

**KARNATAKA ELECTRICITY REGULATORY COMMISSION**

No.9/2, 6<sup>th</sup> & 7<sup>th</sup> Floor, Mahalakshmi Chambers,  
M.G. Road, Bengaluru-560 001

**Present:**

<b>Sri. M.K. Shankaralinge Gowda</b>	<b>Chairman</b>
<b>Sri. H.D. Arun Kumar</b>	<b>Member</b>
<b>Sri. D.B. Manival Raju</b>	<b>Member</b>

In the matter of:

**Tariff and other Operational procedures applicable in respect of Multiple /  
Combined Solar Rooftop Photovoltaic (SRTPV) Installations  
in a single premises**

**ORDERS**

**S/03/1**

**Date:15.09.2017**

1. The Commission in its Order dated 10<sup>th</sup> October, 2013 had determined the tariff and other norms for Solar Rooftop and Small Photovoltaic Power Plants under net-metering concept, wherein Tariff of Rs 9.56 per unit was determined and such plants were allowed to have installed capacity upto 1MW irrespective of the sanctioned load of the installation of the consumer related to net metering.
2. Subsequently, the Commission in its Order dated 2<sup>nd</sup> May, 2016 has determined the revised tariff and other norms for Solar Rooftop and Small Photovoltaic Power Plants. The Commission while adopting net-metering in general, has adopted gross-metering concept for consumers of Domestic, Hospital and Educational institution categories under which the entire energy generated by the solar rooftop plant is allowed to be injected into the grid. The Commission has also restricted the installed capacity of such plants to be upto 150 per cent of the sanctioned load of the installation of the consumer.
3. The Commission, further, in its Order dated 19<sup>th</sup> September, 2016, decided to allow one-time irrevocable option of either gross or net metering for the consumers under Domestic, Hospital and Educational institution

categories, at the time of signing of PPA. It also decided to further limit the installed capacity of the Solar PV plant to 100 per cent of the sanctioned load of the installation of the consumer.

4. The BESCOM in its letter dated 6<sup>th</sup> February, 2017 sought clarification on allowing more than one SRTPV plant in a single premises of the consumer. It stated that some of the consumers are requesting permission for setting up of one SRTPV plant on the basis of the combined sanctioned load of all the consumer installations in a premises.
5. The CESC in its letter dated 15<sup>th</sup> April ,2017 sought clarification on reduction of sanctioned load/contract demand of the installation connected to SRTPV plants for which Power Purchase Agreements have been executed prior to 2<sup>nd</sup> May, 2016. Further, clarification was also sought on increasing the installed capacity of the SRTPV plants upto the sanctioned load of the consumer installations for the plants commissioned earlier.
6. The Commission having examined the issue, notes that at present, the consumers are allowed to install SRTPV units equivalent to sanctioned load of the installation of such consumers based on gross or net-metering basis as the case may be. If multiple SRTPV units on a common rooftop in a premises with individual units having different tariff structures are allowed, it would lead to over lapping and pose practical difficulties to the ESCOMs in monitoring and settling accounts of such multiple installations for the term of the PPAs. Further, if the SRTPV units are to be allowed on the basis of combined sanctioned load of all the installations in a premises, the attendant benefits of solar power generation should be equitably available to all the consumers and only one or a few consumers cannot be allowed to avail such benefits.
7. The Commission considers that, while promotion of solar power generation with tariff higher than conventional sources and renewable power purchase obligation on ESCOMs has its obvious benefits, solar power capacity creation beyond a reasonable limit is not desirable and sustainable because of attendant financial and operational issues.
8. The Commission notes that in the last couple of years, there has been large capacity addition of solar power in the State, from both megawatt scale plants and small kilowatt scale rooftop plants. As on date, megawatt scale plants of 1092 MW capacity and SRTPV installations of 148 MW have been commissioned. The ESCOMs in the State will be able to meet their RPO targets in the near future with these capacities commissioned and also planned. Thus, now there is a need to moderate additional capacity creation in Solar plants. The new Tariff Policy, issued by the Government of India, provides for procurement of power from

