

ಚಾಮುಂಡೇಶ್ವರಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು

ನಿಗಮ ನಿಯಮಿತ

(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸ್ವಾಮ್ಯಕ್ಕೆ ಒಳಪಟ್ಟಿದೆ)

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ್(ವಿ)

ಚಾ.ವಿ.ಸ.ನಿ. ಕಾ ಮತ್ತು ವಾ, ಉಪವಿಭಾಗ

ಯಳಂದೂರು ಪಿನ್ ಕೋಡ್-571441

Telephone.No : 08226-240042



CHAMUNDESHWARI ELECTRICITY

SUPPLY CORPORATION LIMITED

(A Government of Karnataka Undertaking)

O/o Asst Executive Engineer (Ele)

CESC, O&M Sub Division Yalander

Pin Code-571441

Web Site: www.cescmysore.org

E-mail ID: aeeescycalandur@gmail.com

Company Identity Number [CIN]:-U40109KA2004SGC035177

ಕ್ರಮಾಂಕ: ಸ.ಕಾ.ನಿ.ಇಂ(ವಿ)/ಹಿ.ಸ/ಯ.ಉ/22-23/ 1546-47

ದಿನಾಂಕ:- 18/08/2022

To,

(Dr: SUDARSHAN,

KARUN TRUST,

GUMBALLI,

Madam/Sir,

Sub: Approval for installing Solar RTPV system of 8 kWp Capacity to the installation bearing RR No YP-385 under Net metering reg.

- Ref: 1. Application Reg.01 Dtd:12.08.2022 Revenue Report of SA, YALANDUR O&M Sub-Division, CESC dated:12.08.2022
2. Technical feasibility Report 01 DATE 12.08.2022 of SO YALANDUR O&M section/SD, CESC YALANDUR No. 12.08.2022 dated:
3. PPA executed date.:12.08.2022
4. KERC approval letter No.:18.08.2021

With reference to your application , Approval is herewith accorded, after verifying the Technical feasibility Report submitted by Section Officer, YALANDUR O& M Section, CESC/AEE(Elect), YALANDUR O&M Sub-Division, CESC vide ref(3) and as per PPA executed for installing Solar RTPV system of 8kWp on the rooftop of your existing installation bearing RR No YP-385 with sanctioned load of 10HP under Net Metering for the Net energy at Rs 3.19 per kwh with the following conditions:

1. As per CEA guidelines, 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 reputed system installer of your choice, who has experience in design, supply, installation and commissioning of SRTPV system.
3. Up gradation of infrastructure, if required, (service main, meter with CT, upgrade) up to the grid connectivity point is to be done at your cost.
4. Technical and Interconnection Requirements of the equipment's shall be as per the Clause (1) of PPA vide ref (4) and **Annexure-1** (enclosed).
5. The work of grid connectivity shall be carried out in accordance with the Net-metering /Gross metering schematic diagram available in CESC website.

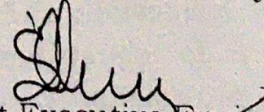
6. In Net -Metering system, Bi-directional meter (whole current/ CT operated) shall be provided before the point of interconnection and the existing meter shall be shifted to the generation side of SRTPV plant to measure solar power generation.
7. Both the meters shall be within the same proximity and easily accessible for taking monthly reading by the meter reader.
8. 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 20 kWp.
9. As per KERC (Implementation of Solar Rooftop Photovoltaic Power Plants) Regulations, 2016 clause 5(3), the SRTPV plant shall be commissioned within 180 days from the date approval PPA i.e. **12.08.2022**

Note:

- a. SRTPV capacities from **1kWp to 499 kWp** - Within 180 days from the date of PPA.
 - b. SRTPV capacities **500kWp & above upto 2000kWp** - As specified in the KERC approval letter.
10. After completion of the work in all respects, you have to submit the work completion report in **Format - 8** 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.
 - b. Test certificate of Bi-directional meter issued by MT division, CESC.
 - 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.
 11. CESC, YALANDUR will not be held responsible for any legal disputes between the applicant and SRTPV system installer arising out of the contract.
 12. **All the terms and conditions mentioned in the Power Purchase Agreement (PPA) vide ref(4) shall be complied.**

The SRTPV system is to be commissioned within stipulated period as stated above, failing which the approval will be terminated.

