

# KERALA STATE ELECTRICITY REGULATORY COMMISSION

WHEREAS the Kerala State Electricity Regulatory Commission have published in the Kerala Government Gazette on different dates the following, namely:-

Kerala State Electricity Regulatory Commission (KSERC), (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014;  
(Notification No. : 2096/KSERC/CT/2014, Dated: 10.06.2014)

A. Kerala State Electricity Regulatory Commission Supply Code (KSERC), (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014 (First Amendment), 2016;  
(Notification No. : 2521/ADL/KSERC/2015, Dated: 15.03.2016)

- Inserted/ Replaced matter is shown as [ <sup>P</sup> ] at appropriate place; wordings inserted/ replaced shown within square brackets;
- In both of above cases; -<sup>D</sup> ; superscript D implies that change is caused by Amendment '4';

## Notification

No. 2096/KSERC/CT/2014

Dated, Thiruvananthapuram 10<sup>th</sup> June 2014.

In exercise of the powers conferred under sections 66, 86 (1) (e) and 181 of the Electricity Act, 2003 (Central Act 36 of 2003) and all other powers enabling it in this behalf, and after previous publication, the Kerala State Electricity Regulatory Commission hereby makes the following regulations, namely:

### Kerala State Electricity Regulatory Commission

#### (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014

**1. Short title, extent and commencement.**-(1) These regulations may be called the Kerala State Electricity Regulatory Commission (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014.

(2) They shall apply to all the distribution licensees in the State of Kerala and to the consumers availing electricity at voltage level of and below 11000 volts.

(3) They shall come into force from the date of publication of the same in the Official Gazette.

**2. Definitions.**-In these regulations, unless the context otherwise requires,

- (1) **“Act”** means the Electricity Act, 2003 (Central Act 36 of 2003);
- (2) **“application form”** means an application form complete in all respects in the appropriate format, as required by the distribution licensee, before the payment of applicable charges;
- (3) **“application”** means an application form complete in all respects in the appropriate format, as required by the distribution licensee, along with the receipt for payment of necessary charges and all necessary documents including copies of approvals from statutory or other authorities;
- (4) **“billing period”** means the period as approved by the Commission for which electricity bills are regularly prepared by the licensee for different categories of consumers;
- (5) **“Commission”** means the Kerala State Electricity Regulatory Commission;
- (6) **“connection agreement”** means an agreement entered into between a distribution licensee and an eligible consumer for connecting the solar energy system to the distribution system;
- (7) **“consumer”** means any person who is supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public

under this Act or any other law for the time being in force and includes any person whose premises are, for the time being, connected for the purpose of receiving electricity with the works of a distribution licensee, the Government or such other person, as the case may be;

- (8) **“contracted connected load”** means the connected load installed by the consumer at the time of execution of the service connection agreement and recorded in kW / kVA in the schedule to the said agreement and includes the connected load duly revised thereafter;
- (9) **“contracted load”** or **“contract demand”** means the maximum demand in kW or kVA, agreed to be supplied by the distribution licensee and indicated in the service connection agreement executed between the licensee and the consumer; and includes the contracted load or contract demand duly revised thereafter;
- (10) **“distribution licensee”** or **“licensee”** means a person granted licence under section 14 of the Act authorizing him to operate and maintain a distribution system and to supply electricity to the consumers in his area of supply, and includes a deemed licensee;
- (11) **“eligible consumer”** means a consumer of electricity in the area of supply of the distribution licensee, who uses or proposes to use a solar energy system, whether owned by him or by a third party, installed in his premises to meet all or part of his energy requirement;
- (12) **“financial year”** means the period beginning from the first of April in a Gregorian calendar year and ending with the thirty first of March of the next year;
- (13) **“interconnection point”** means the point of interconnection between the solar energy system installed or proposed to be installed by the eligible consumer and the distribution system of the licensee;
- (14) **“invoice”** means either a bill or a supplementary bill or an invoice or a supplementary invoice raised by the distribution licensee relating to the billing cycle or billing period;
- (15) **“kWp”** means kilo Watt peak;
- (16) **“net meter”** means the bi-directional energy meter for measuring the quanta of electricity flowing in opposite directions and the net quantum of electricity consumed by the eligible consumer or injected into the distribution system of the licensee; which shall be an integral part of the net metering system;
- (17) **“net metering system”** means a system consisting of a solar meter and net meter with their associated equipment;
- (18) **“normal period”** means the period from 6.00 hours to 18.00 hours on the same day;
- (19) **“obligated entity”** means the entity mandated to fulfill the renewable purchase obligation under Kerala State Electricity Regulatory Commission (Renewable Purchase Obligation and Its Compliance) Regulations, 2010, as amended from time to time;
- (20) **“off-peak period”** means the period from 22.00 hours to 06.00 hours on the next day;
- (21) **“peak-hours”** means the period from 18.00 hours to 22.00 hours on the same day;
- (22) **“premises”** includes any land or building or structure which is included in the details and sketches specified in the application or in the agreement for grant of electric connection or in such other records relating to revision of connected load or contract demand;
- (23) **“Renewable Energy Certificate (REC)”** means the certificate issued in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, as amended from time to time;
- (24) **“settlement period”** means the period beginning from first day of October in a Gregorian calendar

year and ending with thirtieth day of September in the next year;