- renewable sources of energy mainly through competitive bidding. Further, the rates offered by solar project developers have seen a drastic downward trend due to competitive bidding. The current tariffs in respect of SRTPV projects are higher than such rates. In the circumstances, the Commission is of the view that any capacity addition in respect of SRTPV units through multiple installations on a single roof requires to be regulated to ensure better utilisation of idle rooftops with least impact on technical operations and financial health of the ESCOMs and also tariff burden on the general consumers.
9. The Commission is of the view that, the multiple SRTPV units could be allowed on a common rooftop, if the tariff for all the units is uniform and remains the same for the term of their PPAs. The Commission, hitherto, is allowing purchase of solar power from SRTPV units at tariffs determined based on cost plus return approach. If, the multiple units on a common roof are to be allowed, the slab-wise tariff based on installed capacity as per the Commission's Tariff Order dated 2<sup>nd</sup> May, 2016, cannot be applied to such installations.
  10. The Commission considering it necessary to elicit the views of the stakeholders in the matter had hosted the Draft Order it proposes to issue in this regard, on the Commission's website [www.karnataka.gov.in/kerc](http://www.karnataka.gov.in/kerc) on 05.06.2017 inviting objections/suggestions/views from them. A Public Notice was also published in certain newspapers informing the public/stakeholders/interested persons to file their objections/suggestions/views if any, to the Draft Order. The Commission had received views from the CESC, the HESCOM, the MESCOM and the BESCOM.
  11. As part of further consultative process, the Commission also held a 'Public Hearing' on 01.08.2017 in the matter and has considered the views/suggestions / objections raised by the stakeholders.
  12. The Commission, having considered all aspects of the matter and the feedback received, in addition to and in partial modification to its Orders dated 10<sup>th</sup> October, 2013, 2<sup>nd</sup> May, 2016 and 19<sup>th</sup> September, 2016 decides to issue the following:

### **ORDER**

Subject to the other terms specified in the Commission's Orders dated 10<sup>th</sup> October, 2013, 2<sup>nd</sup> May, 2016 and 19<sup>th</sup> September, 2016, and further subject to the provisions of the KERC (Implementation of Solar Rooftop Photovoltaic Power Plants) Regulations, 2016, the Commission decides;

- i. To allow on net metering basis, installation of multiple SRTPV units, by a single registered consumer or multiple registered consumers on common rooftop in a premises without any existing SRTPV unit, with the capacity of such units not exceeding the sanctioned load of the connected installation of the respective registered consumer.
- ii. To allow on gross metering basis, a registered consumer having multiple installations in a premises without any existing SRTPV unit to install single SRTPV unit with installed capacity not exceeding the total combined sanctioned load of all the installations of such registered consumer and with billing on one chosen installation.
- iii. To allow on gross metering basis, multiple registered consumers having multiple installations in a premises without any existing SRTPV unit to install single SRTPV unit with installed capacity not exceeding the total combined sanctioned load of all such installations, subject to nomination of any one consumer in whose name the gross metered energy is to be billed.
- iv. To allow on net metering basis, multiple registered consumers having multiple installations in a premises having an existing SRTPV unit of a single consumer, to install multiple SRTPV units with the capacity of each such unit not exceeding the sanctioned load of the connected installation of respective registered consumer, provided the consumer of the existing SRTPV installation agrees to cancel the existing PPA and enters into a new PPA on net metering basis with the tariff prescribed in this Order.
- v. To allow on gross metering basis multiple registered consumers having multiple installations in a premises having an existing SRTPV unit of a single consumer, to install additional SRTPV unit with the combined installed capacity of such unit including the existing unit not exceeding the total combined sanctioned load of all the registered consumers in the premises and with the billing of the additional SRTPV unit being done on one nominated consumer. Provided that the consumer of the existing SRTPV unit agrees to cancel the existing PPA and enters into a new PPA for his existing SRTPV unit under gross metering with the tariff prescribed in this Order.
- vi. To allow in all the above cases, phased capacity addition so as not to exceed the sanctioned capacity as applicable to the respective single SRTPV unit or multiple SRTPV units.

- vii. To allow on gross metering basis, a single registered consumer with multiple installations in a premises having an existing SRTPV unit to scale up the capacity of such SRTPV unit to the combined sanctioned load of all his installations, provided the consumer agrees to cancel the existing PPA and enters into a new PPA for the total installed capacity.
- viii. To allow in the case of existing SRTPV units, any change in the sanctioned load of the connected consumer installation or any change in the tariff category of the connected consumer installation, provided such consumer agrees to cancel the existing PPA and enters into a new PPA with the tariff prescribed in this Order.
- ix. To specify that the tariff payable for the energy injected into the distribution licensee's system in all the above cases either under net metering or gross metering, shall be the latest finalised APCC rates notified by the Commission or Rs 4/- per unit whichever is less.

**This Order shall be effective from the date of this Order and shall be in force till 31<sup>st</sup> March, 2018.**

**This Order is signed and issued by the Karnataka Electricity Regulatory Commission at Bengaluru, on Friday 15<sup>th</sup> of September, 2017.**

Sd/-

**M.K.Shankaralinge Gowda  
Chairman**

Sd/-

**H.D.Arun Kumar  
Member**

Sd/-

**D.B.Manival Raju  
Member**