15 -ാം കേരള നിയമസഭ

8 -ാം സമ്മേളനം

നക്ഷത്ര ചിഹ്നം ഇല്ലാത്ത ചോദ്യം നം. 2572

<u>27-02-2023 - ൽ മറ്റപടിയ്ക്</u>

<u>പുരപ്പുറ സൗരോർജ്ജ പദ്ധതി</u>

	ചോദ്യം		ഉത്തരം
ശ്രീ പ്രമോദ് നാരായൺ, ശ്രീ. ജോബ് മൈക്കിൾ, ശ്രീ. സെബാസ്റ്റ്യൻ കളത്തുങ്കൽ, ഡോ. എൻ. ജയരാജ്		ശ്രീ . കെ . കൃഷ്ണൻകുട്ടി (വൈദ്യുതി വകുപ്പ് മന്ത്രി)	
(₄)	സംസ്ഥാനത്ത് പുരപ്പറ സൗരോർജ്ജ പദ്ധതി മുഖേന സ്ഥാപിച്ചിട്ടുള്ള പ്ലാന്റുകളും അവ മുഖേന ലഭിച്ചുകൊണ്ടിരിക്കുന്ന വൈദ്യുതിയും സംബന്ധിച്ച വിശദാംശം ലഭ്യമാക്കാമോ;	(₄)	സംസ്ഥാനത്ത് സൗരോർജ്ജ പദ്ധതി വഴി നിലവിൽ ആകെ 732 മെഗാവാട്ടിന്റെ വൈദ്യുതി ഗ്രിഡുമായി ബന്ധിപ്പിച്ചിട്ടുണ്ട്. ഇതിൽ സൗര പദ്ധതി വഴി നിലവിൽ 127.57 മെഗാവാട്ടിന്റെ വൈദ്യുതിയാണ് കമ്മീഷൻ ചെയ്തിട്ടുള്ളത്. ഇതിൽ കേന്ദ്ര സാമ്പത്തിക സഹായത്തോടെയുള്ള സബ്ലിഡി പദ്ധതി വഴി 106.15 മെഗാവാട്ടും കെ.എസ്.ഇ.ബി.എൽ. മുതൽ മുടക്കിലുള്ള നോൺസബ്ലിഡി പദ്ധതി വഴിയുള്ള 21.42 മെഗാവാട്ടും ഉൾപ്പെടുന്നം. ഗാർഹിക പുരപ്പര സൗരോർജ്ജ മേഖലയിൽ അനേർട്ട് മുഖേന നടപ്പിലാക്കിവരുന്ന പദ്ധതിയുടെ വിശദാംശങ്ങൾ അന്മബസം (1) ആയി ചേർക്കുന്നം.
(ബി)	പ്രസ്തുത പ്ലാന്റുകളിൽ നിന്ന് ലഭിക്കുന്ന വൈദ്യുതിയുടെ വ്യാപാരവും വിലയും സംബന്ധിച്ച് ഇലക്ലിസിറ്റി ബോർഡും പ്ലാന്റ് ഉടമകളും തമ്മിൽ ഏർപ്പെട്ടിരിക്കുന്ന കരാറിലെ വ്യവസ്ഥകൾ അറിയിക്കാമോ; എത്തരം മീറ്ററിങ് സംവിധാനമാണ് ഏർപ്പെടുത്തിയിരിക്കുന്നത് എന്ന് വ്യക്തമാക്കാമോ;	(ബി)	ഇതുമായി ബന്ധപ്പെട്ട് സെക്ഷൻ ഓഫീസുകളിൽ വയ്ക്കുന്ന എഗ്രിമെന്റിന്റെ പകർപ്പ് അനുബന്ധം (2) ആയി ചേർക്കുന്നു. നിലവിൽ സൗരനിലയം സ്ഥാപിച്ച് കെ.എസ്.ഇ.ബി.ലിമിറ്റഡുമായി കരാറിൽ ഏർപ്പെടുന്നവർക്ക് റെഗുലേറ്ററി കമ്മീഷൻ അനുമതി നൽകിയ നെറ്റ്മീറ്ററിംഗ് സ്കീമാണ് നൽകുന്നത്.
(സി)	നിലവിൽ പ്ലാന്റ് സ്ഥാപിച്ച് ബോർഡുമായി കരാറിൽ ഏർപ്പെട്ടിട്ടുള്ള നെറ്റ് മീറ്ററിങ് സ്കീമിലുള്ളവർക്ക് ഭാവിയിൽ ഗ്രോസ് മീറ്ററിങ് സംവിധാനം ബാധകമാകുമോയെന്ന് അറിയിക്കാമോ;	(സി)	ഇത് സംബന്ധിച്ച് KSERC—യുടെ ഉത്തരവിന് വിധേയമായി വൈദ്യുതി ബോർഡ് തീരുമാനം കൈക്കൊള്ളുന്നതാണ്.
(ഡി)	ഗ്രോസ് മീറ്ററിങ് സംവിധാനം ഏർപ്പെടുത്തുന്നത് മൂലം പുരപ്പുറ സൗരോർജ്ജ പദ്ധതിയിൽ നിന്ന് ശരാശരി വരുമാനക്കാർ പിന്മാറുമെന്നത് പരിഗണിച്ച് നെറ്റ് മീറ്ററിങ് സംവിധാനം തുടരുന്നതിന് നടപടി സ്വീകരിക്കുമോയെന്ന് അറിയിക്കാമോ?	(ഡി)	നെറ്റ്മീറ്ററിംഗിൽ നിന്നും ഗ്രോസ് മീറ്ററിംഗ് നടപ്പിലാക്കുന്നതിനുള്ള തീരുമാനം നാളിതുവരെ കൈക്കൊണ്ടിട്ടില്ല. ഇതു സംബന്ധിച്ച് തീരുമാനം KSERC-യാണ് എടുക്കേണ്ടത്.

