
Serial No	922280
Phase	Single Phase
CT Ratio	1.0
PT Ratio	1.0
Date of Test by MT division	10 Apr 2024

System Installer Firm Name	Espec Solar Pvt Ltd
System Installer Firm License Number	29AABCE2543A1Z5

***Certified that the above said SRPTV system was installed by me and the equipment's used comply the Technical and Safety standards issued by BESCOM.***

Report submitted on : 13 Jun 2024 01:08:27 PM

This is a system generated letter and doesn't require signature

### Note:

The Illustration of uploading work completion details is as detailed in Annexure-1

## **STAGE -06 – SYNCHRONIZATION:**

**Responsibility:** Consumer & ESCOM O&M AEE/EE and MT staff.

For Synchronization purpose, the Consumers are divided into following 02 categories;

- Category-1: From 1kW to 17.5kW solar capacity
- Category-2: Above 17.5 kW solar capacity

### **Category 1: (From 1kW to 17.5kW solar capacity)**

- The O&M AEE shall visit the SRTPV installation, ensure all technical compliance as per norms and synchronize the solar rooftop plant with ESCOM grid and duly record the meter details and readings.
- The synchronization certificate shall be generated by sub division officers in the online portal.

### **Category 2: (Above 17.5 kW solar capacity)**

- The O&M AEE shall initiate action for synchronization and shall intimate the concerned MT official for conducting PC test.
- The Consumer shall co-ordinate with O&M AEE for synchronization of the SRTPV plant.
- The MT officers shall conduct PC test, record the relevant parameters and provide the report to the concerned sub division and shall upload the details in online portal.
- The check meter shall be provided for SRTPV systems capacity of more than 17.5 kW.
- The O&M AEE shall synchronize the SRTPV plant and generate synchronization certificate in the online portal.



- The SRTPV plant Commissioning & Synchronizing Authority:

Sl. No.	Capacities	ESCOM Officers authorized for synchronization
1	1kW to 17.5kWp	Assistant Executive Engineer(Ele), O & M subdivision.
2	Above 17.5kW to upto 500kWp	Assistant Executive Engineer(Ele), O & M Subdivision in co-ordination with Meter Testing (MT) staff.
3	Above 500kWp	Executive Engineer(Ele), O & M Division in Co-ordination with Meter Testing (MT) staff

The MESCOM officers shall issue synchronization certificate in following format till deployment of software:



**BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED**

Wholly owned Govt. of Karnataka Undertaking

Ref:

Asst. Executive Engineer (Ele) (Com.  
O&M) BESCOM, 14th Cross, 1st Phase,  
Jayaprakash Narayan Nagar, Bengaluru - 560078  
Date: 05.06.2024

To,

A S SHASHICHARA  
NO 26 YALE NARAYAN NAGAR HOBLI

Madam Sir,

Sub: Certificate of synchronization of your SRTPV system

Ref: Application Reg No. 1000371621 dated 12-03-2024

Synchronization test of Solar Rooftop PV system of 4.0 kWp, installed on the roof of your installation bearing RR No.: 510H00458 has been conducted and your SRTPV system successfully synchronized with the BESCOM grid at 230 voltage level on 09.04.2024

Yours Faithfully

35/

Assistant Executive  
Engineer(Ele)

210 Subdivision, BESCOM

**Note:**

The Illustration of entering the synchronization details and generating the synchronization letter is as detailed in Annexure-1



## IV. ACCOUNTING & BILLING

**Responsibility:** AEE, AE (Technical) & AAO of the sub division

- In case of execution of offline PPA, the AE(T) of the sub division, after generating the synchronization certificate, shall hand over the PPA to accounting unit (AAO).
- The AAO of the sub division shall ensure that all the SRTPV installations synchronized in a calendar month are read and billed in the next calendar month without fail by verifying the details in online portal.
- No hard copies of the documents, except for PPA in case of offline PPA, shall be collected from Consumer / Installer. If required, documents shall be downloaded by AE(T)/AAO using their login credentials.

The format for billing of SRTPV installations is as below and all the ESCOMs shall bill the SRTPV installations in the same format.

SRTPV Bill Description with TOD billing

1	RR No	23	Cost of Purchase (PPA Rates)
2	Account ID/Connection ID	24	Availing of Subsidy (Yes/No)
3	Name & Address	25	Gross Amount Payable (Net Export *PPA Rate)
4	Meter Reader Code	26	A) Demand Charges B) MD Penalty (If any)
5	Retail Tariff Applicable	28-31	Slab Wise Import Bill (If Column Number 17 is Net Import)
6	Sanction Load KVA	32	FAC for the Net Imported Units.
7	Solar Installed KWP	34	Electricity Tax at 9% for the Energy Charges (28+29+30+31)*9%
8	Billing Period	35	20 Paise Captive Tax on Self Consumption (Above 425 KWP)
9	Reading Date	36	Electricity Tax at 9% on TOD Charges
10	Main Meter/ Check meter serial No	37	Rebates TOD Charges
11	A) Present Reading Bi-Directional meter Import & Export	38	Power Factor Penalty (Rs 3 Ps for HT Consumers) (Rs 2 Ps for LT consumers, Max 30 Ps) (To be levied on the total units imported from BESCOM Grid)
11	B) Previous Reading Bi-Directional meter Import & Export		
12	Difference Present & Previous	41	Total Deductions
13	Metering Constant	42	Amount payable to consumer after deductions (Gross Bill-Deductions)
14	Gross Export & Gross Import (12*13)	43	TDS 194Q
15	Sub Meter/Wheeling/Consumption Short Claims	44	Amount Credited to Consumer after TDS
16	Total Export & Total Import (14-15)	45	Due Dates
17	Net Export/Net Import (As the Case May Be)		
18	MD Recorded (Displayed in the meter) Both import & Export MD	Note :	TOD rebate/ Penalty shall be levied on actual zone wise consumption before setting off Import & Export
19	MD (18*13)		
20	Conversion from KVA to HP/KW for LT Installations		
21	Power Factor		
22	Generation Meter Details		



**Bill Format**  
**SRTPV Bill With TOD**  
**CORPORATE OFFICE SOLAR ROOF TOP CENTRALIZED BILLING CENTER BANGALORE**  
**NET Metering SRTPV Bill For the Month - April-2024**