Yours faithfully,



Asst Executive Engineer (Ele)
O&M Sub-Div CESC
YALANDUR

Copy:

1. Executive Engineer (Ele) O&M DIV CESC KOLLEGAL FOR KIND NEED FULL INFORMATION



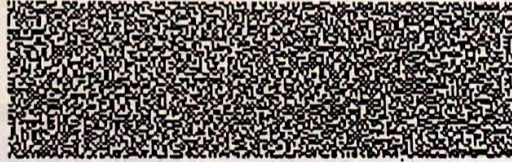
सत्यमेव जयते

INDIA NON JUDICIAL

Government of Karnataka

e-Stamp

Certificate No. : IN-KA02740868653584U
 Certificate Issued Date : 16-Aug-2022 10:17 AM
 Account Reference : NONACC (BK)/ kakscub08/ GANGANAGAR1/ KA-BA
 Unique Doc. Reference : SUBIN-KAKAKSCUB0821546050919029U
 Purchased by : DR SUDARSHAN KARUNA TRUST
 Description of Document : Article 12 Bond
 Description : POWER PURCHASE AGREEMENT
 Consideration Price (Rs.) : 0
 (Zero)
 First Party : ASST EXECUTIVE ENGINEER EL CESC YALANDUR
 Second Party : DR SUDARSHAN KARUNA TRUST
 Stamp Duty Paid By : DR SUDARSHAN KARUNA TRUST
 Stamp Duty Amount(Rs.) : 200
 (Two Hundred only)



Authorized Signatory
 HOTEL INDUSTRIALISTS CO-OP SOCIETY LTD
 Ganganagar Branch, Bangalore-32

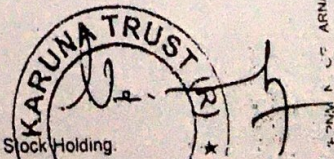
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**POWER PURCHASE AGREEMENT FOR ROOFTOP SOLAR PV PLANTS
 WITH NET METERING ARRANGEMENT**

This Power Purchase agreement is entered into at Yalandur on this 16 day of August 2022 between Chamundeshwari Electricity Supply Corporation Limited (CESC), Yalandur, a Government of Karnataka undertaking, being a Company formed and incorporated in India under the Companies Act-1956, with its registered office at Yalandur Karnataka State, represented by Asst. Executive Engineer (EL), CESC, Yalandur hereinafter referred to as the "CESC, Yalandur", (which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) as party of the first part

Statutory Alert:

- 1 The authenticity of this Stamp certificate should be verified at www.e-stamp.karnataka.gov.in or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details of the Stamp certificate and as available on the Website / Mobile App renders it invalid.
- 2 The onus of checking the legitimacy of the Stamp certificate is on the user of the Stamp certificate.



AND

Dr. Sudarshan, M/s. Karuna Trust the consumer of CESC, Yalandur residing at Unit No.CFTRP Block Premises, Gumballi campus PHC Campus Area, Yalandur 571441. hereinafter referred to as the "Seller" (which expression shall, unless repugnant to the context or meaning thereof, include its 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 CESC's HT/LT Distribution system for sale of Solar Power to CESC, Yalandur in terms of the Karnataka Electricity Regulatory Commission (KERC) Order No. dated: or as amended from time to time.
- b. The Seller intends to install a SRTPV system of 8 KWp (Eight KWp) capacity on the existing roof top of the premises, situated at M/s. Karuna Trust, Unit No.CFTRP Block Premises, Gumballi campus PHC Campus Area, Yalandur.571 441. and bearing RR. No YP385 in the same premises, under Yalandur O&M Sub-Division of CESC, Yalandur.
- c. The Seller intends to sell the energy, generated from the SRTPV system to CESC Yalandur 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.

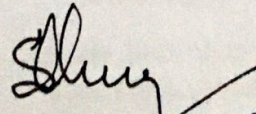
- d. CESC, Yalandur intends to purchase the energy, generated by such SRTPV system, on net-metering basis, at the tariff determined by the KERC.

Now therefore, in consideration of the foregoing premises the parties hereto, intending to 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 CESC'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 CESC'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 CESC's network, in case of power outage of the CESC's distribution system, and it shall be accessible for CESC, Yalandur to operate, if required, during maintenance / emergency conditions.