സെക്ഷൻ ഓഫീസർ

അനബന്ധം (1)

District	Total Systems in Numbers	Total Capacity in kW	Total Systems in Numbers	Total Capacity in kW	Total Systems in Numbers	Total Capacity in kW
Alappuzha	594	2167	209	716.24	95	308
Ernakulam	744	2915	153	458.09	81	253
Idukki	84	301	42	109.44	16	45
Kannur	497	1830	107	357.25	56	186
Kasaragod	173	616	37	105	20	52
Kollam	503	1882	105	352	62	205
Kottayam	312	1130	47	127.96	18	61
Kozhikode	247	906	43	130.175	17	48
Malappuram	199	759	39	121.52	5	11
Palakkad	571	1940	119	328.695	44	145
Pathanamthitta	315	1174	72	240.48	23	58
Thiruvananthapuram	1313	4817	298	964.965	128	436
Thrissur	752	2624	277	817.575	78	280
Wayanad	143	404	59	127.52	11	23
TOTAL	6447	23465	1607	4956.91	654	2111

Section Offices.

(Brom 3 672 millo





Soura Project (Model I)

Agreement executed

between

The Consumer

and

The State Nodal Officer,

Soura Project

Name of Consumer/Owner:

Consumer No.

Capacity of

Roof Top Solar Plant

Agreement Date

Agreement executed with consumer registered under Soura Project – Model I

This AGREEMENT is entered into at	THE COURT OF THE PLANT OF THE PERSON OF THE
(name of the place) on theday of	betwee
Sri/ Smtowning bu	ilding having consume
nounder Electrical Section	, KSEB Ltd residing
at	
"the Owner" / "Authorised Person" (in case of Government Institution) (strike whichever	
expression, unless repugnant to the subject or context, shall include his/her/their legal heirs, ex-	ecutors, administrators,
legal representatives, successors and permitted assigns) on the First Part	
And	
Sri/Smt/	
(Name and designation) acting for and on behalf of The State Nodal Officer, Soura Project, Kerala Limited, a company established under the Companies Act 1956 having its registered office a Pattom, Thiruvananthapuram-695004 (hereinafter referred to as SNO which expression shall, us the context or meaning thereof be deemed to mean and include its successors or permitted assignation.	t Vydyuthi Bhavanam,
Owner "shall mean the person who is the title holder of the building/premises (First Party to th	is Agreement)
Authorised Person" shall mean the official/person authorised to perform so by the Government of First Party to this Agreement)	r appropriate authority
Consumer "shall mean the person in whose name the electricity connection in the building e ecords. The beneficiary of the project as per this agreement shall be the consumer.	exists as per KSEB Ltd
Background	
VHEREAS, KSEB Ltd as part of implementing Grid Connected Roof Top Solar Photo Voltaic I roject) had invited registrations from interested consumers of KSEB Ltd to establish Roof top Soloof Top, for the aforesaid project	Power Projects (Soura plar PV Plant / to lend
ND WHEREAS the Consumer had registered and expressed his/her/their willingness to ccordingly, KSEB Ltd has conducted feasibility study at the premises of the Consumer and prop	oces to implement

NOW THESE PRESENTS WITNESS, it is hereby MUTUALLY AGREED BY AND BETWEEN THE PARTIES HERETO as follows:

1. Obligation of KSEB Ltd

- a. KSEB Ltd / Solar Power Developer engaged by KSEB Ltd shall use the said rooftop for the purpose of Solar Power Project and will not in any way utilize the rooftop except for the said purpose.
- b. The design, engineering, procurement, installation, testing and commissioning of the solar plant shall be done by KSEB Ltd / Solar Power Developer engaged by KSEB Ltd, at their cost. The ownership of the said plant will vest with KSEB Ltd/ Solar Power Developer engaged by KSEB Ltd, during the currency of this agreement period.
- c. KSEB Ltd/its authorised person shall carry out the operation and routine maintenance of the plant for 25 years, from the date of commissioning of the plant.
- d. KSEB Ltd/ its authorised person shall undertake repair/rectification of the plant upon malfunctioning / nongeneration of energy.
- e. KSEB Ltd / Solar Power Developer engaged by KSEB Ltd shall make only minimum alterations/ modifications in the premises, as is required for establishing the Photo Voltaic panels in the optimal angle and for routing of cables and for installing associated hardware.
- f. KSEB Ltd shall ensure grid connectivity to the power generated in the plant, but without provision for any storage or backup of power.
- g. Statutory permits/ approvals related to energisation and grid connectivity of the plant shall be obtained by KSEB Ltd / Solar Power Developer engaged by KSEB Ltd.

. Scope of the Consumer	
a. The consumer shall provide shade free area ofsq.ft on the roof top consulting to KSEB Ltd / Solar Power Developer authorised by KSEB Ltd during the construction period and 25 com date of Commercial Operation of the plant or mutually agreed extended period as required for the purpose.	Weare
stalling solar plant with capacity of	ent to
ne details of building is as scheduled below.	
nilding Noof	ning (
nchayath/ Municipality/ Corporation, in	
llage, having Survey No,	
luk,District, with KSEB Ltd Consume:	r No.
 The Consumer shall also provide access to the premises/rooftop to KSEB Ltd or its authorized person responsation of the materials for installation, operation, maintenance and other allied activities of the plant during reement period. 	n for g the

- c. The security and safety of the plant shall be the responsibility of the consumer, except under force majeure conditions.
- d. The area for installation of the solar plant shall be clearly demarcated prior to commencement of the work and such area shall be free from any installations/ structures that hinder set up and upkeep of the power plant.
- e. The consumer shall provide facility for accommodating the accessories of solar plant such as inverter, solar meter, net meter etc.