1. <b>SRTPV Meter S/N</b> / RRNO		SRTPV-_____		23. <b>Cost of Purchase</b>		Without Subsidy 9.56		With Subsidy 7.20	
2. <b>Account ID / Connection ID</b>		XXXXXXXXXXXX		24. <b>Whether the consumer has availed MNRE subsidy (Yes or No)</b>		NO			
3. <b>Consumer Name / Enve / Name and Address</b>		XXXXXXXXXXXXXXXXXXXXXXXXXXXX		25. <b>Gross Amount payable to Consumer</b>		846003			
4. <b>Meter-Reader Code</b>		AEE		26. <b>Fixed/Demand Charges</b>		KVA		BMP/CMAULB in Rs	
5. <b>Tariff</b>		HT2A(II)		27. <b>Energy Charges [Units X Rate]</b>		YES		Charges	
6. <b>Sanctioned Load in KVA</b>		800 KVA		28. <b>Slab1</b>		0		6.90	
7. <b>Solar Installed capacity in KWP</b>		1000 KWP		29. <b>Slab2</b>		0		0.00	
8. <b>Billing Period</b>		01.04.2024 TO 30.04.2024		30. <b>Slab3</b>		0		0.00	
9. <b>Reading Date</b>		01-May-24		31. <b>Slab4</b>		0		0.00	
10. <b>Bi-Directional Meter S/N (Main/Check)</b>		Y0234565/66		32. <b>FAC</b>		0		0.16	
11. <b>Energy Recorded</b>		(A) <b>Energy Import</b>		33. <b>Total Energy charges (i+ii+iv) + FAC</b>		0.00		0.00	
12. <b>Present Reading</b>		73.743		34. <b>Electricity Tax @ 9 % for the Energy Charges</b>		0.00		0.00	
13. <b>Previous Reading</b>		72.747		35. <b>Self / Tax 0.20 on Self Consumption</b>		2845.20		569.00	
14. <b>Difference (11-12)</b>		1.00		36. <b>Electricity Tax @ 9 % for TOD charges</b>		0.00		-127.00	
15. <b>Energy Import / Export (12X13)</b>		5976		37. <b>Rebates, TOD charges / Rebates, TOD Charges</b>		0.00		-1416.00	
16. <b>Sub Meter Consumption</b>		5976		38. <b>Power Factor Penalty</b>		0.00		100.00	
17. <b>Total Consumption (14-15)</b>		5976		39. <b>Area / Short Claims / Late Payment Charges/ Penalty/Recovery</b>		0.00		0.40	
18. <b>Net Import / Export</b>		0		40. <b>Net Amount to be paid by Consumer (26A+26B+28+29+30+31+32+34+35+36+37+38+39-40)</b>		349542.00		496461.00	
19. <b>Recorded MD</b>		0.1524		41. <b>Net Amount to be paid to by BESCOM 2341</b>		0.00		5.00	
20. <b>Total Load in KVA (in Case of LT installations)</b>		914.40		42. <b>TDS @ 1% on Cumulative Payments above 50 Lakhs in FY)</b>		0.00		496461.00	
21. <b>Power Factor</b>		0.85		43. <b>Amount Paid To Consumer 42-43</b>		496461.00		30-May-24	
22. <b>SRTPV Meter Details</b>		3124739		44. <b>Due Date for Payment</b>		30-May-24			
I. <b>SRTPV Meter S/N</b>		3124739		45. <b>Due Date for Payment</b>		30-May-24			
II. <b>Present Reading</b>		24785.20							
III. <b>Previous Reading</b>		24481.09							
IV. <b>Difference (II-III)</b>		304.11							
V. <b>Meter Constant</b>		320							
VI. <b>Total (4*5)</b>		97315							
<b>Average Generation Per Day</b>		3.24							

Rupees Four Lakh NinetySix Thousand Four Hundred SixtyOne Only  
Counter Signed

Manager(CBC) Assistant General Manager(CBC) General Manager (DSM)

Import Time Zone	Present Reading	Previous Reading	Diff	K	Consumption	TOD EC PER UNIT	TOD TAX
Time Zone 1 06 to 10	3116	3077	0.04	6000	234.00	0	0
Time Zone 2 10 to 18	12618	12497	0.13	6000	786.00	0	0
Time Zone 3 18 to 22	22962	22667	0.29	6000	1770.00	1	159.3
Time Zone 4 22 to 06	35037	34506	0.53	6000	3186.00	-1	-3186.00
<b>Total</b>	<b>73743</b>	<b>72747</b>	<b>1.00</b>		<b>5976.00</b>		<b>-1416.00</b>

Export Time Zone	Present Reading	Previous Reading	Diff	K	Consumption	TOD EC PER UNIT	TOD TAX
Time Zone 1 06 to 10	145150	143150	2.00	6000	12000.00		
Time Zone 2 10 to 18	397135	383410	13.73	6000	82350.00		
Time Zone 3 18 to 22	3120	3100	0.02	6000	120.00		
Time Zone 4 22 to 06	0.000	0.000	0.00	6000	0.00		
<b>Total</b>	<b>545405</b>	<b>529660</b>	<b>15.75</b>		<b>94470.00</b>		

		Main Meter		Check Meter		42 JV Details			
	Energy Recorded	Energy Import	Energy Export	Energy Import	Energy Export	Debit	Credit	Debit	Credit
	Present Reading	73.743	545.405	73.762	535.307	70.520	-	846003.00	
	Previous Reading	72.747	529.660	72.764	529.567		23.261		349100.00
41	Difference	0.996	15.745	0.998	5.740		46.300		442.00
	Meter Constant	6000.000		6000.000			46.109		0.00
	Total Energy Import / Export	5976.000	94470.000	5988.000	34440.000		46.924		496461.00
	Net Import (Consumption) /Export	0.000	88494.000	0.000	28452.000				
						Total		846003.00	846003.00

LOCATION CODE:759

HEAD OF ACCOUNT:70.5207  
PASSED FOR PAYMENT  
SRTPV CENTRALIZED BILLING CENTER CORPORATE OFFICE BESCOM  
Enforcement  
Original/Duplicate

<b>Account Head</b>		70.5207		<b>Bill Passed for Rupees</b>		846003.00	
<b>Figures:-</b>				<b>Words:-</b>		Rupees Eight Lakh FortySix Thousand Three Only	
<b>Name of the Consumer</b>		XXXXXXX		<b>Account Number</b>		A/c No XXXXXXXX IFSC HDFC0000523 HDFC BANK Bangalore	
<b>Gross Bill Amount</b>		846003.00		<b>Others</b>		-520.00	
<b>Arrears + Int</b>		100.00		<b>Electricity Tax</b>		442.00	
<b>Demand Charges + MD Penalty</b>		349520.00		<b>Payable Amount</b>		496461.00	
<b>TOTAL</b>		846003.00		<b>TOTAL</b>		846003.00	

Rupees Four Lakh NinetySix Thousand Four Hundred SixtyOne Only

**CERTIFICATE**

1) Certified that the bill have been prepared as per reading furnished by AEE (C.O&M) sub division.  
2) Certified that this Bill for the month of AUGUST 2023 Has Not Been Paid at SRTPV CBC earlier.

Manager(CBC) Assistant General Manager(CBC) Assistant General Manager (I/A)



## V. TIMELINES:

Process	Responsibility	Time line
Application Registration & Payment of application fees.  Application Registration & Payment of application and facilitation fees & online PPA execution in case of deemed applications	Consumer	Zero date
Feasibility – For other than deemed applications	Sub division Office	Within 10 days of application registration.
Offline Power Purchase Agreement	Consumer & AEE/EE	Within 05 days of Feasibility.
Work approval intimation	Sub division Office	Within 07 days of from date of execution of PPA.
Installation of SRTPV plant & Intimation of work Completion	Consumer	Within 150 days from Work Approval Intimation letter.
Synchronization of SRTPV plant	Consumer & O&M AEE/ MT AEE	<p>Within 05 days from intimation of work approval by Consumer.</p> <p>Note: If SRTPV plant is not synchronized within 05 days from 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.</p> <p>After five days of work completion, in case the plant is not commissioned, the consumers are entitled to deemed generation benefits.</p>
Billing	Sub division Office	Next billing cycle after date of synchronization

## VI. ILLUSTRATION OF PROCEDURE

### ILLUSTRATION FOR NON-SUBSIDY APPLICATIONS

#### Stage -01: Application Registration

**Responsibility:** Consumer

**Documents Required:** Electricity Bill (Scanned copy)

**Registration Procedure:**

The Consumer has to follow the below listed procedure for registration of application;

- a. Click the link of the online portal of the ESCOM . The links are as tabulated below;

ESCOM	Portal link
BESCOM	<a href="https://bescom.karnataka.gov.in">https://bescom.karnataka.gov.in</a>
GESCOM	<a href="https://gescomsrtpv.in">https://gescomsrtpv.in</a>
HESCOM	<a href="https://hescom.karnataka.gov.in">https://hescom.karnataka.gov.in</a>
CESC	<a href="https://cescmysore.karnataka.gov.in">https://cescmysore.karnataka.gov.in</a>
MESCOM	Portal yet to be developed but shall follow procedure as per this guidelines.