- (25) **“solar energy system”** means the grid interactive distributed solar photo voltaic electricity generating system with a grid-tied inverter, installed in the premises of the eligible consumer and connected to the distribution system of the licensee;
- (26) **“solar meter”** means a unidirectional energy meter installed as an integral part of the net metering system, at the point at which the electricity generated by the solar energy system is delivered to the main panel of the eligible consumer;
- (27) **“Supply Code”** means the Kerala Electricity Supply Code, 2014, as amended from time to time;
- (28) **“tariff order”** in respect of a licensee means the order issued from time to time by the Commission, stipulating the rates to be charged by the licensee from various categories of consumers for supply of electrical energy and for other services.

**3. Interpretations.**-(1) These regulations shall be interpreted and implemented in accordance with, and not at variance from, the provisions of the Act and the Rules and Regulations made there under.

(2) Words, terms and expressions defined in the Electricity Act, 2003, in the Rules made there under by the Central Government and the Kerala State Government and in the Regulations issued by the Central Electricity Authority, the Central Electricity Regulatory Commission and the Commission and used in these regulations shall have and carry the same meanings as defined and assigned to them in the said Act, Rules and Regulations.

(3) In the interpretation of this code, unless the context otherwise requires:-

- (a) words in the singular or plural term, as the case may be, shall also be deemed to include the plural or the singular term, respectively;
- (b) reference to any statute, rule, regulation or guideline shall be construed as including all statutory provisions consolidating, amending or replacing such statute, rule, regulation or guideline referred to, as the case may be;
- (c) terms “include” and “including” shall be deemed to be followed by “without limitation” or “but not limited to”, regardless of whether such terms are followed by such phrases or words of like import.

**4. General conditions for installation of solar energy system.**- (1) Any consumer in the area of supply of the distribution licensee may install in his premises, the solar energy system, either owned by him or by a third party.

(2) The solar energy system installed by the consumer shall be,-

- (a) within the permissible rated capacity as specified under these Regulations;
- (b) located in the premises of the eligible consumer;
- (c) connected with interlocking system and operated safely in parallel with the distribution system of the licensee.

(3) The capacity of the solar energy system to be installed at the premises of any eligible consumer shall not be less than one kilo Watt peak (kWp) and shall not exceed one Mega Watt peak (MWp) subject to the condition as specified in sub-regulation (4):

Provided that the capacity of the solar energy system shall be in conformity with the provisions relating to the connected load or contract demand permissible at each voltage level as specified in the Kerala Electricity Supply Code, 2014, as amended from time to time.

(4) The specification of output of the solar energy system shall be as specified hereunder and shall be in conformity with the provisions relating to the connected load or contract demand permissible at each voltage

level in the Kerala Electricity Supply Code, 2014.

Sl. No.	Type of connection	Supply Voltage	Specification of output of the solar energy system
1.	Low Tension Single phase	240 V	240 V, 50 Hertz
2.	Low Tension Three phase	415 V	415 V, 50 Hertz
3.	High Tension	11000 V	11000 V, 50 Hertz

(5) A consumer having electric connections in different premises owned by him shall be eligible to install separate solar energy system in each of such premises subject to the provisions of these regulations.

**5. Obligation of the distribution licensee to give connectivity to the low tension feeders.-** (1) The distribution licensee shall, without any discrimination, provide to the eligible low tension consumers in its area of supply, the connectivity to its low tension distribution feeder for installing the solar energy system subject to compliance with the other provisions as per these regulations and the technical limit specified in sub-regulation (2).

(2) The distribution licensee shall give connectivity to the solar energy system of any eligible low tension consumer only till the cumulative capacity of the solar energy systems connected to a particular low tension distribution feeder is less than eighty percent of the average minimum load of all the consumers of the said feeder between 8 AM and 4 PM during the period of seven days succeeding the date of submission of the application form by the eligible consumer for connecting the solar energy system to the said feeder:

~~^1 Provided that the distribution licensee may adopt the average minimum load of the low tension distribution feeder assessed between 8 AM and 4 PM within a period of six months prior to the date of submission of the application form, if the licensee is convinced that there has been no considerable change of load in the said feeder after the previous assessment.~~

*2 (a) The distribution licensee shall give connectivity for the solar energy system of any eligible low tension consumer to a distribution transformer, till the cumulative capacity of the solar energy systems connected to the said transformer reaches fifteen percent of its rated capacity, irrespective of the average load on the said transformer as specified in clause (b) below.*

