

KARNATAKA ELECTRICITY REGULATORY COMMISSION
No. 16 C-1, Miller Tank Bed Area, Vasanth Nagar, Bengaluru- 560 052

Dated: 18.08.2021

Present:

Shri Shambhu Dayal Meena	..	Chairman
Shri H.M. Manjunatha	..	Member
Shri. M.D. Ravi	..	Member

In the matter of:

"Determination of Tariff in respect of Solar Power Projects (including Solar Rooftop Photovoltaic Projects) for FY22 toFY23"

Preamble:

1. Section 86(1)(e) of the Electricity Act, 2003 (the Act), mandates the State Electricity Regulatory Commissions to promote generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid. Section 61(h) of the Act provides that, while specifying the terms and conditions of determination of tariff, the Commission shall be guided by the objective of promotion of co-generation and generation of electricity from renewable sources of energy. While Section 62(1) empowers the Commission for determination of Tariff, Section 64 of the Act provides procedure for determination of tariff in respect of generating companies or licensees.
2. Accordingly, the Karnataka Electricity Regulatory Commission has been promoting generation of power from renewable sources, by determining the feed-in-tariff (generic tariff) periodically, based on the normative operational

and financial parameters for different control periods from the year 2005 onwards. This approach of the Commission has enabled creation of a favorable environment for investment in Renewable Energy (RE) projects in the State, ensuring the investors to get reasonable returns on their investments. As a result, the State has made substantial progress in Wind and Solar generation capacity addition.

3. The Commission, vide its Order dated 22.05.2020, had extended the validity of the Tariff Order dated 01.08.2019 relating to solar power projects (including Solar Rooftop Photovoltaic Projects) for FY21, wherein, Commission determined a Levelized tariff of Rs.3.08 per unit for Megawatt scale solar project, Rs.3.07 per unit for 1kW to 2000 kW scale solar rooftop photovoltaic projects and Rs.3.99 per unit for 1kW to 10kW for domestic consumer's solar rooftop photovoltaic projects, applicable for the life of the projects, i.e. for 25 years. These tariffs were applicable to all such new solar power projects for which PPAs are entered into and approved by the Commission, after the date of issue of the said Order and also those which achieved commercial operation on or after 01.04.2020. This Order was in force till 31.03.2021.

4. As on 31.07.2021 the State had an installed Solar Power Generation capacity of 5850.16 MW, in both Grid Connected ground mounted solar photovoltaic and Solar Rooftop Photovoltaic Plants. However, the Commission has noticed that, the investment in 'Solar Rooftop installations' is not encouraging as could be seen from the fact that, out of the above capacity, the current installed capacity of SRTPV plants is only 292.58 MW. Further, bulk of these projects pertain to large rooftop capacity projects, indicating that smaller consumers have not shown much interest in installing SRTPV units on their rooftops, even though the potential for installation of small capacity SRTPV units, especially by the domestic



consumers is substantial, as the installation of SRTPV plants benefits both the consumers and the distribution licensees.

5. The Commission notes that, the Solar Mission of GoI targets installing 100 GW grid-connected solar power plants by the year 2022. As per the Government of Karnataka's Solar Policy 2014-21, it is envisaged to install a minimum of 6000MW solar power projects by March 2021, of which the share of grid connected SRTPV projects shall be 2400 MW. The Commission notes that only 12% of the target for grid connected SRTPV capacity has been achieved so far.

6. The Tariff Policy dated 28.01.2016, issued by the Government of India (GoI), envisages that, all the future procurements of renewable energy (except from waste to energy plants) shall be made only through competitive bidding, as per the bidding guidelines issued by the GoI. Pursuant to the said Policy, the Government of India had issued the Bidding Guidelines on 03rd August, 2017, duly prescribing the standard bidding documents along with Models for Request for Selection (RfS), Power Purchase Agreement (PPA), Power Sale Agreement (PSA) etc., to facilitate power procurement by the DISCOMs. Even prior to this, the Government of Karnataka has been procuring megawatt scale solar power through a transparent process of competitive bidding, using the Commission determined tariff, as a bench mark. The Commission has also decided that all the future power procurements of RE shall be made through the process of competitive bidding, subject to the capacity limit, as may be fixed by the Government.

As per the said Policy, the Commission is required to determine the Generic tariff for small ground mounted solar projects of the capacity of less than 5 MW and SRTPV projects of up to 2000kW (including SRTPV projects of 1kW to 10kW) which are not covered under competitive bidding.

7. In order to encourage installation of SRTPV units in the State, the following steps were taken by the Commission:
- a. The Commission, vide its order dated 22.05.2020 had extended the validity of the SRTPV Tariff Order dated 01.08.2019 by retaining the same tariff in respect of new solar rooftop photovoltaic units of 1kW to 10kW capacity installed by domestic consumers at Rs.3.99 per unit (without subsidy) and Rs.2.97 per unit (with capital subsidy) valid upto 31.03.2021.
 - b. The Commission, in its Order dated 18.05.2018, had allowed the installation of SRTPV plants on the Government buildings by the ESCOMs under Government funding scheme, with the energy generated from such plants being allowed to be utilised by the concerned office/institution and inject any surplus energy into the grid, on net metering basis with the tariff as indicated in the 22.05.2020 Order;
 - c. The Commission, in its Order dated 15.09.2017, has also allowed installation of multiple SRTPV units or single SRTPV unit with the combined installed capacity in a single premise not exceeding the total sanctioned load of all the consumers in that premises, at a tariff equal to 90% of the tariff as per its Order dated 22.05.2020;
 - d. As per clause-13 of KERC (Implementation of Solar Rooftop Photovoltaic Power Plants) Regulations, 2016, the Commission has also allowed to install SRTPV plants up to the capacity of 2000 kW subject to further limit based on the sanctioned load of the consumer's installation, as may be specified by the Commission from time to time.
 - e. The Commission, vide its Order dated 09.12.2019 has allowed third party investment on the Roof of the consumers building under various models and issued the guidelines there on for Solar Roof Top Photovoltaic plants,

by approving the Tariff as per the prevailing Generic Tariff Order issued by the Commission from time to time. However, the Order has been challenged by Amplus Energy Solutions Private limited and others, before Hon'ble ATE in Appeal No:41 of 2021 and IA No:168 of 2020 and the decision in the matter is pending before the Hon'ble ATE.

8. The Central Electricity Regulatory Commission (CERC), on 23.06.2020 has notified "CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2020", for determination of tariff in respect of Renewable energy sources. The following are the salient provisions relating to renewable energy projects:

1. Project specific tariff, on case to case basis, shall be determined by the Commission for the following types of renewable energy projects:
 - i. Solar PV power projects, floating solar projects and solar thermal power projects;
 - ii. Wind power projects (both on-shore and off-shore);
 - iii. Biomass gasifier based power projects and biogas based power projects – if a project developer opts for project specific tariff;
 - iv. Municipal solid waste based power projects and refuse derived fuel based power projects;
 - v. Renewable hybrid energy projects;
 - vi. Renewable energy with storage projects; and
 - vii. Any other project based on new renewable energy sources or technologies approved by MNRE.
2. Financial and operational norms specified in those Regulations, except for capital cost shall be the ceiling norms while determining the project specific tariff.