- b. Enter the account id which is printed in the electricity bill. The billing data will be fetched automatically and enter the remaining fields such as proposed solar capacity, type of metering – Net or Gross etc.:
- c. The Consumer will be verified through OTP sent to registered mobile number.
- d. Pay the application fees online using any one of the payment methods displayed on the screen.
- e. Application is considered as registered after payment of application fees.



**S RTPV ONLINE SERVICES** APPLY ONLINE VIEW STATUS OFFICERS' LOGIN

Apply for a new Solar Rooftop Connection

1 Fetch Account Info 2 Enter Rooftop Info 3 Verify, Register and Pay

Enter your Account ID/Consumer ID to proceed  Fetch details

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Apply for a new Solar Rooftop Connection

1 Fetch Account Info 2 Enter Rooftop Info 3 Verify, Register and Pay

Enter your Account ID/Consumer ID to proceed 122 Fetch details

**Application Registration Process**

1 Rooftop details 2 Payment 3 Verify & Sign PPA

**Note:**

1. Complete the Registration process by entering rooftop details, payment & e-sign the Power Purchase Agreement(PPA).
2. Please verify the PPA details before e-sign such as Name, address, proposed capacity, RR no., tariff.
3. Obtain instantly Auto generated PPA approval for successfully registered applicants.
4. For the detailed guidelines/orders click here
5. For any queries Please contact Solar RTPV helpline : 08022340816

**Applicant details**

Applicant Name: SRINIVASA S O NAGENDRAPPA  
 Applicant Address: -UPPANAYAKANAHALLI  
 Subdivision code: 5210301  
 Subdivision Name:  
 RR Number: UPNL2732  
 Sanctioned Load / Contract demand: 1.00 kW  
 Connection Type: Phase  
 Tariff category: - LT-2(A)-R

**Rooftop system details**

☐ Application for Multiple Installations in the same premise

Type of Scheme\* Own Investment Scheme

Type of Grid Connectivity\* ☐ Gross Metering ☒ Net Metering

Solar Proposed in kWp\* 1

Minimum Shadow free area in Sq. mtr\* 10

Type of connection\* Single Phase

PIN code\* 560058

Latitude of the installation\* 12.96977595798365

Longitude of the installation\* 77.5848095565918

Locate Latitude & Longitude on Google Map  
OR Use my current location

**Applicant contact details**

Email\* agmdsm2@gmail.com Mobile\* 9480612458 Send OTP

(OTP will be sent to this Mobile Number)

SGST)	
Payment Mode	Credit Card
Status	Success
Remarks	PGS10001-Success
GSTIN	29AACCB1412G1Z5
GST Service Account Code Number	998631

Application details	
Application No	1000254011
Type of scheme	Own investment
Type of Grid connectivity	Net Metering
Solar Proposed in kWp	3.0
Minimum Shadow free area in Sq. mtr	250.0
Type of connection	3 Phase LT
PAN	
Aadhar Number	
Pin code	560034
Latitude	12.87894885995952
Longitude	77.71362984429399
MNRE Subsidy sanctioned or not?	No

Account details	
Account ID	4894240559
Applicant Name	
Applicant address	
City	
Pincode	
Subdivision code	140019
Subdivision Name	S11 Subdivision
RR Number	S11DL89909
Sanctioned Load	7.0 kW
Connection Type	THREE Phase
Tariff category	Domestic - LT2A



## **Stage -02: Feasibility**

**Responsibility:** Sub division

**As per KERC order dated 22.01.2024, all the solar rooftop applications upto capacity of 150kW are considered as deemed feasible and hence providing feasibility for these applications is not required.**

For all other applications, the procedure for providing feasibility is as below;

- a. The Sub Division office has to login to the online portal using their login credentials.
- b. The list of applications for which feasibility is to be provided will be displayed.
- c. Select one application at a time, open the feasibility tab and enter the required details.
- d. After entry of required data in the portal, Feasibility report will be generated automatically.
- e. Download the feasibility report, sign it and upload it.

### **Facilitation fees:**

- a. In case deemed applications, facilitation fees has to paid along with or after registration of application. No feasibility is required.
- b. For all other applications, Consumer has to pay the facilitation fees after feasibility approval.

SRTPV ONLINE SERVICES

APPLY ONLINE VIEW STATUS OFFICERS' LOGIN

Official Login

Enter Mobile Number 9449841568 Send OTP

Enter OTP Verify & Login

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## SRTPV Applications Registered



Number of Applications registered: 2

Application ID	Account ID	Subdivision Code	Subdivision Name	RR Number	Registered Date	Status
1000003541	8265141040	140017	S8 BOMMANAHALLI	8SEH96064	01 Oct 2018	PPA Forwarded To KERC. 13 Nov 2018
1000002966	5450996000	140017	S8 BOMMANAHALLI	S8HT60	25 Sep 2018	Payment Successful. Pending feasibility 25 Sep 2018

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080 2234 0816 [solarrooftop@bescom.co.in](mailto:solarrooftop@bescom.co.in)[Application Info](#) [Feasibility](#) [PPA](#) [Work execution](#) [Commissioning](#)

Application No. 1000002966 Proposed Solar capacity in kWp : 202.0

## Distribution Transformer Information

DTC location\*   
DT Code\*   
DT Capacity in kVA\*   
Connected Load on DT in kW\*   
SRTPV capacity already connected in kWp\*   
SRTPV capacity under progress in kWp\*

## Feeder Information

Substation Name\*   
Feeder Name\*   
Feeder MDM Code   
Feeder conductor size in sq mm\*   
Rated current carrying capacity in Amps\*   
SRTPV capacity already connected in Amps\*   
SRTPV capacity under progress in Amps\*   
SRTPV capacity proposed in Amps\*

## Feasibility

\* Feasible ☐ Partially Feasible ☐ Not Feasible ☐  
Application is feasible

## Download/Upload

Download Unsigned Feasibility Report  
Signed Feasibility Report (PDF < 2MB)





## BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

Wholly owned Govt. of Karnataka Undertaking

Ref:

Asst. Executive Engineer (Ele.)(Com.  
O&M),BESCOM, SLN Complex, Bus Stand,  
Kengeri, Bangalore-560060

### Feasibility Report for SRTPV Application No. 1000052853

Proposed solar capacity: 3.0

*This application is registered under SOURA GRUHA YOJANE (SGY) - 2019-2020*

DT Information	
DTC Location	VBHCS LAYOUT-6
DT Code	111060401 063
DT Capacity in kVA	250.0
Connected Load on DT in kW	179.0
SRTPV Capacity already connected in kW	0.0
SRTPV Capacity under progress in kW	0.0

Feeder Information	
Substation Name	RAJARAJESHWARINAGAR_66
Feeder Name	F07-BEML-LAYOUT
Feeder MDM code	1140204901010301
Feeder conductor size in sq. mm	400.0
Rated current carrying capacity in Amps	286.0
SRTPV capacity already connected in Amps	113.0
SRTPV capacity under progress in Amps	0.0
SRTPV capacity proposed in Amps	13.0

Feasibility	
Proposed Application is	Feasible
Allowable SRTPV Capacity	3.0
Remarks	ITS FEASIBLE

### Stage -03 – Execution of Power Purchase Agreement

#### Responsibility:

- Consumer in case of deemed applications.
- Consumer & O&M AEE /EE for all other applications.

