

KARNATAKA ELECTRICITY REGULATORY COMMISSION

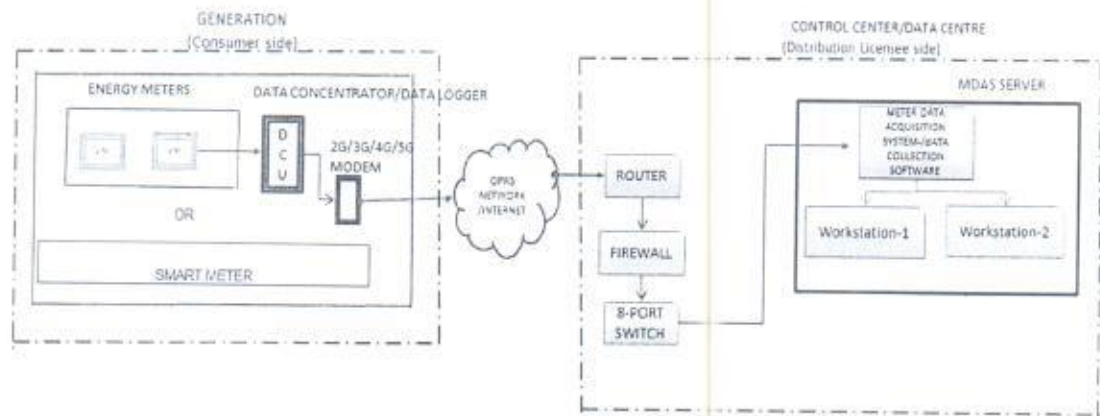
Date: 7 NOV 2022

"Discussion Paper for Evacuation/ Utilization of Solar Energy Generation at LT/HT Voltage and connect to their LT/HT system.

1. The Commission has been receiving proposals from the HT consumers for approval for availing Net Metering arrangements in respect of SRTPV plants installed on the roof top of several buildings with different capacities within the same premises and requesting for facilitating evacuation of solar energy to connect to the LT voltage level of each building, within the same premises, instead of injecting the solar energy at a single point. This not only saves the cost on additional infrastructure and also minimizes the loss of power as there is no need to lay cable from each SRTPV unit installed on individual buildings, to a single point. The excess energy injected to the grid shall be accounted as per KERC (Implementation of Solar Rooftop Photovoltaic Power Plants) Regulations, 2016 and the orders of the Commission issued from time to time.
2. The Commission proposes to allow Net Metering arrangements in respect of SRTPV plants installed on the roof top of several buildings with different capacities within the same premises having HT connection with the distribution licensee and to evacuate the solar energy connecting it at the LT Voltage of each building.
3. Roles and Responsibilities of the SRTPV consumers:
For recording the energy, the consumers shall have to install solar energy generation meter in each of the buildings so that real-time data acquisition is enabled from the data logger deployed and organize the data in the database in a Common Data Format (CDF) as devised by the distribution licensee. The bi-directional meter shall be installed on the HT side.
4. Roles and Responsibilities of the distribution licensee:
To enhance and update its metering and billing system, in line with the requirement of its data center with relevant parameters pertaining to solar energy gross generation, export, import, net units, demand etc., the

distribution licensees are required to compute and furnish these details separately, in the consumer's electricity bills. Distribution licensees are required to make available online all above details of billing data to the consumers, along with a sample bill explaining the various billing components.

5. The schematic of the data collection is indicated as detailed below:



6. In this regard, suggestions/comments/views of the Stakeholders and the general public are invited on the following issues;
- a. On obtaining data from the solar energy generation, a separate unidirectional meter (either Smart meter or Tri vector meter, duly tested) to be provided to each solar unit installed in each of the buildings after confirming to the applicable CEA Regulations, provided that the bi-directional Meter shall be installed on the HT side of the Consumer's Transformer. The specification of the meters shall have defined application layer protocol and standards for metering application, telemetry application and control applications, having the following features:
 - i) For metering applications, the consumer should be able to choose any communication carrier.
 - ii) To aggregate the meter data, central data collection software can be in cloud or within premises.
 - iii) The central data collection software for meter data must accept data from all the meters approved by the distribution licensee.
 - b. On the Roles and Responsibilities of the consumer and the distribution licensee.

7. The Commission hereby requests all the stakeholders and the interested persons to furnish their views/suggestions/comments in the matter to:

The Secretary,
Karnataka Electricity Regulatory Commission,
No-16, C-1, Millers Tank Bed area,
Vasanthanagara, Bangalore-560 052
email kerc-ka@nic.in

The Comments may be submitted on or before 05.12.2022. They are also requested to furnish documents or material in support of their proposals / views so as to enable the Commission to examine all the aspects and issue a suitable Order.



Secretary,

Karnataka Electricity Regulatory Commission