*(b) The distribution licensee shall give connectivity for the solar energy system of any eligible low tension consumer to a distribution transformer above fifteen percent of its rated capacity as specified in clause (a) above, till the cumulative capacity of the solar energy systems connected to the said transformer, reaches the average load on the said transformer between 8 AM and 4 PM during the period of seven days succeeding the date of submission of the application form for connecting the solar energy system:*

*Provided that the distribution licensee may adopt the average load of the distribution transformer assessed between 8 AM and 4 PM within a period of six months prior to the date of submission of the application form, if the licensee is convinced that there has been no considerable change of load on the said transformer after the previous assessment.*<sup>A</sup>

**6. Obligation of the distribution licensee to give connectivity to the high tension feeders.-**(1) The distribution licensee shall, without any discrimination, provide to the eligible high tension consumers in its area of supply, the connectivity to its high tension distribution feeder for the installation of solar energy system

---

<sup>1</sup> Omitted and Inserted sub-Regulation (2) of Regulation 5, vide First amendment (A), 2016

subject to compliance with the other provisions as per these regulations and the technical limit specified in sub-regulation (2).

~~^2 (2) The distribution licensee shall give such connectivity to the solar energy system of any eligible consumer, generating electricity at 11000 volts, provided the cumulative capacity of the solar energy systems connected to the distribution feeder under a particular power transformer in the feeding substation is less than eighty percent of the average minimum load of that feeder as assessed from the data available at the substation, relating to three hundred and sixty five days preceding the date of submission of the application form:~~

~~Provided that, in the case of new feeders, the average minimum load of a high tension feeder for a period less than three hundred and sixty five days may also be considered for the purpose.~~

~~(2) The distribution licensee shall give such connectivity to the solar energy system of any eligible consumer, generating electricity at 11000 volts, provided the cumulative capacity of the solar energy systems connected to the distribution feeder under a particular power transformer in the feeding substation is less than eighty percent of the average load of that feeder as assessed from the data available at the substation, relating to three hundred and sixty five days preceding the date of submission of the application form:~~

~~Provided that, in the case of new feeders, the average load of a high tension feeder for a period less than three hundred and sixty five days after its installation may also be considered for the purpose.]<sup>A</sup>~~

**7. Obligation of the distribution licensee to provide banking facility.-** (1) The licensee shall extend to the eligible consumer, the facility to bank the electricity generated and injected into the distribution feeder by the solar energy system of the eligible consumer, subject to the conditions specified in the sub-regulations (2), (3), (4) and (5).

(2) The banking facility shall be available only in respect of the solar electricity in excess over the full consumption of the eligible consumer during a billing period.

(3) The eligible consumer in time of the day (ToD) billing system shall be entitled to use the quantum of electricity banked by him, first in the corresponding normal period and the balance in the peak period and in the off peak period in succession in subsequent billing period. The eligible consumer who is not in time of the day (ToD) billing system shall be entitled to use the quantum of electricity banked by him, irrespective of the normal, peak or off-peak periods in subsequent billing period.

(4) The electricity banked by an eligible consumer shall be accounted and settled in accordance with the provisions in regulations 14 and 15.

**8. Specifications, standards and safety.-**(1) The distribution licensee shall ensure that,-

(a) the interconnection of the solar energy system with the distribution system of the licensee conforms to the specifications and standards as provided in the Central Electricity Authority (Technical Standards for connectivity of the Distributed Generation Resources) Regulations, 2013, as amended from time to time;

(b) the interconnection of the solar energy system with the distribution system of the licensee conforms to the relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply), Regulations, 2010, as amended from time to time;

(c) the net meter and solar meter installed conform to the standards, specifications and accuracy class as provided in the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006,

---

<sup>2</sup> Omitted and inserted sub-Regulation (2) of Regulation 6, vide First amendment (A), 2016

as amended from time to time and are installed in such a way that they are accessible for reading.

(2) The licensee shall, while intimating the feasibility as per sub-regulation (6) of regulation 13, inform the eligible consumer, the specifications and such other details of the components if any to be installed along with the solar energy system as per the provisions of the regulations mentioned in sub-regulation (1).

**9. Metering arrangement.**-(1) The net meter shall be installed at the interconnection point of the eligible consumer with the network of the distribution licensee:

Provided that consumers having ABT compliant meters with net metering facility shall not be required to install additional net meter.

(2) Solar meter shall be installed at the delivery point of the solar energy system to measure the solar electricity generated.

(3) The solar meter and net meter shall have the facility for downloading the meter readings using meter reading instrument (MRI) or wireless equipment or such other devices.

(4) The meters shall be tested, installed and sealed in accordance with the provisions of Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time.

(5) The meter reading shall be taken by the distribution licensee and a copy of the statement of reading of the net meter and the solar meter shall be handed over to the eligible consumer under proper acknowledgement, as soon as meter reading is taken.