#### For Deemed Applications:

- The online signing of PPA will enabled after payment of facilitation fees.
- The Consumer has to Digitally sign the online PPA using Adhar Number and the phone number linked to Adhar (For OTP).



**For other applications:**

- a. PPAs to be executed on offline mode on Rs. 500 value non-judicial stamp paper. The PPA has to be executed between Consumer and designated ESCOM official, who shall sign the PPA on behalf of ESCOMs.
- b. For capacities upto 500kWp, the PPAs shall be executed by the Assistant Executive Engineer(Ele) of O & M Sub-Division and above 500kWp capacities, the PPAs shall be executed by the Executive Engineers of O&M divisions.
- c. The Assistant Executive Engineer(Ele) of O & M Sub-Division is PPA approval authority upto 500kWp capacities of SRTPV plants and for SRTPV plants of capacities more than 500kWp and upto 1000kWp, the Corporate Office of respective ESCOM is the approval authority.
- d. The approval of the KERC shall be obtained for capacities of more than 1000kWp and for any deviation from standard format.

If a Consumer requests for installation of additional solar capacity, the present PPA shall be canceled and new PPA shall be executed for 25 years with PPA rate being 90% of PPA tariff or present tariff, whichever is lower,

The Sub division / Division office shall issue OM for cancellation of present PPA.

**Note:** In case of additional SRTPV capacity, for deciding the PPA authority, the total of already commissioned and proposed plant capacity shall be considered.

The screenshot displays the 'SRTPV ONLINE SERVICES' web portal. At the top, there is a header with the ESCOM logo, the text 'SRTPV ONLINE SERVICES', and user information: 'ASSISTANT EXECUTIVE ENGINEER(ELE), O & M SUBDIVISION' and a 'LOGOUT' link. Below the header is a navigation bar with five tabs: 'Application Info', 'Feasibility', 'PPA' (which is highlighted in red), 'Work execution', and 'Commissioning'. The main content area shows 'Application No. 1000002966' and 'Feasible Solar capacity in kWp : 100.0'. Under the 'PPA Information' section, there are input fields for 'Agreed Rate\*' (3.56), 'PPA Signed Date\*' (06/12/2018), and 'Signed PPA (PDF < 2MB)' with a 'Choose File' button and a file named 'Work\_Ap...13).pdf'. Below these fields is a text box containing 'PPA accepted.' and two buttons at the bottom: 'Submit PPA' and 'Reject Application'. The background of the portal features a solar panel array under a blue sky.



### **Stage -04 – Work Approval Intimation**

**Responsibility:** Sub division

- a. Work approval intimation letter is automatically generated and emailed to registered email after online execution of PPA/Uploading of PPA document in case of off-line PPA.
- b. The work approval intimation shall also include intimation for change of meter and if required change of HT metering cubicle.

### **Stage -05 – Work Completion Intimation**

**Responsibility:** Consumer

Consumer has to the following;

- a. Login to ESCOM SRTPV portal using “Track Status” option with application number and registered mobile number.
- b. Enter the details of panels and inverters in work completion tab of the application.
- c. The Consumer has to enter Bank details and upload copy of the PAN card and cancelled bank cheque copy.
- d. After work completion, the Consumer will be prompted for SPPA, if the installed capacity is different from PPA capacity and is within the sanctioned load of the Consumer.



- In case deemed feasible application, online SPPA has to be done.
  - In case of other applications, the sub division has to raise ticket through portal for capacity correction.
  - Status of application has to be reverted to feasibility stage by the IT team, once the ticket is raised from sub division.
  - The revised feasibility has to be provided for installed capacity.
  - Offline SPPA has to be executed once revised feasibility is provided.
- e. Submit the details through OTP verification.
- f. As KERC tariff orders, the Consumer has to complete the work within 150 days from date of work approval intimation.

Application Info				Work Completion				Commissioning			
Application No. 1000005553				Feasible Solar capacity in kWp : 1.0							
The work of installation of SRTPV system is completed and I would like to submit the following information for your kind needful.											
<b>Solar PV Module</b>											
Sl No.	Make of the PV Module	Type of the PV Module	Capacity of each module in kWp	No. of Modules	Sl. No of Modules (Comma separated)	Total capacity of this make, type & capacity	Add	Delete			
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>	<input type="button" value="Delete"/>			
Total PV Panel capacity (in kWp) 0											
<b>Inverter</b>											
Sl No.	Make of the Inverter	Type of the Inverter	Capacity of the Inverter (VA)	No. of Inverters	Sl. No of Inverters (Comma separated)	Total capacity of this make, type & capacity	Add	Delete			
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>	<input type="button" value="Delete"/>			
Total Inverter capacity (in VA) 0											
<b>Bi-directional meter details (Test report of bi-directional meter issued by MT division, BESCOM to be uploaded)</b>											
Sl. No	Particulars				Main Meter						
1	Make				<input type="text"/>		<input type="button" value="v"/>				
2	Type				<input type="text"/>		<input type="button" value="v"/>				
3	Sl. No.				<input type="text"/>		<input type="button" value="v"/>				
4	Phase				<input type="text"/>		<input type="button" value="v"/>				
5	CT Ratio				<input type="text"/>		<input type="button" value="v"/>				
6	PT Ratio				<input type="text"/>		<input type="button" value="v"/>				
7	Date of Test by MT Division				<input type="text"/>						
8	Meter Testing Report (PDF less than 2 MB)				<input type="button" value="Choose File"/> <input type="text" value="No file chosen"/>						

Work Execution details of of SRTPV Application No. 1000028266

Solar PV Module

Sl No	Make	Type	Capacity of each module in kWp	No. of Modules	Sl. No of Modules (Comma separated)	Total capacity of this make, type & capacity
1	WAAREE	Monocr	370.0	94	ATTACHED	34780.0

Inverter

Sl No	Make	Type	Capacity of Inverter (VA)	No. of Inverters	Sl. No of Inverters (Comma separated)	Total capacity of this make, type & capacity
1	M/s Solar Edge Tech Ltd., Israel	String	27.6	1	SJ5118-07E155378-5E	27.6

DC Cables

Sl No	Make	Type	Size
1	SIECHEM	COPPER	4.0

AC Wiring

Sl No	Make	Type	Size
1	FINOLEX	COPPER	16.0

DC Distribution Box

Sl No	Make	Sl no. of DC Distribution Box	DC Surge Protection Device	MCB/Isolator capacity	MCB/Isolator quantity
1	HENSEL	00	CITEL	63.0	0

AC Distribution Box

Sl No	Make	Sl no. of AC Distribution Box	DC Surge Protection Device	MCB/Isolator capacity	MCB/Isolator quantity
1	HENSEL	00	CITEL	63.0	2