- f. The consumer shall provide space for routing the cable between solar plant and inverter and between inverter and metering point.
- g. Modifications related to the existing consumer side wiring installation if any, for incorporation of the solar power shall be the responsibility of the consumer.
 - h. The consumer is not at liberty to get the plant repaired/ replaced through a third party.
- i. If the building/ premises is rented/leased out, recitals of this agreement shall be made part of the rent/lease agreement so as to facilitate the implementation/ other allied works connected with the plant.
- j. The consumer shall provide basic amenities for installation of the plant. He/ She shall also provide water for cleaning the plant during the maintenance.
 - k. The consumer shall provide site for temporary stacking of the materials prior to installation of the plant.
- 1. The consumer is not authorised to make any alteration in the circuit of the said plant or loop/tap power directly from the plant by any means.

3. Duration of the Agreement

This agreement shall commence from the date of handing over of the Roof Top/Premises to KSEB Ltd for the installation of the solar plant. This Agreement shall continue to be in force for a period of 25 years from the date of commissioning of the plant, unless the agreement is terminated as per clause 10 of this agreement. This Agreement may be extended for a further period on mutually agreed terms and conditions.

4. Applicable Laws/ Regulations

The parties have understood and agreed to abide by the relevant provisions of Electricity Act 2003 and applicable regulations and all amendments made therein from time to time. All relevant regulation in regard to the supply of electricity shall form part of this Agreement.

5. Metering

There shall be two type of energy meters installed in the system.

- 1. Solar meter. The solar meter records the total AC energy output of the solar plant.
- 2. Net Meter. Net meter records the energy injected into the grid (export) and energy drawn from the grid (import) and the net energy. Metering shall be provided and maintained by KSEB Ltd for the purpose of accounting of the output electrical energy of the plant and the energy injected into the grid/ the energy drawn from the grid. KSEB Ltd shall arrange the meter reading at proper interval. The consumer shall facilitate access to KSEB Ltd staff / its authorised representative for recording monthly/bimonthly meter reading and for taking check reading.

6. Guaranteed Returns

The Consumer shall be eligible to consume 10 % of the gross AC energy output from the plant, free of cost in lieu of providing the rooftop to KSEB Ltd. This 10 % energy eligible for the consumer shall be adjusted in the monthly/ bimonthly consumption of the consumer, as the case may be. If the consumer is not consuming the above eligible energy either partly or fully, the same shall be carried over to the succeeding month and settled at the end of settlement period. For this purpose, the settlement period shall be from October to September.

7. Disputes

Any dispute arising out of this agreement shall be mutually discussed and resolved by the parties within a period of 90 days on having brought such difference or dispute by either party to the attention of the other. Those disputes remaining unresolved will be subject to the exclusive jurisdiction of respective civil courts.

8. Force Majeure Conditions

'An affected Party' means either the Consumer or KSEB Ltd whose performance has been adversely affected by an event of Force Majeure.

A 'Force Majeure' means any event or circumstance or combination of events and circumstances as stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care in performing its obligations which consist of

a) Act of God, including, but not limited to lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado or Explosion, accident or breakage of transmission/ distribution facilities or

b) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, strikes, riot, insurrection, terrorist attack or military action making the performance of obligations as specified herein as impossible.

Force Majeure shall not include

Any event or circumstance which is within the reasonable control of the Parties, ie

- a. Non-performance resulting from normal wear and tear;
- b. The agreement becoming onerous to perform;
- c. Non-performance caused by, or connected with, the Affected Party's:
- d. Negligent or intentional acts, errors or omissions;
- e. Failure to comply with an Indian Law; or
- f. Breach of, or default under this Agreement.

The Affected Party shall give notice to the other Party of any event of Force Majeure as soon as reasonably practicable, but not later than twenty one (21) days from the date of commencement of the event of Force Majeure. If an event of Force Majeure results in a breakdown of communications rendering it impossible to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably possible after reinstatement of communications, but not later than seven(7) days after such reinstatement.

Provided that such notice shall be a pre-condition to the Affected Party's entitlement to claim relief under this Agreement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed.

The Affected Party shall give notice to the other Party of

- (i) The cessation of the relevant event of Force Majeure; and
- (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this Agreement, as soon as practicable after becoming aware of each of these cessations.

9. Lock in period

There shall be a lock in period of five (5) years from the date of commercial operation of the plant during which the Consumer is legally bound to permit KSEB Ltd to keep the plant for its operation and maintenance. However, the Consumer shall have the right to get the agreement terminated and to get plant removed by KSEB Ltd by paying damages to KSEB Ltd as mentioned in **Annexure** – I of this agreement. If the consumer desires, they may own and operate the plant after payment of amount mentioned in **Annexure** I.

10. Termination of the Agreement

This agreement shall cease to exist upon the occurrence of the following;

(i) Termination due to Force Majeure

If the Force Majeure event or its effects continue to be present beyond a period of twelve (12) months, either Party shall have the right to cause termination of the Agreement. In such an event, this Agreement shall get terminated on the date

of such Termination Notice without any further liability to either Party from the date of such termination.

- (ii) KSEB Ltd event of default
- (a) If KSEB Ltd / its authorised person fails to attend repair / replacement of the defective panels or allied parts for a continuous period of 6 months from the date of intimation of the said request, the consumer shall be at liberty to terminate the Agreement with 30 days notice. In such cases , KSEB Ltd is liable to pay to the consumer the generation loss in actuals.
- (b) The Consumer shall be vested with the right to terminate the Agreement if no set off / adjustments have been effected in the monthly/ bimonthly bills for three consecutive settlement periods. In such cases, the Agreement can be terminated by the Consumer with 30 days notice and KSEB Ltd shall be liable to settle the uncounted energy in subsequent bills.
- (c) If the plant has not been installed by KSEB Ltd within a period of one year from the date of handing over of the roof top, except due to force majeure conditions, this Agreement shall be deemed to have been terminated or can continue to mutually agreed extended period.
- (iii) If the Consumer is desirous in getting the agreement terminated during the agreement period after the lock-in period of first 5 years.