(6) Commercial settlement of the drawal and injection of electricity by the eligible consumer during a billing period shall be made based on the statement of readings of the net meter.

**10. Obligation of the licensee to provide net metering system.**-(1) The distribution licensee shall make available a correct net meter and solar meter to the eligible consumer who proposes to install a solar energy system in his premises, unless the eligible consumer elects to purchase the said meters as provided in the Act and in the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time:

Provided that the licensee shall make available to the eligible consumer the specification and make of the net meter and solar meter approved by the licensee;

Provided further that the licensee shall complete the testing and installation of the solar meter and net meter purchased by the eligible consumer, within a period of twenty days from the date of presentation of such meters for testing.

(2) The licensee may collect, at the rates approved by the Commission, the security deposit and meter rent for the solar meter and net meter provided by it to the eligible consumer.

**11. Obligation of the eligible consumer to comply with the specifications, standards and safety.**

The eligible consumer shall comply with the specifications and standards as provided by the licensee under sub-regulation (2) of regulation 8 and install grid-tied inverter, manually operated isolating switch and associated equipment with sufficient safeguards to prevent injection of electricity from his solar energy system to the distribution system of the licensee when the distribution system is de-energized.

**12. Right of the eligible consumer to use the excess solar electricity in other premises.**-(1) The eligible consumer shall have the right to avail open access for wheeling the excess electricity generated by the solar energy system installed in one of his premises and to use such excess electricity in other premises owned by him within the area of supply of the licensee subject to the following conditions,-

(i) the right of wheeling and consumption of excess electricity shall be available to the eligible

- consumer irrespective of the category of tariff in other premises;
- (ii) such right for wheeling excess electricity shall be available for the use in his second premises only after the eligible consumer meets his full demand in the premises where the electricity is generated using solar energy system; and the right for wheeling balance excess electricity if any, for consumption in his third premises shall be available only after the eligible consumer meets his full demand in the second premises and so on;
  - (iii) such right for wheeling excess electricity shall be available only if the electricity wheeled to other premises owned by the eligible consumer exceeds 500 units in a month;
  - (iv) the quantum of excess electricity wheeled shall be calculated based on sub-regulation (6) and accounted in subsequent bills of the other premises.
- (2) The eligible consumer shall apply to the licensee for availing the facility as per sub-regulation (1) above, with necessary particulars of all such other premises where such excess electricity generated by the solar energy system installed in one of his premises, is proposed to be used.
- (3) The eligible consumer shall specifically state in the application under sub-regulation (2), the sequence in which the excess electricity shall be allowed to be consumed in his other premises.
- (4) The licensee shall after due verification of the application submitted under sub-regulation (2) above and after satisfying about its genuineness, grant the permission to use the excess electricity in such other premises owned by the eligible consumer.
- (5) The modifications if any, required in the metering system in such other premises of the eligible consumer where the excess electricity is proposed to be used, shall be made by the distribution licensee at the cost of the eligible consumer.
- (6) The eligible consumer shall be entitled to avail only ninety five percent of the total electricity wheeled for his consumption in the other premises and the balance five percent of the electricity shall be adjusted towards the distribution losses and other expenses incurred by the distribution licensee in this regard.

**13. Procedure for granting connection to the solar energy system.** <sup>^3</sup>(1) ~~The eligible consumer who proposes to install a solar energy system in his premises shall apply in the form in Annexure-I to the local office of the distribution licensee, for permission to connect the solar energy system to the distribution feeder of the licensee along with the application fee as specified in the schedule to these regulations:~~

~~Provided that application fee, once paid, shall not be refundable.~~

- (2) ~~The licensee shall acknowledge the receipt of the application form and register the applications and shall process the application in the order of its receipt.~~
- (3) ~~In the case of application for connection to low tension feeder, the distribution licensee shall assess the average minimum load of all consumers as specified in sub-regulation (2) of regulation 5.~~
- (4) ~~In the case of application for connection to high tension feeder, the distribution licensee shall assess the average minimum load of the high tension feeder as specified in sub-regulation (2) of regulation 6.~~
- (5) ~~The distribution licensee shall complete the assessment of minimum load as specified in sub-regulation (3) or sub-regulation (4) as the case may be and intimate the applicant within fifteen days from the date of receipt of the application form, the feasibility or otherwise and the capacity available in the feeder for connecting the solar energy system to the low tension or high tension feeder of distribution system as the case may be:~~

~~Provided that the intimation regarding feasibility shall be valid only for a period of one month, unless extended by the distribution licensee.~~

---

<sup>3</sup> Omitted and Inserted sub-Regulation (1)-(10) of Regulation 13, vide First amendment (A), 2016

~~(6) While intimating the feasibility for connecting the solar energy system as specified in sub-regulation (5) the distribution licensee shall furnish to the applicant,~~