Earthing details

Earth Resistance (Less than 50 ohms)	3.1
Size of the Earth flat (3 x 70 sq mm galvanized iron flat)	25.0
Modules & DC Surge arrester	YES
Inverter & AC Surge arrester	YES
Lightning Arrester	YES

Bidirectional Main Meter

Make	M/s Secure meters
Type	ELECTRO TRIVECTOR METER
Serial No	XE470909
Phase	Three Phase
CT Ratio	1.0
PT Ratio	1.0
Date of Test by MT division	24 Sep 2019

Bidirectional Check Meter

Make	M/s Secure meters
Type	ELECTRO TRIVECTOR METER
Serial No	XE470911
Phase	Three Phase
CT Ratio	1.0
PT Ratio	1.0
Date of Test by MT division	24 Sep 2019

Caution Signs

Panels	YES
Inverters	YES
DC/AC distribution box	YES

Switch

Provision of manual and automatic switch	Yes
--	-----

System installer details

System Installer Firm Name	ECOSOCH SOLAR PVT LTD
System Installer Firm License Number	0000

Certified that the above said SRTPV system was installed by me and the equipment's used comply the Technical and Safety standards issued by BESCOM.

Report submitted on : 16 Mar 2021 07:04:20 PM

This is a system generated letter and doesn't require signature



## Stage -06 – Synchronization:



**Responsibility:** Consumer & ESCOM O&M AEE/EE and MT official.

- The sub division/division is required to login to portal, verify the work completion details entered by Consumer and generate the synchronization certificate.
- In case of SRTPV applications of more than 17.5kW, the Pre-Commissioning test has to be done by MT Officers and they have to enter Meter details in the portal using their credentials.
- The SRTPV plant Commissioning & Synchronizing Authority:

Sl. No.	Capacities	ESCOM Officers authorized for synchronization
1	1kW to 17.5kWp	Assistant Executive Engineer(Ele), O & M Sub-Division
2	Above 17.5kW to upto 500kWp	Assistant Executive Engineer(Ele), O & M Sub-Division in co-ordination with Meter Testing (MT) staff
3	Above 500kWp	Executive Engineer(Ele), O & M Division in Co-ordination with Meter Testing (MT) staff.

Application Info	Work Completion	Commissioning						
Application No. 1000005668 Feasible Solar capacity in kWp : 0.9								
<b>Feasibility</b> <b>Commissioning</b>								
<b>Note:</b> 1. The Bi-directional meter records solar generation and existing meter records installation consumption in case of Gross metering. 2. The Bi-directional meter records export of solar energy to grid and Import of energy by the installation. Existing meter records the total solar energy generated.								
<b>Note:</b> The following verification has to be done scrupulously during field inspection: 1. Verify the sl no. nos of modules and capacity of each panel with agreed capacity in the Power purchase agreement. In case of any variation SPPA shall be made. 2. Verify the details of grid tied inverters and meters. 3. In case any changes / modifications or observations to be made/ attended by the consumer the same shall be returned back to consumer to attend the same ( by clicking the return button along with reasons). 4. The SPPA shall be made in case of delay in commissioning. 5. The SRTPV plant shall be synchronized with 5 days from the date of submission of work completion or after attending the observations whichever is later. 6. The other norms of the SRTPV tariff order / Regulation issued from time to time is applicable.								
<b>Work Declaration Details</b> <a href="#">Download</a>								
<b>Meter Information</b>								
<b>Bi-Direction Meter (Main)*</b>		<b>Existing Meter*</b>						
Meter make:	M/s Genus Power Infrastructu							
Meter phase:	Three Phase	Three Phase						
Meter Type	ELECTRO TRIVECTOR METER							
Serial number	123							
Meter constant	1.0							
Initial reading (Tri vector parameters) Import								
Initial reading (Tri vector parameters) Export								
<b>Solar PV Module</b>								
Sl No.	Make of the PV Module	Type of the PV Module	Capacity of each module in kWp	No. of Modules	Sl. No of Modules (Comma separated)	Total capacity of this make, type & capacity	Add	Delete
1	gfdgdf	Mono	0.9	1	gdf	0.9	+	-
Total PV Panel capacity (in kWp) 0.9								



Grid Tied Inverter									
Sl No.	Make of the Inverter	Type of the Inverter	Input voltage (volts)	Output voltage (volts)	Capacity of the Inverter (VA)	No. of Inverters	Sl. No of Inverters (Comma separated)	Total capacity of this make, type & capacity	Add Delete
1	fgfd	Micro			1.0	1	dfgdf	1.0	 
Total Inverter capacity (in VA) 1.0									

Inspection Details	
Pincode	560001
District of the installation	525,BENGALURU URBAN
Latitude of the installation*	12.971533
Longitude of the installation*	77.59906
Locate Latitude & Longitude on Google Map OR Use my current location	
Whether Anti-islanding feature is in working condition ?* <input type="radio"/> Yes <input type="radio"/> No	
Is DC earthing verified?* <input type="radio"/> Yes <input type="radio"/> No	
Is AC earthing verified?* <input type="radio"/> Yes <input type="radio"/> No	
Is LA earthing verified?* <input type="radio"/> Yes <input type="radio"/> No	
Is AC & DC DB available?* <input type="radio"/> Yes <input type="radio"/> No	
Is Manual Switch on solar side available?* <input type="radio"/> Yes <input type="radio"/> No	
Is Relay operated automatic switch at net-meter side available?* <input type="radio"/> Yes <input type="radio"/> No	
Date of Inspection	
Photo of the plant along with the Prosumer (JPEG file < 2 MB)	<input type="button" value="Choose File"/> <input type="button" value="No file chosen"/>
Date of synchronizing with BESCO grid	
Synchronization Voltage Level	
Remarks not exceeding 1000 characters	
<input type="button" value="Return to Work Completion"/> <input type="button" value="Submit"/>	

## Stage -07 – Accounting & Billing

**Responsibility:** AE (Technical) of the sub division

- After generating the synchronization certificate, the AE(T) of the sub division has to hand over the PPA to accounting unit in case of offline PPA.
- The AAO of the sub division will also be provided with login credentials.
- No hard copies of the documents except for PPA in case of offline PPA are to be collected Consumer / Installer. If required, documents are to be downloaded by AE(T)/AAO using their login credentials.



**Note:** Billing format to be followed across all ESCOM is as below.

**SRTPV Bill Description with TOD billing**

1	RR No	23	Cost of Purchase (PPA Rates)
2	Account ID/Connection ID	24	Availing of Subsidy (Yes/No)
3	Name & Address	25	Gross Amount Payable (Net Export *PPA Rate)
4	Meter Reader Code	26	A) Demand Charges B) MD Penalty (If any)
5	Retail Tariff Applicable	28-31	Slab Wise Import Bill (If Column Number 17 is Net Import)
6	Sanction Load KVA	32	FAC for the Net Imported Units.
7	Solar Installed KWP	34	Electricity Tax at 9% for the Energy Charges (28+29+30+31)*9%
8	Billing Period	35	20 Paisa Captive Tax on Self Consumption (Above 425 KWP)
9	Reading Date	36	Electricity Tax at 9% on TOD Charges
10	Main Meter/ Check meter serial No	37	Rebates TOD Charges
11	A) Present Reading Bi-Directional meter Import & Export	38	Power Factor Penalty (Rs 3 Ps for HT Consumers ) (Rs 2 Ps for LT consumers,
11	B) Previous Reading Bi-Directional meter Import & Export		Max 30 Ps) (To be levied on the total units imported from BESCO Grid)
12	Difference Present & Previous	41	Total Deductions
13	Metering Constant	42	Amount payable to consumer after deductions (Gross Bill-Deductions)
14	Gross Export & Gross Import (12*13)	43	TDS 194Q
15	Sub Meter/Wheeling/Consumption Short Claims	44	Amount Credited to Consumer after TDS
16	Total Export & Total Import (14-15)	45	Due Dates
17	Net Export/Net Import (As the Case May Be)		
18	MD Recorded (Displayed in the meter) Both import & Export MD	<b>Note :</b> TOD rebate/ Penalty shall be levied on actual zone wise consumption before setting off Import & Export	
19	MD (18*13)		
20	Conversation from KVA to HP/KW for LT Installations		
21	Power Factor		
22	Generation Meter Details		