If the consumer wants to dismantle the plant from his premises during the duration of the agreement period but after the lock-in period of first 5 years, then the consumer shall be liable to pay compensation mentioned in **Annexure – II** of this agreement and KSEB Ltd shall remove the plant. Further if the consumer desires, they may own and operate the plant after payment of amount as mentioned in **Annexure – II**.

(iv) Consumer's event of default

KSEB Ltd shall be at liberty to terminate the agreement with 30 day notice

- (a) If the ingress/ egress to the said roof top/premises is restrained by the Consumer continuously for three billing cycles except in cases where prior intimation has been given to KSEB Ltd/ Authorised representative about Consumer's inconvenience to permit access to the said plant.
- (b) If the Consumer deliberately tampers with the plant and allied equipments.
- (c) If the consumer is not maintaining the space shade-free thereby affecting the generation.
- (d) If the Consumer is seen indulging in making alterations/ modifications by himself / engaging a third party, except for cleaning the panels.
- (e) If the consumer defaults payment of his/her/their electricity bills and the electricity connection is disconnected / dismantled.

In such events, consumer shall be liable to pay compensation as fixed by KSEB Ltd.

11. Correspondence

- (a) Any letter, order or document addressed to the Consumer shall be served by post or e-mail or courier or left at the address given in the preamble to this Agreement in the manner prescribed in Section 171 of the Electricity Act, 2003.
- (b) All communication to KSEB Ltd shall be addressed to the State Nodal Officer, Soura Project or to any other officer authorised or designated in this behalf.

12. Notice Period

Both the Parties shall issue notice for a period not less than 30 days for any deviation occurring in the provisions of the agreement.

13. Shifting / Deposit Work Charges

(i) Shifting within the same premises due to factors beyond control of the consumer

If the Solar Plant is required to be shifted within the same premises due to shade affecting the generation from the Solar Plant or due to any other factors which is not within the control or not attributable to the Consumer, the Consumer will identify another space within the premsies for shifting the plant. The shifting shall be done by KSEB Ltd at its own cost, one time only during the entire agreement period. If the plant is required to be shifted more than once consumer shall be liable to pay the shifting charges.

(ii) Shifting within the same premises at the instance of the consumer

If the Solar Plant is required to be shifted to a different location within the same premises at the instance of the consumer, the consumer shall be liable to pay the shifting charges, and the shifting work, if feasible shall be arranged by KSEB Ltd within a period of 45 days.

(iii) Shifting to a different premises

If the plant is required to be shifted to a different premises, the Consumer shall be liable to pay the shifting charges, and the shifting work, if feasible shall be arranged by KSEB Ltd within a period of 45 days, after executing new agreement.

14. Transfer of ownership

If the building/ premise where the solar plant installed is sold, the matter shall be intimated to KSEB Ltd within 30 days of the sale. If the same is not done within the stipulated time, the Consumer with whom this Agreement is entered into by KSEB Ltd shall be liable for any compensation to be given to KSEB Ltd for damages/non generation of electricity from the said plant, as the case may be.

Provided that it is the bounden duty of the Consumer/ owner of the building / premises to get it specifically recorded in the sale deed that all the rights and liabilities arising out of the said plant shall be vested with the new owner/ consumer.

Plant Outage

If the plant is not generating electricity for a period of more than $48\ hours$ continuously due to non-availability of grid , other than due to instances of force majeure conditions, compensation shall be payable to the consumer @10 % of the average generation during the corresponding month of previous year. If previous year data is not available, average generation from the plant from date of commencement of generation till the outage date will be considered.

16. Insurance

The insurance for the said plant will be arranged by KSEB Ltd.

17. Completion Period

The period of completion of the installation of the plant shall be six months from the date of handing over the roof top/premises to KSEB Ltd.

18. Accidents

KSEB Ltd / Solar Power developer engaged by KSEB Ltd shall not be responsible for any accident occurring due to unauthorised access to the plant and associated equipment.

19. Upgradation/Repowering of the Plant

KSEB Ltd shall have the right to re-install the plant for better performance, owing to technological improvements. The consumer shall also be eligible for benefits consequent to enhanced generation from the plant, in such instances.

20. Consumer's Right to opt a different model.

The Consumer shall have the option to changeover to a different model other than the current one, subject to the rules and regulations issued by the Government.

n WITNESSES WHEREOF the	e parties hereto have put their hands and seals this the	d
20		
Signature of the consumer/	owner, name & address	
Signatures of witness to the	e execution by the consumer, name & address	
organization of withcom to the	concention by the consumer, name & address	
08.312		
	al Officer/ designated officer KSEB Ltd, name & address	
31.189		
	A Company of the Comp	
designated officer, name &	execution by the personnel of the office of the State Nodal Officer/	
20.340	A THE PARTY OF THE	
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Annexure to agreement between consumers and State Nodal Officer, Soura Project

<u>Annexure - I</u>
Damages payable within lock in period of first 5 years (per kWp)

<=10kWp	11-100 kWp	>100kWp
Rs.53,500	Rs.47,500	Rs.44,500

Annexure - II
Compensation payable after 5 years (per kWp)

1		<=10kW	p 11-100 kW	>100kWr
-	Compensation Year 6	27938.00	24590.53	22916.80
2	Compensation Year 7	26309.22	23156.90	21580.75
3	Compensation Year 8	24775.39	21806.86	20322.59
4	Compensation Year 9	23330.98	20535.52	19137.78
5	Compensation Year 10	21970.79	19338.30	18022.05
6	Compensation Year 11	20689.89	18210.87	
7	Compensation Year 12	19483.67	17149.18	16971.36 15981.93
8	Compensation Year 13	18347.77	16149.38	
9	Compensation Year 14	17539.54	15437.99	15050.19
10	Compensation Year 15	16731.31	14726.60	14387.22
11	Compensation Year 16	15923.08	14015.21	13724.25
12	Compensation Year 17	15114.85	13303.82	13061.28
13	Compensation Year 18	14306.62	12592.43	12398.31
4	Compensation Year 19	13498.39	11881.04	11735.34
5	Compensation Year 20	12690.16	11169.65	11072.37
6	Compensation Year 21	11881.93	10458.26	10409.40
7	Compensation Year 22	11073.70	0=11	9746.43
8	Compensation Year 23		0025 10	9083.46
9	Compensation Year 24		000.	8420.49
)	Compensation Year 25	0640.04		7757.52 7094.55

Part of the year will be treated as full year while arriving at the salvage value

Section officer







Office of the State Nodal Officer, Soura Project Vydyudhi Bhavanam, Thiruvananthapuram, Kerala, India PIN - 695 004







Agreement executed

between

The Consumer

and

The State Nodal Officer,

Soura Project

Name of Consumer

Consumer No.