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ಬೆಂಗಳೂರು, ಕರ್ನಾಟಕ ರಾಜ್ಯ

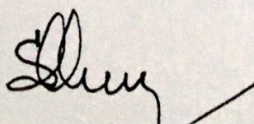


- 1.5 Install all the equipment of SRTPV system compliant with relevant International (IEEE/IEC) and Indian standards (BIS).
- 1.6 (a) The SRTPV system shall be designed, engineered and constructed and operated by the seller or any other person on his behalf, with reasonable diligence, subject to all 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 PPA.**
- 1.7 Adhere to the following power quality measures, as per the International and Indian standards and/or such other measures stipulated by the KERC/CESC Yalandur: -
- a. Harmonic current: Harmonic current injections from a generation unit shall not exceed the limits specified in IEEE 519.
 - b. Voltage at the injection point should be in the operating range of 80% to 110% of the nominal connected voltage.
 - c. 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.
 - d. 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.
 - e. 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.
 - f. Power Factor: While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9 shall be maintained.
 - g. 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 CESC's distribution system.


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- 2.3 If the Seller's SRTPV system either, causes damage to and/or produces adverse effects on the other consumers' or CESC's assets, Seller will disconnect SRTPV system immediately from the distribution system, by himself or upon directions from the CESC, Yalandur and rectify the same at his own cost before reconnection.

3. Clearances and Approvals

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

4. Access and Disconnection

- 4.1 CESC, Yalandur 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 CESC, Yalandur shall have the right to disconnect power supply to the premise.

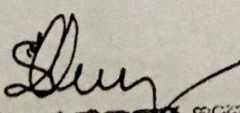
5. Liabilities

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 CESC, Yalandur shall pay for the net energy at Rs. _____ per KWh, as determined by the KERC in the Order dated 18.08.2021 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 ESCOM, 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.
- c. The Seller, shall pay the Electricity tax and other statutory levies, pertaining to SRTPV generation, as may be levied from time to time.
- 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


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ಕಾರುನಾ ಟ್ರಸ್ಟ್, ಕಾರುನಾ ಟ್ರಸ್ಟ್



7. Metering:

7.1 The parties 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 of energy.
- 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 CESC, Yalandur 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, The CESC, Yalandur 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 CESC, Yalandur for the net-energy imported, as per the prevailing retail supply tariff, determined by the Commission from time to time.


8.4 CESC, Yalandur 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.

Explanation: Net-energy means, the difference of meter readings of energy injected 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 CESC, Yalandur commits any breach of the terms of the Agreement, Seller shall to serve a written notice specifying the breach and calling upon the CESC, Yalandur 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 CESC, Yalandur fails to remedy/ rectify the same.


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9.3 If the Seller commits any breach of the terms of the Agreement, CESC, Yalandur 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 CESC, Yalandur 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 CESC, Yalandur.

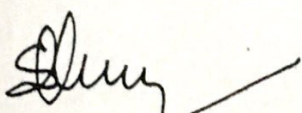
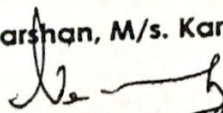
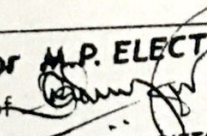

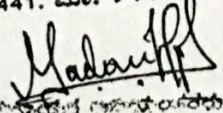
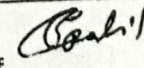
10. Dispute Resolution:

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.

IN WITNESS WHEREOF, the Seller and the CESC, Yalandur have entered into this Agreement to be executed as of the date and the year first set forth above.

For AND ON CHAMUNDESHWARI Electricity Supply CORPORATION Limited (CESC), Yalandur	For AND ON BEHALF OF SELLER
By: 	By: Dr. Sudarshan, M/s. Karuna Trust, 
Designation: ಕಾರ್ಯ ನಿರ್ವಾಹಕ ಅಧಿಕಾರಿ (ಬಿ) ಅಧೀನವಿಧಿ, ಯಳಂದೂರು ಉಪವಿಭಾಗ	Designation : Trustee
Address :	Address : Unit No.CFTRP Block Premises, Gumballi campus PHC Campus Area, Yalandur.571 441.
WITNESS For M.P. ELECTRICALS In Presence of 	WITNESS In Presence of 
Name : ಎಂ.ಪಿ. ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ Designation: ಕಾರ್ಯನಿರ್ವಾಹಕ ಪದವಿಧ್ಯುಕ್ತ ಗುತ್ತಿಗೆದಾರರು # 1/250, 4ನೇಯ ಬಡಾವಣೆ, ಯಳಂದೂರು ಫನ್-571 441. ಮೊ: 9449509502	Name : Shivamallappa Designation : Manager
WITNESS In Presence of 	WITNESS In Presence of 
Name : ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿ (ಬಿ) ಅಧೀನವಿಧಿ, ಯಳಂದೂರು ಉಪವಿಭಾಗ	Name : Santosh. R. Pahi
Designation :	Designation : Dygram manager