**SRTPV Bill With TOD**  
**ಬೆಂಗಳೂರು ವಿಶ್ವ ಶಾಲೆ ಸಂಭರಣ ಕಂಪನಿ ನಿಗಮ**  
**CORPORATE OFFICE SOLAR ROOF TOP CENTRALIZED BILLING CENTER BANGALORE**  
**NET Metering SRTPV Bill For the Month - April-2024**

BR No

Date

Pan No

1	SRTPV / RRNO	SRTPV-	23	ಎಲೆಕ್ಟ್ರಿಕ್ಟಿ / Cost of Purchase	ಎಲೆಕ್ಟ್ರಿಕ್ಟಿ / Without Subsidy	ಎಲೆಕ್ಟ್ರಿಕ್ಟಿ / With Subsidy
2	ಆಕೃತಿ / Account ID / Connection ID				9.56	7.20
3	ಮಾಲೀಕರ ಹೆಸರು / Name and Address:	XXXXXXXXXXXX	24	whether the consumer has availed MINRE subsidy (Yes or No)		NO
4	ಮೀಟರ್ ಓದಿಕೆ / Meter-Reader Code	XXXXXXXXXXXX	25	ಮಾಲೀಕರ ಪಾವತಿಯನ್ನು ಮಾಡಲು ಬಾಕಿ / Gross Amount payable to Consumer		846003
5	ಮೀಟರ್ / Tariff	HT2A(II)		ಮಾಲೀಕರ ಪಾವತಿಯನ್ನು ಮಾಡಲು ಬಾಕಿ / To be paid by Consumer		
6	ಮಾಲೀಕರ ಮೀಟರ್ ಸಂಖ್ಯೆ / Sanctioned Load in KVA	800 KVA	A	ಮಾಲೀಕರ ಮೀಟರ್ ಸಂಖ್ಯೆ / BBMP/CMLB in Rs		Charges
7	ಮಾಲೀಕರ ಮೀಟರ್ ಸಂಖ್ಯೆ / Solar Installed capacity in KWP	1000 KWP		ಮಾಲೀಕರ ಮೀಟರ್ ಸಂಖ್ಯೆ / Village Panchayath in Rs		272000.00
8	ಮೀಟರ್ ಓದಿಕೆ / Billing Period	01.04.2024 TO 01-May-24	i	Slab1	800.00	340.00
9	ಮೀಟರ್ ಓದಿಕೆ / Reading Date	01-May-24	ii	Slab2	0.00	0.00
10	ಮೀಟರ್ ಓದಿಕೆ / Bi-Directional Meter SI No (Main/Check)	Y0234565/66	26A	Total Fixed charges (Tii)		272000.00
11	ಮೀಟರ್ ಓದಿಕೆ / Energy Recorded	(A) ಮೀಟರ್ ಓದಿಕೆ / Energy Import	268	ಮೀಟರ್ ಓದಿಕೆ / MD Penalty Charges [(MD Recorded - Sanctioned load)	114	Rate 680
A	ಮೀಟರ್ ಓದಿಕೆ / Present Reading	73.743	27	ಮೀಟರ್ ಓದಿಕೆ / Energy Charges [Units X Rate]		77520.00
B	ಮೀಟರ್ ಓದಿಕೆ / Previous Reading	72.747				
12	ಮೀಟರ್ ಓದಿಕೆ / Difference (11-12)	1.00	28	Slab1	0	YES
13	ಮೀಟರ್ ಓದಿಕೆ / Meter Constant	6000	29	Slab2	0	6.90
14	ಮೀಟರ್ ಓದಿಕೆ / Meter Constant	5976	30	Slab3	0	0.00
15	Sub Meter Consumption	0	31	Slab4	0	0.00
16	Total Consumption (14-15)	5976	32	FAC	0	0.16
17	ಮೀಟರ್ ಓದಿಕೆ / Net Import / Export :	0	33	Total Energy charges (Tii+Tiii+Tiv) + FAC		0.00
18	ಮೀಟರ್ ಓದಿಕೆ / Recorded MD	0.1524	34	Electricity Tax @ 9 % for the Energy Charges		0.00
19	Total Load in KVA	914.40	35	MD / Tax 0.20 on Self Consumption		2845.20
20	Total Load in KW (in Case of LT installations)	0.85	36	Electricity Tax @ 9 % for TOD charges		569.00
21	ಮೀಟರ್ ಓದಿಕೆ / Power Factor	0.85	37	ಮೀಟರ್ ಓದಿಕೆ / Rebates, TOD Charges		-127.00
22	SRTPV Meter Details		38	ಮೀಟರ್ ಓದಿಕೆ / Power Factor Penalty		-1416.00
I	SRTPV Meter SI NO	3124739	39	ಮೀಟರ್ ಓದಿಕೆ / Short Claims / Late Payment Charges/ Penalty/Recovery		896.40
II	Present Reading	24785.20	40	ಮೀಟರ್ ಓದಿಕೆ / Credits, Adjustments/Round off adj		100.00
III	Previous Reading	24481.09	41	ಮೀಟರ್ ಓದಿಕೆ / Net Amount to be paid by Consumer (26A+26B+28+29+30+31+32+34+35+36+37+38+40)		0.40
IV	Difference (II-III)	304.11	42	ಮೀಟರ್ ಓದಿಕೆ / Net Amount to be paid to by BESCOM 2341		349542.00
V	Meter Constant	320	43	TDS (0.1% on Cumulative Payments above 50 Lakhs in FY)		496461.00
VI	Total (4+5)	97315	44	Amount Paid To Consumer 42-43		0.00
Average Generation Per Day	3.24		45	ಮೀಟರ್ ಓದಿಕೆ / Due Date for Payment		496461.00
						30-May-24

Rupees Four Lakh NinetySix Thousand Four Hundred SixtyOne Only

Counter Signed

Manager(UC)

Assistant General Manager(BC)

General Manager (USM)



Import Time Zone		Present Reading	Previous Reading	Diff	K	Consumption	TOD EC PER UNIT	TOD TAX
Time Zone 1 06 to 10		3116	3077	0.04	6000	234.00	0.00	0
Time Zone 2 10 to 18		12628	12497	0.13	6000	786.00	0.00	0
Time Zone 3 18 to 22		22962	22667	0.29	6000	1770.00	1770.00	159.3
Time Zone 4 22 to 06		35037	34506	0.53	6000	3186.00	-3186.00	-286.74
Total		73743	72747	1.00		5976.00	-1416.00	-127.00