Capacity of Roof Top Solar Plant

Agreement Date

Agreement executed with consumer registered under Soura Project – Model II

This AGREEMENT is entered into at	
(name of the place) on theday of	
Sri/ Smtowning b	between
Owning b	building having consumer
nounder Electrical Section	, KSEB Ltd residing
at	(herein after called
"the Owner" / "Authorised Person" (in case of Government Institution) (strike whicheve	minimum after called
(in case of Government Institution) (strike whicheve	r not applicable) which
expression, unless repugnant to the subject or context, shall include his/her/their legal heirs, expression, unless repugnant to the subject or context, shall include his/her/their legal heirs, expression, unless repugnant to the subject or context, shall include his/her/their legal heirs, expression, unless repugnant to the subject or context, shall include his/her/their legal heirs, expression, and the subject or context is a subject or context.	xecutors, administrators,
legal representatives, successors and permitted assigns) on the First P.	
And the transfer of the second	
Sri/Smt/	
Sri/Smt/	a State Electricity Board at Vydyuthi Bhavanam, unless it is repugnant to
shall mean the person who is the title holder of the building/premises (First Party to the	aia A and a same
"Authorised Person" shall mean the official/person authorised to perform so by the Government of (First Party to this Agreement)	or appropriate authority
*Consumer "shall mean the person in whose name the electricity connection in the building of the beneficiary of the project as per this agreement shall be the consumer.	exists as per KSEB Ltd
Background	
WHEREAS, KSEB Ltd as part of implementing Grid Connected Roof Top Solar Photo Voltaic Project) had invited registrations from interested consumers of KSEB Ltd to establish Roof top Solor Top, for the aforesaid project	Power Projects (Soura olar PV Plant / to lend
ND WHEREAS the Consumer had registered and expressed his/her/their willingness to accordingly, KSEB Ltd has conducted feasibility study at the premises of the Consumer and promises	establish the same.

NOW THESE PRESENTS WITNESS, it is hereby MUTUALLY AGREED BY AND BETWEEN THE PARTIES HERETO as follows:

1. Obligation of KSEB Ltd

- a. KSEB Ltd / Solar Power Developer engaged by KSEB Ltd shall use the said rooftop for the purpose of Solar Power Project and will not in any way utilize the rooftop except for the said purpose.
- b. The design, engineering, procurement, installation, testing and commissioning of the solar plant shall be done by KSEB Ltd / Solar Power Developer engaged by KSEB Ltd, at their cost. The ownership of the said plant will vest with KSEB Ltd/ Solar Power Developer engaged by KSEB Ltd, during the currency of this agreement period.
- c. KSEB Ltd/its authorised person shall carry out the operation and routine maintenance of the plant for 25 years, from the date of commissioning of the plant.
- d. KSEB Ltd/ its authorised person shall undertake repair/rectification of the plant upon malfunctioning / non-
- e. KSEB Ltd / Solar Power Developer engaged by KSEB Ltd shall make only minimum alterations/ modifications generation of energy. required for establishing the Photo Voltaic panels in the optimal angle and for routing of in the premises, as is cables and for installing associated hardware.
- f. KSEB Ltd shall ensure grid connectivity to the power generated in the plant, but without provision for any storage or backup of power.
- g. Statutory permits/ approvals related to energisation and grid connectivity of the plant shall be obtained by Developer engaged by KSEB Ltd. KSEB Ltd / Solar Power

2. Scope of the Consumer

2. Scope of the Consumer
a. The consumer shall provide shade free area of
The details of building is as scheduled below.
of
Panchayath/ Municipality/ Corporation, in
Village, having Survey No
Taluk,
Taluk,

- b. The Consumer shall also provide access to the premises/rooftop to KSEB Ltd or its authorized person for transportation of the materials for installation, operation, maintenance and other allied activities of the plant during the agreement period.
- c. The security and safety of the plant shall be the responsibility of the consumer, except under force majeure
- d. The area for installation of the solar plant shall be clearly demarcated prior to commencement of the work and conditions. such area shall be free from any installations/ structures that hinder set up and upkeep of the power plant.
- e. The consumer shall provide facility for accommodating the accessories of solar plant such as inverter, solar meter, net meter etc.

- f. The consumer shall provide space for routing the cable between solar plant and inverter and between inverter and metering point.
- g. Modifications related to the existing consumer side wiring installation if any, for incorporation of the solar power shall be the responsibility of the consumer.
 - h. The consumer is not at liberty to get the plant repaired/ replaced through a third party.
- i. If the building/ premises is rented/leased out, recitals of this agreement shall be made part of the rent/lease agreement so as to facilitate the implementation/ other allied works connected with the plant.
- j. The consumer shall provide basic amenities for installation of the plant. He/ She shall also provide water for cleaning the plant during the maintenance.
 - k. The consumer shall provide site for temporary stacking of the materials prior to installation of the plant.
- l. The consumer is not authorised to make any alteration in the circuit of the said plant or loop/tap power directly from the plant by any means.

3. Duration of the Agreement

This agreement shall commence from the date of handing over of the Roof Top/Premises to KSEB Ltd for the installation of the solar plant. This Agreement shall continue to be in force for a period of 25 years from the date of commissioning of the plant, unless the agreement is terminated as per clause 10 of this agreement. This Agreement may be extended for a further period on mutually agreed terms and conditions.