- ~~(i) the details of documents to be submitted by the applicant along with scheme for the installation of solar energy system;~~
- ~~(ii) the fee for registration of the scheme for installation of solar energy system as specified in schedule;~~
- ~~(iii) the technical specifications as well as other particulars of the grid-tied inverter and manually operated isolating switch to be installed by the applicant;~~
- ~~(iv) the technical specifications and other particulars of the solar meter and net meter.~~

~~(7) The eligible consumer shall, on receipt of the intimation regarding feasibility and capacity as specified in sub-regulation (5), submit an application in the format specified in Annexure-II for the registration of his scheme for installing the solar energy system, along with the documents and technical specifications as stipulated in sub-regulation(6), indicating specifically therein the capacity of the solar energy system which he proposes to install and the licensee shall acknowledge its receipt on the spot.~~

~~(8) The distribution licensee shall scrutinise the application and the documents submitted under sub-regulation (7) within a period of three working days and shall intimate the eligible consumer on the next working day,-~~

- ~~(a) the particulars of registration fee to be remitted, and~~
- ~~(b) the particulars of defects if any noticed along with the instructions to cure such defects.~~

~~(9) The distribution licensee shall, on receipt of the registration fee and on curing defects if any noticed in the application and the documents submitted under sub-regulation (7), register the scheme and assign a registration number:~~

~~Provided that the registration made under this sub-regulation shall be valid only for a period of six months from the date of registration and the distribution licensee may allot to other applicants in accordance with the provisions of these regulations, such capacity for connectivity of solar energy system, if the eligible consumer whose scheme has been registered does not avail the connectivity within the period of six months;~~

~~Provided further that the distribution licensee may allot to other applicants in accordance with the provisions of these regulations, the balance capacity for connectivity of solar energy system if the eligible consumer whose scheme has been registered does not avail the full capacity requested for by him within a period of six months;~~

~~Provided also that the registration fee remitted shall not be refundable.~~

~~(10) The applicant shall, within six months from the date of registration as specified in sub-regulation (8), procure the solar energy system conforming to the technical specifications and get it installed by a licensed electrical contractor.~~

*(1) The eligible consumer who proposes to install a solar energy system in his premises shall apply in the form in Annexure-I to the local office of the distribution licensee, for permission to connect the solar energy system to the distribution feeder of the licensee along with the application fee as specified in the Schedule to these regulations:*

*Provided that application fee, once paid, shall not be refundable.*

*(2) The licensee shall acknowledge the receipt of the application form and shall process it in the chronological order of its receipt.*

*(3) On receipt of the application form for permission to connect the solar energy system to the feeder from a distribution transformer, the distribution licensee shall, for the purpose of determining the capacity of*



*the solar energy system that can be connected to the feeder, assess the average load on the said transformer as specified in clause (b) of sub-regulation (2) of regulation 5:*

*Provided that the distribution licensee shall process the application form without waiting for the assessment of average load as specified above, if the cumulative capacity of the solar energy system connected to the said transformer is below fifteen percent of the rated capacity of the said transformer.*

*(4) In the case of application for connection to high tension feeder, the distribution licensee shall assess the average load of the high tension feeder as specified in sub-regulation (2) of regulation 6.*

*(5) The distribution licensee shall complete the assessment of the average load as specified in sub-regulation (3) or sub-regulation (4), as the case may be, and intimate the eligible consumer within fifteen days from the date of receipt of the application form, the feasibility or otherwise and the capacity that can be allotted to him for connecting his solar energy system to the low tension or high tension feeder of distribution system, as the case may be:*

*Provided that, the intimation regarding the feasibility shall be valid only for a period of one month from the date of communication, unless the validity is extended by the distribution licensee.*

*(6) While intimating the feasibility for connecting the solar energy system as specified in sub-regulation (5), the distribution licensee shall intimate the eligible consumer,-*

- (i) the details of documents to be submitted by the eligible consumer along with the scheme for installation of the solar energy system;*
- (ii) the capacity that can be allotted to the eligible consumer for the installation of his solar energy system;*
- (iii) the technical specifications as well as other particulars of the grid-tied inverter and manually operated isolating switch to be installed by the eligible consumer; and*
- (iv) the technical specifications and other particulars of the solar meter and net meter to be installed.*

*(7) (a) The eligible consumer shall, on receipt of the intimation regarding feasibility and capacity as specified in sub-regulations (5) and (6) above, submit an application in the format specified in Annexure-II for the registration of his scheme for installing the solar energy system, along with the documents and technical specifications as stipulated in sub-regulation (6), indicating specifically therein the capacity of the solar energy system which he proposes to install.*

*(b) The distribution licensee shall acknowledge the receipt of the scheme for installing solar energy system.*

*(8) (a) The distribution licensee shall, for the purpose of registering the scheme, determine the fee based on the capacity of the solar energy system to be allotted to the eligible consumer, at the rates as specified in the Schedule.*

