Net-metering

(Applicable for Industrial, Commercial and all categories of consumers other than Domestic, Hospital and Educational institution categories)



Hubli Electricity Supply Company Limited

(wholly owned Government of Karnataka undertaking)

Telephone : Email ID : Ref No.: Office of the

AEE/EE(Ele) O&M Tikota Sub Division/ Division Bijapura

HESCOM

Date: 16/11/2018

To,

The Register Karnataka State Women's University Torvi,Bijapura

Madam/Sir,

Sub: Approval for installing **170kWp** solar RTPV system under Net- metering.

Ref: 1. Application Reg. No. TKTSRTPV/01 dtd: 23/10/2018

PPA executed date: 16/11/2018

With reference to your SRTPV application, approval is herewith accorded for installing Solar RTPV system of **170kWp** on your rooftop under Netmetering basis as per following terms and conditions:

- 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.
- You can select a reputed system installer of your choice, who have experience in design, supply, installation and commissioning of SRTPV system.
- Only HESCOM empaneled inverters and meter shall be used. The empaneled list of inverters and meters are available in HESCOM website.
- Upgradation of infrastructure, if required, (service main, meter with CT, upgrade) upto the grid connectivity point is to be done at your cost.
- All the other components of Solar RTPV system shall comply with applicable IS/IEC standards. The Technical specification of each equipment is available in HESCOM website.

- 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.
- 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 20kWp.
- Approval of Electrical Inspectorate, GoK is required if capacity of SRTPV system is more than 10kWp.
- You should complete the SRTPV installation work before 16/11/2018
- After completion of the work in all respects, you have to submit the work completion report in Format - 7 along with following documents:
 - a. Test reports of PV modules and other equipment's (except Grid tied inverter and bi-directional meter) as per IS/ IEC standards.
 - Test certificate of Bi-directional meter issued by MT division, HESCOM.
 - c. 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.
 - d. Receipt of facilitation fee.
- 13. If for any reason the date of commissioning is delayed beyond the date of commissioning agreed, the tariff payable by the HESCOM shall be lower of the:
 - i. Tariff agreed to in the PPA. OR
 - ii. Tariff as per the average pooled power purchase cost notified by the Commission prevailing on the date of commissioning.

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

Yours faithfully,

AEE/Executive Engineer(Ele)
O&M Tikota sub-div/division,
Bijapura,HESCOM

HUBBALLI ELECTRICITY SUPPLY COMPANY LIMITED

Cell: 9480882628

Emai:aeehtrmrbjp@gmail.coml



Office of the

Assistant Executive Engineer (El), HTMR Sub-Division. HESCOM, Vijaypur.

No: VJP/AEE/HTMR /SD/18-19 \ 508-511

Date: 26.12,2018

To,

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The Rigister Akkamahadevi Women University, At Toravi village Tq:Tikota,Dist:Vijaypur.

Sub: Reg- Payment of testing fees.

Ref: VJP/EEE/AEE(O)/TA-1/18-19/11336-38 dated 20.12.2018

requested to With reference to the above, you are calibration of 11KV STRPV Installation Tariff meters of Bearing RSDHT-18 with SRTPV Generation Peak of 170KWp with contract demand of CD-200KVA, are requested to remit the meter testing fee as per the table

given be	elow.	Capacity	Amount
S1.No	Name of The SRTPV Installation	Capacia	Rs-10100/-+
1	The Rigister Akkamahadevi Women University, At Toravi village Tq:Tikota, Dist:Vijaypur . RR NO:RSDHT-18	170KWp	(GST Rs 1818)

Hence as per the above Table you are requested to remit the testing fees of Rs:10100/-+GST Rs 1818/-, with testing fees Head 61.9067 by cash/DD in favour of Assistant Executive Engineer(Ele), O&M,Sub-Division HESCOM, Tikota and intimate to this for Pre-conducting & Calibration test at an earliest.

Yours F

Assistant Executive Engineer (El), b-Division,

HESCOM, Vijaypur.

Copy submitted for kind information to,

1)The Executive Engineer (Ele), O&M Division ,Hescom Vijaypur

2)The Executive Engineer (Ele), MRT Division, Hescom , Belagavi. 3)The Assistant Executive Engineer(Elec)O&M, Sub Division, Hescom, Tikota



INDIA NON JUDICIAL

"HESCON"

Government of Karnataka

e-Stamp

Certificate No.