ಚಾಮುಂಡೇಶ್ವರಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ನಿಗಮ ನಿಯಮಿತ
(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸ್ವಾಮ್ಯಕ್ಕೆ ಒಳಪಟ್ಟಿದೆ)
ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ(ವಿ),
ವಿಲ್.ಬಿ/ಹೆಚ್.ಟಿ. ರೇಟಿಂಗ್ ಉಪ-ವಿಭಾಗ,
ಚಾಮುಂಡೇಶ್ವರಿ, ಕೊಲ್ಲಗಲ-571440.
Telephone No: 08224-254348



CHAMUNDESHWARI ELECTRICITY SUPPLY CORPORATION LIMITED
(A Government of Karnataka Undertaking)

Assistant Executive Engineer(Ele),

LT/HT Rating Sub Division,

CESC, Kollegala-571440

Web Site : www.cescmysore.org

E-mail ID : aeemtkgl@gmail.com

Company Identity Number [CIN]:- U40109KA2004SGC035177

NO: AEE/LT & HT Rating/KGL/22-23/24-29

Dtd: 21/02/2023

To,
The Asst. Executive Engineer (Ele),
O&M Sub-Division,
CESC, Yalanduru

Sir,

Sub:- Solar synchronization (LT SRPTV) test report of Dr Sudarshan, Karuna Trust, Gumballi
Ref:- AEE(E)/SA/Yalanduru Sub-dvn/2022-23/Nill Date: 17-02-2023

As per your reference letter cited above solar synchronization carried out on existing LT installation of Dr Sudarshan, Karuna Trust, Gumballi bearing RR No YP-385

R.R. No.	Name and Address	Sanction Load	Type of phase	Capacity of SRPTV	Date of Synchronization
YP-385	Dr Sudarshan, Karuna Trust, Gumballi	10 KW	3Phase	8Kwp	17-02-2023

Solar Meter Details:

Make	Sl. No.	Voltage	Current	Imp/kwh	Class	Type
L&T	19387827	3X240V	5-30A	900	1	ER300P

Meter Readings:

Date	17-02-2023	Ckwh	5898.2
Time	14:12	B1kwh	5473.9
Voltage	238, 234, 231V	Bmd	4.48
Current	8.9, 5.05, 8.46A	B1md	4.48
Prkw	3.99		
Prpf	0.99		

Accchueck Details:

Error	+0.44
Wh	5.53
Voltage	230, 255, 240
Current	12.5, 1.1, 8.4
Prkw	5.6
Prpf	1.00

Seals details

MC	C215051+AK20430+CZ14584
TC	AI80119
Reset	AK20438

Remarks: Accuracy is within limits

Bidirectional Meter Details:

Make	Sl. No.	Voltage	Current	Imp/kwh	Class	Type
SECURE	X2082564	3X240V	10-60A	800	1	E3D106

Meter Readings:

Date	17-02-2023	(Import) (+)		(Export) (-)	
Time	14:4	Ckwh	000001.6	Ckwh	000002.0
Voltage	231, 230, 234V	Bmd	0.00	Bmd	0.00
Current	11.8, 6.78, 8.78	B1kwh	000001.6	B1kwh	000002.0
Prkw	2.28	B1md	2.70	B1md	4.16
Prpf	0.00	Pf	0.00	Pf	0.00

(P.T.O)

Acchuccheck Details:

Error	+0.26
Wh	6.36
Voltage	230, 234, 231
Current	11.8, 1.78, 8.78
Prkw	2.28
Prpf	0.93

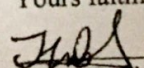
Seals details:

MC	20666957+RGA374775
TC	AI80116+AI80117
Reset	RGA374281

Remarks: Accuracy is within limits

Remarks:- Existing meter is used as solar meter. During synchronization of installation there was a generation from SRPTV to CESC grid.

Yours faithfully


Assistant Executive Engineer (Ele),
LT / HT Rating Sub Division,
CESC, Kollegala

Copy:

~~1. O.C / M.F.~~