*(b) The distribution licensee shall scrutinise the application and the documents submitted under sub-regulation (7) within a period of three working days and shall intimate the eligible consumer on the next working day,-*

- (i) the particulars of registration fee to be remitted for the capacity allotted to him; and*
- (ii) the particulars of defects if any noticed along with the instructions to cure such defects.*

(9) (a) *The distribution licensee shall, on receipt of the registration fee and on curing defects if any noticed in the application and the documents submitted under sub-regulation (7), register the scheme and assign a registration number.*

(b) *The registration given under clause (a) above shall be valid for a period of six months from the date of registration, unless the validity period is extended by the distribution licensee under clause (c) below.*

(c) *The distribution licensee may on application from an eligible consumer, for good and sufficient reasons beyond the control of the applicant, extend the validity of registration for a period not exceeding six months.*

(d) *The distribution licensee may allot to other applicants in accordance with the provisions of these regulations, such capacity for connectivity of solar energy system, if the eligible consumer whose scheme has been registered does not avail the connectivity within the period of validity of registration.*

(e) *The distribution licensee may allot to other applicants in accordance with the provisions of these regulations, the balance capacity available for connectivity of solar energy system if the eligible consumer whose scheme has been registered does not avail, within the period of validity of registration, the full capacity allotted to him.*

(f) *The distribution licensee shall refund to the eligible consumer eighty percent of the registration fee collected by it, if the eligible consumer has installed the solar energy system within the period of validity of the registration.*

**Explanation :** *This clause shall apply retrospectively to all the eligible consumers who have already installed the grid interactive distributed solar energy systems.*

(g) *The distribution licensee may, on receipt of a written request from the eligible consumer before the expiry of the validity of his registration, allow him to withdraw his application, on satisfaction that he is not able to install the solar energy system within the period of validity of the registration, due to reasons beyond his control and in such case, the distribution licensee shall refund eighty percent of the registration fee to the applicant.*

(h) *The registration fee shall be forfeited, if the applicant fails to install the solar energy system within the period of validity of his registration or to withdraw the application as per clause (g) above.*

(10) *The applicant shall, within the period of validity of registration, procure solar energy system conforming to the technical specifications and get it installed by a licensed electrical contractor.<sup>1</sup>*

(11) *If the eligible consumer elects to purchase the solar meter and net meter conforming to the technical specifications stipulated by the distribution licensee as specified in sub-regulation (6), he shall procure them under intimation to the distribution licensee and present the same to the distribution licensee for testing and installation.*

(12) *The eligible consumer shall obtain from the Electrical Inspector having jurisdiction over the area, necessary sanction for commissioning the solar energy system, in accordance with the provisions of the Central Electricity Authority (Technical Standards for Connectivity of Distributed Generation Resources) Regulations, 2013 and produce the sanction to the distribution licensee.*

(13) *The distribution licensee shall, within fifteen days from the date of submission of approval of the Electrical Inspector as specified in sub-regulation (12), test the solar energy system in accordance with the provisions of the Central Electricity Authority (Technical Standards for Connectivity of Distributed Generation Resources) Regulations, 2013.*

(14) On successful completion of the test as specified in sub-regulation (13) the distribution licensee and the eligible consumer shall execute a connection agreement in the format containing the general and specific conditions, as approved by the Commission in accordance with the provisions of the Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013:

Provided that the distribution licensee shall, within two months from the date of commencement of these regulations, submit to the Commission for approval, the format containing the terms and conditions of the agreement.

(15) The licensee shall, within seven days from the date of execution of agreement as specified in sub-regulation (14), commission the solar energy system.

**14. Accounting and settlement of electricity generated, drawn and injected by an eligible consumer who is not in the ToD billing system.-** (1) The accounting of electricity generated, consumed and injected by the eligible consumer shall be done on the basis of readings taken for the billing period applicable to him.

(2) The total electricity generated during a billing period shall be assessed using the readings in the solar meter.

(3) The quantum of electricity drawn from the distribution system of the licensee for the use of eligible consumer, the quantum of electricity injected into the distribution system of the licensee by the eligible consumer and the net quantum of electricity drawn from or injected into the distribution system by the eligible consumer during a billing period shall be assessed using the readings in the net meter.

(4) The total electricity consumed by the eligible consumer shall be computed using the above readings.

(5) If the electricity injected into the system as measured in the net meter exceeds the total electricity drawn by the eligible consumer in the same premises during a billing period, such excess electricity injected into the distribution system shall be carried forward to the next billing period as electricity banked and shall be accounted and used to settle the electricity drawn by him in subsequent billing periods:

Provided that if the eligible consumer has opted, as permitted by the distribution licensee, to consume in other premises owned by him, the excess electricity injected by him into the distribution system, the energy accounting for assessment of banked electricity shall be done after the adjustments as provided in regulation 12.