IN-KA84109578386329Q

Certificate Issued Date

16-Nov-2018 11:15 AM

Account Reference

NONACC (FI)/ kaksfcl08/ BIJAPUR12/ KA-BJ

Unique Doc. Reference

SUBIN-KAKAKSFCL0805122588729203Q EXECUTIVE ENGINEER ELE O AND M HESCOM VIJAYAPUR

Purchased by

Article 12 Bond

Description

: POWER PURCHASE AGREEMENT

Consideration Price (Rs.)

Description of Document

0

First Party

(Zero)

Second Party

EXECUTIVE ENGINEER ELE O AND M HESCOM VIJAYAPUR

Second Party

THE REGISTER K S W U TORAVI

Stamp Duty Paid By

: EXECUTIVE ENGINEER ELE O AND M HESCOM VIJAYAPUR

Stamp Duty Amount(Rs.)

200

(Two Hundred only)





Shivagiri Bouharda Pattin Sahakari Ni, Vijayapur.

Please write or type below this lin-

STANDARD FORMAT OF POWER PURCHASE AGREEMENT FOR ROOFTOP SOLAR PV PLANTS WITH NET METERING

This Power Purchase agreement is entered into at Vijayapur on this. For Day of 16/11/2018 between Hubli Electricity Supply Company Limited (HESCOM), a Government of Karnataka undertaking, being a Company formed and incorporated in India under the Companies Act-1956, with its registered office located at Vijayspur Karnataka State, represented by Executive Engineer Ele O And M HESCOM Vijayapur hereinafter referred to as the

in which on the preside renders it invalid be made of the carried the legitimacy at on the upons of the certificate because of the endoceparcy please inform the Competent Authority ಕಾರ್ಯ ನಿರ್ದಾಹಕ-ಅಭಿಯಂತರರು (ವಿ) - ಕಾರ್ಯ ಮತ್ತು ಬಾಲನ ಎಭಾಗ, "HESCOM", (which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns), as party of the first part

AND

The Register Karnataka State Womens University Torvi, Bijapur the consumer of HESCOM residing at (address) The Register Karnataka State Womens University Torvi, Bijapur .hereinafter, referred to as the "Seller" (which expression shall, unless repugnant to the context or meaning thereof, include his successors and permitted assigns) as party of the second part.

Whereas,

- a. The Seller intends to connect and operate the Solar Roof Top Photo Voltaic (SRTPV) system with HESCOM"s HT/LT Distribution system for sale of Solar Power to HESCOM, in terms of the Karnataka Electricity Regulatory Commission (KERC) Order No. S/03/01 dated: 18.05.2018.
- b. The Seller intends to install a SRTPV system of 170.kWp capacity on the existing roof top of the premises, situated at The Register Karnataka State Womens University Torvi, Bijapur and bearing number RR. No RSDHT-18 in the same premises, under Tikota Sub-Division of HESCOM.
- c. The Seller intends to sell the energy, generated from the SRTPV system to HESCOM on net metering basis, from the date of commissioning of the SRTPV system.

Explanation: the "Commissioning" means the stage at which the SRTPV system starts generating the power for the use by the Seller and injects surplus power if any, into the grid.

d. HESCOM intends to purchase the energy, generated by such SRTPV system, on Net-metering basis, at the tariff determined by the KERC.

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REGISTRAR
Akkamahadevi Women's University,
VIJAYAPURA-586108

Now therefore, in consideration of the foregoing premises, the parties, hereto, intending be legally bound, hereby agree as under:

1. Technical and Interconnection Requirements:

Seller shall ensure his SRTPV system complies with the following technical and interconnection requirement and shall:

- 1.1 Comply with the applicable standards and conditions, in respect of integrating the SRTPV system with the distribution system.
- 1.2 Connect and operate the SRTPV system to HESCOM"s distribution system, in accordance with the State Grid code, and distribution Code as amended from time to time.
- 1.3 Install, prior to connection of SRTPV system to HESCOM"s distribution system, an inverter with an automatic inbuilt isolation devise.
- 1.4 Provide external manual isolation mechanism with suitable locking facility, so that SRTPV system will not back-feed into the HESCOM"s network in case of power outage of the HESCOM"s distribution system, and it shall be accessible for HESCOM to operate, if required, during maintenance / emergency conditions.
- 1.5 Install all the equipment of SRTPV system compliant with relevant International (IEEE/IEC) and Indian standards (BIS).
- 1.6 (a) The SRTPV system shall be designed, engineered and constructed and operated by the Seller or any other person on his behalf, with reasonable diligence, subject to all applicable Indian Laws, Rules, Regulations as amended from time to time and orders having the force of law.
 - (b) The Seller, shall commission the SRTPV system, within six months from the date of approval of the PPA.
 - 1.7 Adhere to the following power quality measures, as per the International and Indian standards and/or such other measures stipulated by KERC/HESCOM:

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- Harmonic current: Harmonic current injections from a generation unit shall not exceed the limits specified in IEEE 519.
- Voltage at the injection point should be in the operating range of 80% to 110% of the nominal connected voltage.
- Flicker: Operation of Photovoltaic system shouldn"t cause voltage flicker in excess of the limits stated in the relevant sections of IEC standards or other equivalent Indian standards, if any.
- iv) Frequency: When the system frequency exceeds the upper limit, specified in the IEGC as amended from time to time, the SRTPV system shall shift to Island mode.
- v) DC Injection: Photovoltaic system should not inject DC power more than 0.5% of full rated output at the interconnection point or 1% of rated inverter output current into distribution system under any operating conditions.
- vi) Power Factor: While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9, shall be maintained.
- vii) The SRTPV system, in the event of voltage or frequency variations must island/disconnect itself, as per IEGC/KEGC Regulations, within the stipulated period.

2. Safety:

The Seller, shall comply with the following safety measures:

- 2.1 The Seller shall comply with the Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations, 2010.
- 2.2 The Seller shall ensure that, the design, installation, maintenance and operation of the SRTPV system, are in a manner conducive to the safety of the SRTPV system, as well as the HESCOM's distribution system.
- 2.3 If the Seller's SRTPV system either, causes damage to and/or produces adverse effects on the other consumers" or HESCOM"s assets, Seller will disconnect SRTPV system immediately, from the distribution system, by himself or upon directions from the HESCOM and rectify the same at his own cost before reconnection.

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3. Clearances and Approvals

The Seller shall obtain HESCOM's and other statutory approvals and clearances before connecting the SRTPV system to the distribution system.

4. Access and Disconnection

- 4.1 HESCOM shall have access to metering equipment and disconnecting device of SRTPV system, both automatic and manual, at all times.
- 4.2 In emergency or outage situation, where there is no access to a disconnecting device either, automatic or manual, the HESCOM shall have the right to disconnect power supply to the premises.

5. Liabilities

The Seller, shall be solely responsible for availing any fiscal or other incentive provided by the State/ Central government, at his own expenses.

6. Commercial Settlement-

6.1 Tariff:

- a. The HESCOM shall pay for the Net energy at Rs.3.56 per kWh, as determined by the KERC in the Order dated 18.05.2018, for the term of this agreement.
- b. If for any reason the date of commissioning is delayed, beyond the date of commissioning agreed. The tariff payable by the HESCOM shall be lower of the:
 - i) Tariff agreed to in this agreement

OR

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

OR

- iii) 90% of the tariff agreed to in this agreement.
- c. The Seller, shall pay the Electricity tax and other statutory levies, pertaining to SRTPV generation, as may be levied from time to time.

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Akkamahadevi Women's University.
VIJAYARURA-586108.

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d. The Seller shall not have any claim for compensation, if the Solar power generated by his SRTPV system could not be absorbed by the distribution system due to failure of power supply in the grid/ distribution system for the reasons, such as line clear, load shedding and line faults, whatsoever.

7. Metering:

- 7.1 The Seller, shall arrange to shift the existing meter to the generation side of SRTPV plant to measure solar power generation and install Bi-directional meter (whole current/CT operated) at the point of interconnection to the distribution system, at a suitable place in the premises, accessible for recording export of energy, from the SRTPV system to the grid and import of energy to the premises of the consumer from the grid. The bi-directional meter, shall comply with the Central Electricity Authority (Installation and operation of meters) Regulations, 2006 and shall have the following features:
 - i. Separate registers, for recording export and import energy with facility to download by Meter Reading Instrument (MRI).
 - ii. kVA, kW and kVAR measuring registers for both import and export.
 - iii. The Meter shall have RS232 (or higher) communication optical port / Radio Frequency (RF) port to support Automatic Meter Reading (AMR).