Export Time Zone		Present Reading	Previous Reading	Diff	K	Consumption
Time Zone 1 06 to 10		145150	143150	2.00	6000	12000.00
Time Zone 2 10 to 18		397135	383410	13.73	6000	82350.00
Time Zone 3 18 to 22		3120	3100	0.02	6000	120.00
Time Zone 4 22 to 06		0.000	0.000	0.00	6000	0.00
Total		545405	529660	15.75		94470.00

Main Meter		Energy Import	Energy Export
Energy Recorded			
Present Reading		73743	545405
Previous Reading		72747	529660
Difference		0.996	15.745
Meter Constant		6000.000	
Total Energy Import / Export		5976.000	94470.000
Net Import (Consumption) /Export		0.000	88494.000

42 JV Details			
Debit	Credit	Debit	Credit
70 520 7	-	846003.00	
	23 261 7		349100.00
	46 300 7		442.00
	46 109 7		0.00
	46 924 7		496461.00
Total		846003.00	846003.00

LOCATION CODE:759

HEAD OF ACCOUNT:70.5207

PASSED FOR PAYMENT

SRTPV CENTRALIZED BILLING CENTER CORPORATE OFFICE BESCOM

Enforcement

Original/Duplicate

Account Head		70.5207	846003.00			
Bill Passed for Rupees		Figures:- Words:-	Rupees Eight Lakh FortySix Thousand Three Only			
		Paid through RTGS / NEFT		Deductions		
		Name of the Consumer	Account Number	Gross Bill Amount	Others	Arrears+ Int
Please Pay towards		XXXXXXXX	A/c No XXXXXXXXX IFSC HDFC0000523 HDFC BANK Bangalore	846003.00	-520.00	100.00
		TOTAL		846003.00	-520.00	100.00
		Rupees Four Lakh NinetySix Thousand Four Hundred SixtyOne Only				
				Payable Amount		
				Demand Charges + MD Penalty		496461.00
				Electricity Tax		442.00

## CERTIFICATE

- 1) Certified that the bill have been prepared as per reading furnished by AEE (C.O&M) sub division.
- 2) Certified that this Bill for the month of AUGUST 2023 Has Not Been Paid at SRTPV CBC earlier.

Manager(CBC)

Assistant General Manager(CBC)

Assistant General Manager (I/A)



## **ILLUSTRATION OF PROCEDURE FOR SUBSIDY APPLICATIONS**

### **Stage -01: Application Registration**

**Responsibility:** Consumer

- a. At present subsidy is available only for domestic category Consumers who are willing to install solar rooftop plants under PM Surya Ghar Scheme.
- b. For installation of solar rooftop plants under PM Surya Ghar Scheme, the Consumers are required to register their application and apply through National Portal using the link : <https://www.pmsuryaghar.gov.in/>
- c. Consumers are required to register under the PM Surya Ghar scheme by following the instructions on the website. After registration, Consumers are required to apply for installation of solar rooftop plant.
- d. Once the application registration process is complete in PM Surya Ghar portal, the Consumers should note down the Registration Reference number generated by the portal for continuing application process in ESCOMs portal.
- e. For continuing application process in ESCOMs portal, the Consumers are required to click the link displayed at ESCOMs website and enter the Registration Reference number generated by the PM Surya Ghar portal.
- f. Once, the Registration Reference number is entered in ESCOMs portal, the data from PM Surya Ghar portal will be fetched automatically and Consumers will be verified by ESCOMs portal through OTP sent to registered mobile number.
- g. After verification, the Consumers are required to pay application fees online through ESCOMs portal for further processing the application.

### **Stage -02: Feasibility**

- a. The feasibility process in ESCOMs portal is same as that in case of Non-subsidy applications. The same procedure shall be followed.
- b. Feasibility in MNRE portal will be updated once the Power Purchase Agreement is executed.



### **Stage -03 – Execution of Power Purchase Agreement**

- a. The execution of Power Purchase Agreement procedure is same as that in case of Non Subsidy application.
- b. PM Surya Ghar Portal portal does not have provsion for PPA uploading and hence PPA shall be executed online / offline PPA shall be uploaded in ESCOMs portal only.

### **Stage -04 – Work Approval Intimation**

- a. The Work Approval Intimation procedure is same as that in case of Non Subsidy application.
- b. No separate work approval intimation will be communicated through PM Surya Ghar Portal.

### **Stage -05 – Work Completion Intimation**

- a. The Consumer has to entry work completion details such as panel wattage and inverter details in PM Surya Ghar Portal using tgheir login credentials.
- b. After entering work completion details in PM Surya Ghar Portal, Consumera required to Login to ESCOM SRTPV portal using "Track Status" option with application number and registered mobile number.
- c. Enter the Registration Reference code in Work completion tab and the details will be fetched automatically from PM Surya Ghar Portal.
- d. Enter the additional information as in case of Non-subsidy application and submit the work completion detilas and confirm the same through OTP verifiaction.

### **Stage -06 – Synchronization:**

The Work Synchronization procedure is same as that in case of Non Subsidy application.

### **Stage -07 – Handing over the documents to accounting unit:**

The Work Synchronization procedure to be followed is same as that in case of Non Subsidy application.

### **Stage -08 – Billing:**

The Billing procedure to be followed is same as that in case of Non Subsidy application.

  
General Manager (Ele.)  
DSM, Corporate Office,  
K.R. Circle, Bengaluru-01.

1. The first part of the report is a general introduction to the subject of the study. It should state the purpose of the study, the scope of the study, and the methods used.

2. The second part of the report is a detailed description of the data collected. This should include a description of the sample, the instruments used, and the procedures followed.

3. The third part of the report is a discussion of the results. This should include a comparison of the results with previous studies, an interpretation of the results, and a discussion of the limitations of the study.

4. The fourth part of the report is a conclusion. This should summarize the main findings of the study and provide recommendations for future research.

5. The fifth part of the report is a list of references. This should include all the sources used in the study, including books, articles, and other documents.

6. The sixth part of the report is an appendix. This should include any additional information that is relevant to the study, such as raw data, questionnaires, or other documents.

7. The seventh part of the report is a bibliography. This should include a list of all the sources used in the study, including books, articles, and other documents.

8. The eighth part of the report is a glossary. This should include a list of all the terms used in the study, along with their definitions.

9. The ninth part of the report is a list of figures. This should include a list of all the figures used in the study, along with their descriptions.

10. The tenth part of the report is a list of tables. This should include a list of all the tables used in the study, along with their descriptions.



**CHAMUNDESHWARI ELECTRICITY SUPPLY CORPORATION LIMITED**

NET Metering SRTPV Bill For the Month - .....