(6) If the electricity injected into the system by the eligible consumer as measured in the net meter, is less than the total electricity drawn by him in all the premises owned by him within the area of supply of the licensee, during a billing period, the licensee shall recover from such eligible consumer, the electricity charges at the rates applicable to each premises as per the tariff order issued by the Commission, for the net quantum of electricity drawn by him from the distribution system, after taking into account any balance electricity banked during the previous billing period.

(7) The licensee shall give a statement of accounts of electricity showing the following particulars, along with the electricity bill relating to each billing period,-

- (i) quantum of banked electricity carried forward from the previous billing period;
- (ii) quantum of electricity injected into the distribution system by the eligible consumer;
- (iii) quantum of electricity supplied by distribution licensee to the eligible consumer;
- (iv) quantum of net electricity which has been billed for payment by the eligible consumer;
- (v) quantum of electricity injected into the distribution system in excess of the drawal by the eligible consumer which is carried over to the next billing period.

(8) The licensee shall pay for the net electricity banked by the eligible consumer at the end of the settlement period at the average pooled purchase cost of electricity as approved by the Commission for that year:

Provided that the settlement of electricity banked by the eligible consumer during the settlement period shall be done based on the last readings of the meters taken during the settlement period.

**15. Accounting and settlement of electricity drawn and injected by an eligible consumer who is in the ToD billing system.-**

(1) The accounting of electricity generated, consumed and injected by the eligible consumer in the ToD billing system, shall be done on the basis of readings taken for the billing period applicable to him.

(2) The total electricity generated during a billing period shall be assessed using the readings in the solar meter.

(3) The quantum of electricity drawn from the distribution system of the licensee for the use of the eligible consumer, the quantum of electricity injected into the distribution system of the licensee by the eligible consumer and the net quantum of electricity drawn from or injected into the distribution system by the eligible consumer during a billing period shall be assessed using the readings in net meter.

(4) The total electricity consumed by the eligible consumer shall be computed using the above readings.

(5) If the quantum of electricity injected into the system by the solar energy system of the eligible consumer as measured in the net meter, exceeds the total electricity drawn during the normal period in all the premises owned by him, within the area of supply of the licensee, in any billing period, such excess electricity injected into the distribution system shall be set off, first against the electricity drawn during the peak period and then during the off peak period in the same billing period.

(6) If the quantum of electricity injected into the distribution system by the solar energy system of the eligible consumer during a billing period exceeds the quantum of electricity drawn by him during the same billing period and adjusted as per sub-regulation (5) above, such excess electricity shall be carried forward to the next billing period as electricity banked and shall be accounted and used to settle the electricity drawn by him in the subsequent billing period, as per the procedures specified in sub-regulation (5):

Provided that if the eligible consumer has opted, as permitted by the distribution licensee, to consume in other premises owned by him, the excess electricity injected by him into the distribution system, the energy accounting for assessment of banked electricity shall be done after the adjustments as provided in regulation 12.

(7) If the electricity injected into the system by the eligible consumer as measured in the net meter, is less than the total electricity drawn in all the premises owned by him within the area of supply of the licensee, during any billing period, the licensee shall recover from such eligible consumer, the electricity charges at the rates applicable to each premises as per the tariff order issued by the Commission, for the net quantum of electricity drawn by him from the distribution system, after taking into account any balance electricity banked in the previous billing period.

(8) The licensee shall give a statement of accounts of electricity showing the following particulars, along with the electricity bill relating to each billing period,

- (i) quantum of banked electricity carried forward from the previous billing period;
- (ii) quantum of electricity injected into the distribution system by the eligible consumer;
- (iii) quantum of electricity supplied by distribution licensee to the eligible consumer;
- (iv) quantum of net electricity which has been billed for payment by the eligible consumer;
- (v) quantum of electricity injected into the distribution system in excess of the drawal by the eligible consumer which is carried over to the next billing period.

(9) The licensee shall pay for the net electricity banked by the eligible consumer at the end of the settlement period at the average pooled purchase cost of electricity as approved by the Commission for that year:

Provided that the settlement of electricity banked by the eligible consumer during the settlement period shall be done based on the last readings of the meters taken during the settlement period.

**16. Solar Renewable Purchase Obligation.-** (1) The quantum of electricity generated from the solar energy system of an eligible consumer shall qualify for accounting towards the Renewable Purchase Obligation (RPO) of such eligible consumer if he is an obligated entity under the Kerala State Electricity Regulatory Commission (Renewable Purchase Obligation and its Compliance) Regulation, 2010.

(2) The quantum of electricity generated from the solar energy system of an eligible consumer, shall qualify for accounting towards the Renewable Purchase Obligation (RPO) of the distribution licensee if the eligible consumer is not an obligated entity under the Kerala State Electricity Regulatory Commission (Renewable Purchase Obligation and its Compliance) Regulation, 2010.