4. Applicable Laws/ Regulations

The parties have understood and agreed to abide by the relevant provisions of Electricity Act 2003 and applicable regulations and all amendments made therein from time to time. All relevant regulation in regard to the supply of electricity shall form part of this Agreement.

5. Metering

There shall be two type of energy meters installed in the system.

- 1. Solar meter. The solar meter records the total AC energy output of the solar plant.
- 2. Net Meter. Net meter records the energy injected into the grid (export) and energy drawn from the grid (import) and the net energy. Metering shall be provided and maintained by KSEB Ltd for the purpose of accounting of the output electrical energy of the plant and the energy injected into the grid/ the energy drawn from the grid. KSEB Ltd shall arrange the meter reading at proper interval. The consumer shall facilitate access to KSEB Ltd staff / its authorised representative for recording monthly/bimonthly meter reading and for taking check reading.

6. Guaranteed Returns

The Consumer shall be eligible to consume the whole energy produced by the plant at an uniform tariff during the agreement period. The tariff shall be in the range Rs.4.50 to Rs.5.95 for various consumer categories. The category wise tariff table is attached as **Annexure III.**

If the consumer is not consuming the above eligible energy either partly or fully, the same shall be carried over to the succeeding month and settled at the end of settlement period. For this purpose, the settlement period shall be from October to September. The consumer shall not be eligible for compensation for the unused energy at the end of the settlement period.

7. Disputes

Any dispute arising out of this agreement shall be mutually discussed and resolved by the parties within a period of 90 days on having brought such difference or dispute by either party to the attention of the other. Those disputes remaining unresolved will be subject to the exclusive jurisdiction of respective civil courts.

8. Force Majeure Conditions

'An affected Party' means either the Consumer or KSEB Ltd whose performance has been adversely affected by an event of Force Majeure.

A `Force Majeure' means any event or circumstance or combination of events and circumstances as stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care in performing its obligations which consist of

a) Act of God, including, but not limited to lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado or Explosion, accident or breakage of transmission/ distribution facilities or

b) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, strikes, riot, insurrection, terrorist attack or military action making the performance of obligations as specified herein as impossible.

Force Majeure shall not include

Any event or circumstance which is within the reasonable control of the Parties, ie

- a. Non-performance resulting from normal wear and tear;
- b. The agreement becoming onerous to perform;
- c. Non-performance caused by, or connected with, the Affected Party's:
- d. Negligent or intentional acts, errors or omissions;
- e. Failure to comply with an Indian Law; or
- f. Breach of, or default under this Agreement.

The Affected Party shall give notice to the other Party of any event of Force Majeure as soon as reasonably practicable, but not later than twenty one (21) days from the date of commencement of the event of Force Majeure. If an event of Force Majeure results in a breakdown of communications rendering it impossible to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably possible after reinstatement of communications, but not later than seven(7) days after such reinstatement.

Provided that such notice shall be a pre-condition to the Affected Party's entitlement to claim relief under this Agreement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed.

The Affected Party shall give notice to the other Party of

- (i) The cessation of the relevant event of Force Majeure; and
- (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this Agreement, as soon as practicable after becoming aware of each of these cessations.

9. Lock in period

There shall be a lock in period of five (5) years from the date of commercial operation of the plant during which the Consumer is legally bound to permit KSEB Ltd to keep the plant for its operation and maintenance. However, the Consumer shall have the right to get the agreement terminated and to get plant removed by KSEB Ltd by paying damages to KSEB Ltd as mentioned in **Annexure – I** of this agreement.

10. Termination of the Agreement

This agreement shall cease to exist upon the occurrence of the following:

(i) Termination due to Force Majeure

If the Force Majeure event or its effects continue to be present beyond a period of twelve (12) months, either Party shall have the right to cause termination of the Agreement. In such an event, this Agreement shall get terminated on the date of such Termination Notice without any further liability to either Party from the date of such termination.

- (ii) KSEB Ltd event of default
- (a) If KSEB Ltd / its authorised person fails to attend repair / replacement of the defective panels or allied parts for a continuous period of 6 months from the date of intimation of the said request, the consumer shall be at liberty to terminate the Agreement with 30 days notice. In such cases , KSEB Ltd is liable to pay to the consumer the generation loss in actuals.
- (b) The Consumer shall be vested with the right to terminate the Agreement if no set off / adjustments have been effected in the monthly/ bimonthly bills for three consecutive settlement periods. In such cases, the Agreement can be terminated by the Consumer with 30 days notice and KSEB Ltd shall be liable to settle the uncounted energy in subsequent bills.
- (c) If the plant has not been installed by KSEB Ltd within a period of one year from the date of handing over of the roof top, except due to force majeure conditions, this Agreement shall be deemed to have been terminated or can continue to mutually agreed extended period.
- (iii) If the Consumer is desirous in getting the agreement terminated during the agreement period after the lock-in period of first 5 years.

If the consumer wants to dismantle the plant from his premises during the duration of the agreement period but after the lock-in period of first 5 years, then the consumer shall be liable to pay compensation mentioned in **Annexure – II** of this agreement and KSEB Ltd shall remove the plant. Further if the consumer desires, they may own and operate the plant after payment of amount as mentioned in **Annexure – II**.

(iv) Consumer's event of default

KSEB Ltd shall be at liberty to terminate the agreement with 30 day notice

- (a) If the ingress/ egress to the said roof top/premises is restrained by the Consumer continuously for three billing cycles except in cases where prior intimation has been given to KSEB Ltd/ Authorised representative about Consumer's inconvenience to permit access to the said plant.
- (b) If the Consumer deliberately tampers with the plant and allied equipments.
- (c) If the consumer is not maintaining the space shade-free thereby affecting the generation.
- $(d) \ If the \ Consumer \ is \ seen \ indulging \ in \ making \ alterations/\ modifications \ by \ himself\ / \ engaging \ a \ third \ party, \ except \ for \ cleaning \ the \ panels.$
- (e) If the consumer defaults payment of his/her/their electricity bills and the electricity connection is disconnected / dismantled.