Pan No

BR No

Date

1	ಆರ್.ಆರ್.ಸಂಖ್ಯೆ / RRNO			23	ಖರೀದಿ ದರ / Cost of Purchase (as per PPA)			ಅನುದಾನ ರಹಿತ / Without Subsidy	ಅನುದಾನ ಸಹಿತ / With Subsidy
2	ಅಕೌಂಟ್ ಐಡಿ/ Account ID / Connection ID								
3	ಹೆಸರು ಮತ್ತು ವಿಳಾಸ/ Name and Address:			24	whether the consumer has availed MNRE subsidy (Yes or No)				
4	ಮಾಪಕ ಓದುಗರ ಸಂಖ್ಯೆ / Meter-Reader Code			25	ಗ್ರಾಹಕರಿಗೆ ಪಾವತಿಸಬೇಕಾದ ಒಟ್ಟು ಮೊತ್ತ / Gross Amount payable to Consumer ( 17B X 23 A or B )			0	
5	ಜಕಾತಿ / Tariff				ಗ್ರಾಹಕರು ಬೆವಿಕಂಗ ಪಾವತಿಸಬೇಕಾದ ಮೊತ್ತ / To be paid by Consumer				
6	ಮಂಜೂರಾದ ವಿದ್ಯುತ್ ಪ್ರಮಾಣ / Sanctioned Load in KVA			A	ನಿಗದಿತ/ಬೇಡಿಕೆ ಶುಲ್ಕ Fixed/Demand Charges	KVA	ಬೃ.ಬೆಂ.ಮ.ಪಾ/ಸ.ಪಾ/ನ.ಸೃ.ಸಂ/ BBMP/CMC/ULB in Rs. ಗ್ರಾಮ ಪಂಚಾಯಿತಿ / Village Panchayath in Rs.	Charges	
7	ಸೌರ ಸ್ಥಾಪಿಸಲಾಗಿದೆ ಸಾಮರ್ಥ್ಯ / Solar Installed capacity in KWP								
8	ಬಿಲ್ಡಿಂಗ್ ಅವಧಿ /Billing Period		TO						
9	ಮಾಪಕ ಓದುವ ದಿನಾಂಕ / Reading Date			i	Slab1			0.00	
10	ಬೈ-ಡೈರೆಕ್ಷನಲ್ ಮಾಪಕ ಕ್ರಮ ಸಂಖ್ಯೆ/ Bi-Directional Meter SI No (Main/Check)			ii	Slab2			0.00	
11	ವಿದ್ಯುತ್ ದಾಖಲಿಕೆಗಳು / Energy Recorded	(A) ವಿದ್ಯುತ್ ಒಳಹರಿವು / Energy Import	(B) ವಿದ್ಯುತ್ ಹೊರಹರಿವು / Energy Export	26A	Total Fixed charges(i+ii)			0.00	
A	ಇಂದಿನ ಗಣಾಂಕ / Present Reading			26B	ಗುಪ್ತ ಬೇಡಿಕೆ ದಂಡ ಶುಲ್ಕ / MD Penalty Charges [( MD Recorded - Sanctioned load)		Excess MD Recorded	Rate	
B	ಓಂದಿನ ಗಣಾಂಕ / Previous Reading							0	0.00
				27	ವಿದ್ಯುತ್ ಶುಲ್ಕ / Energy Charges [ Units X Rate] (if col no 17 is Net Import)				
12	ವ್ಯತ್ಯಾಸ / Difference ( 11-12 )	0.00	0.00	28	Slab1	0			0.00
13	ಮಾಪಕ ಗುಣಾಂಕ / Meter Constant			29	Slab2	0	0.00		0.00
14	ಒಟ್ಟು ವಿದ್ಯುತ್ ಒಳಹರಿವು / ಹೊರಹರಿವು / Energy Import / Export (12X13)	0	0	30	Slab3	0	0.00		0.00
				31	Slab4	0	0.00		0.00
15	Sub Meter Consumption	0	0	32	FAC for net imported units	0			0.00
16	Total Consumption (14-15)	0	0	33	Total Energy charges(i+ii+iii+iv) + FAC			0.00	
17	ನಿವ್ವಳ ಬಳಕೆ/ಉತ್ಪಾದನೆ / Net Import /Export :	0	0	34	Electricity Tax @ 9 % for the Energy Charges (28+29+30+31)*9% (if col no 17 is Net Import)			0.00	0.00
18	ದಾಖಲಿತ ಬೇಡಿಕೆ / Recorded MD			35	ತೆರಿಗೆ / Tax 0.20 on Self Consumption (for above 425 kWp)			0.00	0.00
19	Total Load In KVA (18*13)	0.00	0	36	Electricity Tax @ 9 % for TOD charges			-	0.00
20	Total Load In KW (in Case of LT installations)	NA	NA	37	ರಿಯಾಯಿತಿ, ಟಿ.ಟಿ.ಡಿ ಶುಲ್ಕಗಳು / Rebates, TOD Charges			0.00	
21	ಪವರ್ ಫ್ಯಾಕ್ಟರ್ / Power Factor			38	ಪವರ್ ಫ್ಯಾಕ್ಟರ್ ದಂಡ ಶುಲ್ಕ / Power Factor Penalty			0.00	
22	SRTPV Meter Details :			39	ವಾಕಿ / Arrears / Short Claims / Late Payment Charges/ Penalty/Recovery			0.00	
I	SRTPV Meter SI NO			40	ಜಮೆ , ಹೊಂದಾಣಿಕೆಗಳು / Credits, Adjustments/Round off adj/			0.00	
II	Present Reading			41	ಗ್ರಾಹಕರು ಬೆವಿಕಂಗ ಪಾವತಿಸಬೇಕಾದ ನಿವ್ವಳ ಮೊತ್ತ / Net Amount to be paid by Consumer (26A+26B+28+29+30+31+32+34+35+36+37+38+39-40)			0.00	
III	Previous Reading			42	ಗ್ರಾಹಕರಿಗೆ ಪಾವತಿಸಬೇಕಾದ ನಿವ್ವಳ ಮೊತ್ತ / Net Amount to be paid to by CESC (25-41)			0.00	
IV	Difference (II-III)		0.00	43	TDS (0.1% on Cummalative Payments above 50 Lakhs in FY)			0.00	
V	Meter Constant			44	Amount Paid To Consumer 42-43			0.00	
VI	Total (4*5)		0	45	ಪಾವತಿಕೆ ಕಡೇ ದಿನಾಂಕ / Due Date for Payment				
Average Generation Per Day		0.00		0					
Signature									

Note: For Non-ToD meters the below is not applicable

39	Import Time Zone	Present Reading	Previous Reading		Diff	K	Consumption		TOD EC PER UNIT	TOD TAX
	Time Zone 1 06 to 10				0.00	6000	0.00	0	<b>0.00</b>	0
	Time Zone 2 10 to 18				0.00	6000	0.00	0	<b>0.00</b>	0
	Time Zone 3 18 to 22				0.00	6000	0.00	1	<b>0.00</b>	0
	Time Zone 4 22 to 06				0.00	6000	0.00	-1	<b>0.00</b>	0
	Total	<b>0.000</b>	<b>0.000</b>		<b>0.00</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>

40	Export Time Zone	Present Reading	Previous Reading		Diff	K	Consumption
	Time Zone 1 06 to 10				0.00	6000	0.00
	Time Zone 2 10 to 18				0.00	6000	0.00
	Time Zone 3 18 to 22				0.00	6000	0.00
	Time Zone 4 22 to 06				0.00	6000	0.00
	Total	<b>0.000</b>	<b>0.000</b>		<b>0.00</b>		<b>0.00</b>

41	Main Meter	
	Energy Recorded	Energy Import      Energy Export
	Present Reading	
	Previous Reading	
	<b>Difference</b>	<b>0.000      0.000</b>
	Meter Constant	0.000
	<b>Total Energy Import / Export</b>	<b>0.000      0.000</b>
	<b>Net Import (Consumption) /Export</b>	<b>0.000      0.000</b>

Check Meter	
Energy Import	Energy Export
<b>0.000</b>	<b>0.000</b>
0.000	
<b>0.000</b>	<b>0.000</b>
0.000	<b>0.000</b>