**17. Exemption from banking charge and cross subsidy surcharge.-** The electricity generated by an eligible consumer using the solar energy system installed in his premises, whether owned by him or by a third party, shall be exempted from banking charge and cross subsidy surcharge:

Provided that the Commission may review such exemption when the solar electricity purchase obligation is fully met by the licensee.

**18. Power of relaxation and power to remove difficulties.-**(1) The Commission may in public interest, by general or special order, for reasons to be recorded in writing, and after giving to the concerned parties likely to be affected, an opportunity of being heard, relax any of the provisions of these Regulations on its own motion or on an application made before it by any person.

(2) If any difficulty arises in giving effect to any of the provisions of these regulations or there is a dispute regarding interpretation of any of the provisions of these regulations, the Commission may, by a general or special order, not being inconsistent with the provisions of these regulations or the Act do or undertake to do things or direct to do or undertake such things which appear to be necessary or expedient for the purpose of removing the difficulties.

**19. Power to amend.-**The Commission may from time to time add, vary, alter, suspend, modify, amend or repeal any of the provisions of these Regulations.

By Order of the Commission,  
Mathew Kurien,  
Secretary.  
Kerala State Electricity Regulatory Commission.

#### **Explanatory Note**

(This does not form part of the notification, but is intended to indicate its general purport)

The Electricity Act, 2003, was enacted with a view to consolidating the laws relating to generation, transmission, distribution, trading and use of electricity; taking measures conducive to development of electricity industry; promoting competition therein; protecting interest of consumers; supplying electricity to all areas; rationalising electricity tariff and promoting environmentally benign policies. Clause (e) of subsection (1) of section 86 of the said Act stipulates that the State Electricity Regulatory Commission shall promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures

for connectivity with the grid and sale of electricity to any person and also specify, for purchase of electricity from such sources, a percentage of total consumption of electricity in the area of a distribution licensee. The National Electricity Policy and the Tariff Policy issued by Government of India in exercise of its powers under section 3 of the Act does also provide for promotion of renewable energy by providing incentives and other facilities. The Commission has already issued the Kerala State Electricity Regulatory Commission (Power Procurement from Solar Plants by Distribution Licensees) Regulations, 2008, containing guidelines for promotion of solar energy and for determination of tariff for electricity from solar sources. The Commission has also issued the Kerala State Electricity Regulatory Commission (Renewable Purchase Obligation and its Compliance) Regulations, 2010, wherein the solar energy purchase obligation has been fixed at 0.25 percent of the total consumption of energy. It is found that regulations governing the grid connected distributed solar energy system is absolutely necessary to promote generation of solar energy. Accordingly a draft has been prepared and published on 24.01.2014 and a public hearing was conducted on 19.03.2014. The final regulations have been formulated after considering the suggestions received from the stakeholders in the public hearing and thereafter.

This notification is intended to achieve the above purpose.

#### **SCHEDULE**

(vide Regulation (13 (1) and (8))

Sl. No.	Description	Amount
1)	Application Fee	Rs 1000.00
2)	Registration Fee	Rs 1000/kW or part of thereof

**Annexure-I**

#### **APPLICATION FOR CONNECTIVITY OF SOLAR ENERGY SYSTEM**

(vide Regulation 13 (1))

1)	Name, Consumer No, Category and, Telephone No, E mail Address and full Address of consumer	
2)		
3)	Connected load/ Contract demand of consumer.	
4)	Capacity of solar energy system proposed to be connected.	
5)	Whether the consumer proposes to use the solar energy produced in any other premises owned by him.	
6)	Whether the consumer is under TOD billing system.	
7)	Whether the consumer proposes Roof Top or Ground mounted Solar energy system	
	Proposed date of completion of the installation	

Place :

Date :

Signature of consumer

### Acknowledgement

Received the application for connectivity of Solar Energy System. Name Date Cons

No

Application fee paid or not

Application Registration No

Solar Plant Capacity

Name of Officer

Designation of officer

Seal.

Signature

## Annexure-II APPLICATION FOR REGISTRATION OF THE SCHEME FOR SOLAR ENERGY SYSTEM

(vide Regulation 13 (7))

1)	Name, Consumer No, Category	
2)	Telephone No, Email and Address of consumer	
3)	Connected load/ Contract demand of consumer.	
4)	Capacity of solar energy system proposed to be connected.	
5)	Technical specifications and other particulars of Solar panel, Grid tied inverter and interlocking system proposed to be installed - whether attached	
6)	Technical specifications and other particulars of solar meter and net meter proposed to be installed – whether attached Whether consumer elects to purchase meters himself	
7)	Scheme for installing the solar energy system – whether drawings attached	
	Proposed date of completion of installation	

Place :

Date :

Signature of consumer

**Acknowledgement**

Received the application for registration of the scheme for Solar Energy System. Name Date Cons  
 No  
 Solar Plant Capacity  
 Name of Officer

Designation of officer

Seal.

Signature