8. BILLING AND PAYMENT:

- 8.1 HESCOM shall issue monthly electricity bill for the net energy on the scheduled date of meter reading.
- 8.2 In case, the exported energy is more than the imported energy, HESCOM shall pay for the net energy exported, as per Tariff agreed in this agreement, within 30 days from the date of issue of bill, duly adjusting the fixed charges and electricity duty, if any.
- 8.3 In case, the exported energy is less than the imported energy, the Seller shall pay HESCOM for the Net energy imported as per the prevailing retail supply tariff, determined by the Commission from time to time.
- 8.4 The HESCOM shall pay interest at the same rates, as is being levied on the consumers, for late payment charges, in case of any delay in payment beyond 30 (thirty) days period from the date of issue of bill, for the Net energy exported.

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Explanation: Net metered energy means the difference of meter readings of energy injection by the SRTPV system into the grid (export) and the energy drawn from the grid for use by the Seller (import,) recorded in the bi-directional meter.

9. Term and Termination of the Agreement

- 9.1 This agreement, shall be in force for a period of 25 years from the date of commissioning of the SRTPV system, unless terminated otherwise, as provided here under.
- 9.2 If the HESCOM commits any breach of the terms of the Agreement, Seller shall serve a written notice specifying the breach and calling upon the HESCOM to remedy/ rectify the same, within 30 (thirty) days or at such other period and at the expiry of 30 (Thirty) days or such other period from the delivery of the notice, Seller may terminate the agreement by delivering the termination notice, if the HESCOM fails to remedy/ rectify the same.
- 9.3 if the Seller commits any breach of the terms of the Agreement, HESCOM shall serve a written notice specifying the breach and calling upon the Seller to remedy/ rectify the same within 30 (thirty) days or at such other period and at the expiry of 30 (Thirty) days or such other period from the delivery of the notice, the HESCOM may terminate the agreement by delivering the termination notice, if the Seller fails to remedy/ rectify the same.
 - 9.4 Upon termination of this Agreement, Seller shall cease to supply power to the distribution system and any injection of power shall not be paid for by the HESCOM.

10. Dispute Resolution:

All the disputes between the parties arising out of or in connection with this agreement shall be first tried to be settled through mutual negotiation.

The parties shall resolve the dispute in good faith and in equitable manner.

In case of failure to resolve the dispute, either of the parties may approach the appropriate Forum.

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IN WITNESS WHEREOF, the Seller and the HESCOM have entered into this Agreement executed as of the date and the year first set forth above

For AND ON BE	HALF OF	For AND ON BEHALF OF	
	y Supply Company	SELLER	
Limited	,,		
By: (Name)		By: (Name)	
Designation:	(1)	RR No:RSDHT-18 REGISTRAR	
	क्रां भवा का भारति ।	Address: The Reg K S W 11 To W Women's Univ	versity
Address.	ಕಾರ್ಯ ಮತ್ತು ಒಟ್ಟಿ ವಿಭಾಗ್ನ	VIJAYAPURA 586108	
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Name:		In Presence of Name: Naveln Luman	
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Hubli Electricity Supply Company Limited

(wholly owned Government of Karnataka undertaking)

Telephone : Email ID : Ref No.: Office Add, AEE/EE(Ele) O&M Tikota Sub Dvision/Division Bijapura HESCOM.

Dateo3/11/2018

To, The Register Karnataka State Women's University Torvi, Bijapura.(RSD)

Madam/Sir,

Sub: Execution of Power Purchase Agreement (PPA) for gross / net metering.

Ref: Application Reg. No.TKT SRTPV/01 Dated: 23/10/2018

With reference to your application cited under reference for gross/ net metering, it is pleased to inform that your application is technically feasible for grid connectivity and you are requested to enter into the Power Purchase Agreement (PPA) within 10 days for the date of this letter, failing which your application will be treated as cancelled.

The standard Power Purchase Agreement approved by KERC is available in the HESCOM website. www.hescom.co.in.

Yours faithfully,

AEE/Executive Engineer(Ele)
O&M Tikota sub-div/division,
HESCOM, Line Section 1