In such events, consumer shall be liable to pay compensation as fixed by KSEB Ltd.

11. Correspondence

- (a) Any letter, order or document addressed to the Consumer shall be served by post or e-mail or courier or left at the address given in the preamble to this Agreement in the manner prescribed in Section 171 of the Electricity Act, 2003.
- (b) All communication to KSEB Ltd shall be addressed to the State Nodal Officer, Soura Project or to any other officer authorised or designated in this behalf.

12. Notice Period

Both the Parties shall issue notice for a period not less than 30 days for any deviation occurring in the provisions of the agreement.

13. Shifting / Deposit Work Charges

(i) Shifting within the same premises due to factors beyond control of the consumer

If the Solar Plant is required to be shifted within the same premises due to shade affecting the generation from the Solar Plant or due to any other factors which is not within the control or not attributable to the Consumer, the Consumer will identify another space within the premsies for shifting the plant. The shifting shall be done by KSEB Ltd at its own cost, one time only during the entire agreement period. If the plant is required to be shifted more than once consumer shall be liable to pay the shifting charges.

(ii) Shifting within the same premises at the instance of the consumer

If the Solar Plant is required to be shifted to a different location within the same premises at the instance of the consumer, the consumer shall be liable to pay the shifting charges, and the shifting work, if feasible shall be arranged by KSEB Ltd within a period of 45 days.

(iii) Shifting to a different premises

If the plant is required to be shifted to a different premises, the Consumer shall be liable to pay the shifting charges, and the shifting work, if feasible shall be arranged by KSEB Ltd within a period of 45 days, after executing new agreement.

14. Transfer of ownership

If the building/ premise where the solar plant installed is sold, the matter shall be intimated to KSEB Ltd within 30 days of the sale. If the same is not done within the stipulated time, the Consumer with whom this Agreement is entered into by KSEB Ltd shall be liable for any compensation to be given to KSEB Ltd for damages/non generation of electricity from the said plant, as the case may be.

Provided that it is the bounden duty of the Consumer/ owner of the building / premises to get it specifically recorded in the sale deed that all the rights and liabilities arising out of the said plant shall be vested with the new owner/ consumer.

15. Plant Outage

If the plant is not generating electricity for a period of more than **48 hours** continuously due to non-availability of grid, other than due to instances of force majeure conditions, compensation shall be payable to the consumer @10 % of the average generation during the corresponding month of previous year. If previous year data is not available, average generation from the plant from date of commencement of generation till the outage date will be considered.

16. Insurance

The insurance for the said plant will be arranged by KSEB Ltd.

17. Completion Period

The period of completion of the installation of the plant shall be six months from the date of handing over the roof top/premises to KSEB Ltd.

18. Accidents

KSEB Ltd / Solar Power developer engaged by KSEB Ltd shall not be responsible for any accident occurring due to unauthorised access to the plant and associated equipment.

19. Upgradation/Repowering of the Plant

KSEB Ltd shall have the right to re-install the plant for better performance, owing to technological improvements. The consumer shall also be eligible for benefits consequent to enhanced generation from the plant, in such instances.

20. Consumer's Right to opt a different model.

The Consumer shall have the option to changeover to a different model other than the current one, subject to the rules and regulations issued by the Government.

WITNESSES WHE	EREOF the parties heret	to have put their hands and seals this the	day
20		I - overnoon h	A JEEU
Signature of the c	consumer, name & addre	ess	
Signatures of wit	tness to the execution b	y the consumer, name & address	
	(qWAllsq)	Companished processes of the Steel	
Signature of the	State Nodal Officer/ de	esignated officer KSEB Ltd, name & address	
	or nama graddrass	by the personnel of the office of the State Nodal Officer/	
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Annexure to agreement between consumers and State Nodal Officer, Soura Project

<u>Annexure – I</u> Damages payable within lock in period of first 5 years (per kWp)

<=10kWp	11-100 kWp	>100kWp
Rs.53,500	Rs.47,500	Rs.44,500

<u>Annexure - II</u> Compensation payable after 5 years (per kWp)

		<=10kWp	11-100 kWp	>100kWp
1	Compensation Year 6	27938.00	24590.53	22916.80
2	Compensation Year 7	26309.22	23156.90	21580.75
3	Compensation Year 8	24775.39	21806.86	20322.59
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6	Compensation Year 11	20689.89	18210.87	16971.36
7	Compensation Year 12	19483.67	17149.18	15981.93
8	Compensation Year 13	18347.77	16149.38	15050.19
9	Compensation Year 1'4	17539.54	15437.99	14387.22
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11	Compensation Year 16	15923.08	14015.21	13061.28
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13	Compensation Year 18	14306.62	12592.43	11735.34
14	Compensation Year 19	13498.39	11881.04	11072.37
15	Compensation Year 20	12690.16	11169.65	10409.40
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18	Compensation Year 23	10265.47	9035.48	8420.49
19	Compensation Year 24	9457.24	8324.09	7757.52
20	Compensation Year 25	8649.01	7612.70	7094.55

Part of the year will be treated as full year while arriving at the salvage value

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Annexure III
Solar tariff for consumers registered under Model II of Soura Project

Solar tariff	for	consumers
Tariii category		solar tariff (Rs/unit)
LT-Domestic (upto 250 units)		4.50
LT-Domestic (> 250 units)		5.50
LT-Domestic (> 500 units)		5.95
LT-IVA		5.00
LT-IVB		
LT-VIA	-	5.50
LT-VIB	1	5.00
LT-VIC		5.50
LT-VIE		5.95
	4	1.50
LT-VIF (Upto 200 units)	5	5.50
LT-VIF (> 200 units)	-	.95
LT-VIG(Upto 1000 Units)	-	
LT-VIG(> 1000 Units)	-	.00
LT-VIIA (Upto 200 units)	5.	95
CT-VIIA (> 200 units)	5.	50
(> 200 units)	5.9	95

Tariff category	- 10,000	
	solar tariff (Rs/unit)	
LT-VIIB	4.50	
LT-VIIC	5.50	
HT-1A		
HT-1B	4.50	
HTIIA	4.50	
HT-IIB	4.50	
	5.50	
HT-IVA	5.50	
HT-IVB	5.50	
HT-V	4.50	
EHT Industrial 66KV		
EHT Industrial110KV	4.50	
EHT Industrial220KV	4.50	
FHT Community	4.50	
EHT Commercial	5.50	
EHT General-A	4.50	
EHT General-B	5.00	

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Office of the State Nodal Officer, Soura Project Vydyudhi Bhavanam, Thiruvananthapuram, Kerala, India PIN - 695 004

Agreement for connecting solar energy system to the distribution system of the licensee

(on stamp paper Rs.200/-)

Т	his memorandum of	agreeme	nt is m	ade on	this (date)	day of (m	nonth)	year
a	t (location)	between	(name	of the	eligible consum	ier)		(address)
consume	r (hereinafter	referred						

AND

Whereas, the consumer has installed a solar energy system at the premises owned and possessed by him/her or owned by and possessed by consumer under a valid lease agreement (strike out whichever is not applicable) and has requested KSEB Limited to provide connectivity to the said plant;

And whereas the consumer has in addition to those automatic and inbuilt isolation devices within inverter and external manual relays, installed a manually operated isolating switch and associated equipment with sufficient safeguards between the solar energy system and the distribution system of KSEB Limited to prevent injection of electricity from his solar energy system to the distribution system of the licensee when the distribution system is de-energized;

And whereas, the consumer has assured that in case of a power outage in the system of KSEB Limited his/her plant will not inject power into the distribution system of the licensee and has produced separately the documents substantiating this assurance which form part of this agreement, as if incorporated herein;

And whereas, the consumer has undertaken that all the equipment connected to the distribution system comply with relevant international (IEEE/IEC) or Indian standards (BIS) and that installations of electrical equipment comply with the relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010;

And whereas, the consumer undertakes that he/she is in possession of all the necessary approvals and clearances, including sanction from Electrical Inspector, as specified in relevant regulations for connecting the solar energy system to the distribution system for commissioning the solar energy system;

And whereas the consumer has provided the solar meter and the net meter at his/her cost, which has been tested, certified and installed by KSEB Limited. [strike out this portion if the meter is provided by the consumer at his/her cost];

Now, therefore, both the parties hereby agree as follows:-

- 1. The net-metering connection shall be governed by the provisions contained in the Kerala State Electricity Regulatory Commission (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014 as amended from time to time and also subject to the condition that the solar energy system meets the requirements as per the provisions contained in Central Electricity Authority (Technical Standard for Connectivity of the Distributed Generation Resources) Regulations 2013.
- 2. KSEB Limited shall have the sole authority to decide based on the results of necessary studies, the interface/interconnection point to the solar energy system.
- 3. If the consumer's solar energy system either causes damage to and/or produces adverse effects affecting other consumers or assets of KSEB Limited the consumer will have to disconnect solar energy system immediately from the distribution system upon direction from the KSEB Limited and correct the defect at his own expense prior to reconnection.
- KESB Limited shall have access to the metering equipment and disconnecting means for solar energy system in all required situations.
- 5. KSEB Limited shall have the right to disconnect solar energy system from the distribution system of the licensee in emergency, if it is found that at that point in time providing service through the net metering system is not safe to the grid as a whole.
- (a) The consumer indemnifies KSEB Limited for the damages or adverse effects if any from the negligence or intentional defective operation in the connection and operation of the solar energy system of the consumer;
 - (b) The KSEB Limited indemnifies the consumer for the damages or adverse effects, If any, from the negligence or intentional defective operation in the connection and operation of the distribution system of KSEB Limited.
- 7. KSEB Limited shall not be liable for delivery to or realization by the eligible consumer of any fiscal or other incentives provided by the Central/State Government or any other authority;

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- 8. All the commercial settlements under this agreement shall follow the provisions of the Kerala State Electricity Regulatory Commission (Grid Interactive Distributed Solar Energy Systems) Regulations 2014.
- 9. The consumer may terminate this agreement after giving thirty days' (30 days) clear notice in writing to the authorized authority of the Licensee.
- 10. KSEB Limited has the right to terminate this agreement at any point in time after giving 30 days' prior notice if consumer breaches any terms of this agreement and in cases where such breaches could be rectified and the same are not provided/informed within 30 days of written notice from KSEB Limited about the breach.
- 11. The consumer agrees that upon termination of this agreement, he must disconnect the solar energy system from distribution system of KSEB Limited in a timely manner to the satisfaction of KSEB Limited.
- 12. The consumer shall have the right to bank and use the electricity generated and injected in excess over his/her full consumption into the distribution system of the licensee by the solar energy system subject to the conditions specified in the Kerala State Electricity Regulatory Commission (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014.
- 13. The consumer shall have the right to open access for wheeling the electricity generated in excess by 500 units over the consumption by the solar energy system installed in the premises of the consumer detailed under item II of the schedule attached and shall be used in the premises owned by the consumer and in the order of preference as detailed under item III of the attached schedule.
- 14. The licensee shall within seven days from the date of execution of this agreement commission the solar energy system.
- 15. The licensee shall pay for the net energy banked by the consumer at the end of settlement period at the average pooled purchase cost of electricity as approved by the Commission for that year, as provided for in the Kerala State Electricity Regulatory Commission (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014.

In witness whereof the said (1st party)	and the	said	 (2 nd	party)	have
hereunto signed at the day and year first above						

	Sd/(1st party)
Witness 1	
Witness 2	
	Sd/(2 nd party)
Witness 1	•
Witness 2	

Section Ofice