KERALA STATE ELECTRICITY BOARD Ltd.



(Incorporated under the Indian Companies Act, 1956)

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ABSTRACT

Generation Based Incentive (GBI) for all off-grid solar generators for meeting solar RPO - Implementation Sanction accorded - orders issued.

Corporate Office (Commercial & Tariff)

B.O (DF) No. 2925 /2016 (KSEB/TRAC/Renewables/2016-17) dated Tvpm, 15.10.2016

- Read: 1. Kerala State Electricity Regulatory Commission (Renewable Energy) Regulations, 2015.
 - 2. Suo motu Order dated 30.09.2014 of Hon'ble Commission in the matter of Generation Based Incentive (GBI) for Off Grid Captive Solar Power Plants.
- 3. Letter No.374/DD(Tech)/GBI/2016/KSERC/893 dtd.6-9-2016 of Secretary, KSERC.
 - 4. Note No. KSEB/TRAC/GBI/2016-17/dated:27-9-2016 of Chief Engineer (Commercial & Tariff)

ORDER

Kerala State Electricity Regulatory Commission as per the notification read as 1st paper above has issued the Kerala State Electricity Regulatory Commission (Renewable Energy) Regulations, 2015 (Renewable Energy) Regulations, 2015. Board has held two meetings on 15-12-2015 and 2-2-2016, to devise action plans for meeting the revised RPO targets as per the regulation.

In the meetings it was decided that in view of the RPO shortfall of KSEB Ltd., immediate steps need to be taken for accounting as much of solar generation – both off grid and grid tied, available as on date towards the RPO of KSEB Ltd. by providing Generation Based Incentive to off grid solar generators, the energy for which incentive is paid by KSEB Ltd. can be accounted towards the solar renewable power purchase obligation of KSEB Ltd. It was also decided in the meeting that as the past generation details of off grid solar consumers existing as on date are not available with KSEB Ltd., a suitable mechanism need to be evolved for collecting the available data to derive a reasonable generation figure which could be accounted towards the RPO of KSEB.

In the meeting, the office of the Chief Engineer (REES) was entrusted to evolve a methodology for arriving at the reasonable generation for providing GBI, based on the details collected from ANERT and IT wing. Chief Engineer (REES) proposed a methodology for collecting the details of consumers, solar meter reading, calculation of solar generation units eligible for GBI, mechanism for providing GBI to consumers who have installed off grid solar installation etc.

As per the order of KSERC on GBI, Solar energy for which GBI is payable shall be separately metered for which a solar energy meter shall be installed at the cost of consumer. In view of only a small benefit from GBI, many consumers are not installing meters. As a pro-active step for promoting solar generation in the state and also to meet the RPO shortfall of KSEB Ltd. for the past years, it

was decided in the meeting held on 15-12-2015 and 2-2-2016 to provide GBI for all off grid solar generators as per the $\,$ methodology formulated and to approach KSERC for approval .

Accordingly, Chief Engineer (Commercial & Tariff) submitted the proposal before KSERC for approval and KSERC vide the letter read as 3rd paper above granted approval to provide GBI for all off grid solar systems installed by consumers by their own/ANERT scheme including Government building in the license area of KSEB Ltd as per the procedures enclosed as Annexure to this order for implementation.

Chief Engineer (Commercial & Tariff) placed the above methodology approved by KSERC for calculating GBI before Board for approval and implementation. Having considered the note of Chief Engineer (Commercial & Tariff), Board has approved

- i. Implementation of the methodology approved by KSERC for finding out the Generation Based Incentive payable to off grid solar generators enclosed as annexure to this order for implementation, so that generation from these off grid generators can be accounted towards the RPO of KSEB Ltd.
- ii. entrusting Chief Engineer (REES) to issue directions to field offices to carry out the procedures approved by KSERC for calculating and providing GBI for consumers who have installed off grid solar installations and
- iii. entrusting MIS wing to make available the details of GBI provided to the consumers, to REES and TRAC wing for accounting the same towards the RPO of KSEB Ltd.

This order is issued accordingly.

By order of the Director(Finance),

Sd/ Rajthilakan M.G. Secretary (Administration)

To

The Chief Engineer (Commercial & Tariff)

The Chief Engineer(Renewable Energy and Energy Savings)

The Deputy Secretary (Administration)

Copy to:

Financial Advisor, The Chief Internal Auditor/ Deputy Chief Engineer (TRAC)/Commercial

TA to CMD, TA to Director (Distribution, Safety & Generation-Electrical/Generation-Civil & HRM/ Transmission & System Operation/SCM&Planning), PA to Director (Finance)
Sr.CA to Secretary (Administration) Stock file Library

Forwarded by order

Asst: Exe.Engineer

<u>Annexure to the B.O(DF)No. 2925 /2016(KSEB/TRAC/Renewables/2016-17) dated 15.10.2016.</u>

- i. In case of solar plants without meter tested by KSEB Ltd., the units for which GBI can be allowed shall be determined as follows:
 - Let (a) = energy measured at the inverter meter in kwh.
 - (b) = energy calculated @ 2.45 kwh/kW/day.
 - Then (c) = energy eligible for GBI to the solar system is the lesser of (a) and (b)
- ii. In case of metered off grid solar plants, i.e., those solar systems having meter tested by KSEB Ltd., the GBI shall be provided for the energy recorded in the meter for that period.
- iii. As per order dated 30-9-2014 of the Commission, the GBI is applicable from 1-10-2014. Therefore, if the solar plants are installed prior to 1-10-2014, proportionate reduction in energy may be made to the total generation at the first instance duly following the procedure under (i) or (ii) as the case may be. Thereafter GBI may be provided on monthly/bimonthly basis.(Eg: If the generator is installed on 1-1-2014 and the reading is taken on 1-1-2016 as 'x' units, the units eligible for GBI = ['x' units/(365*2)days]*(365+92)days]
- iv. GBI shall be adjusted in the energy bill of the consumers.
- v. KSEB Ltd. shall submit to the Commission, the data of metered and unmetered solar plants and the amount of GBI paid in each quarter.
- vi. The quantum of energy for which GBI is paid by KSEB Ltd. can be accounted towards its RPO.
- vii. KSEB Ltd. shall take appropriate action to install tested meters at all the off-grid solar plants. As and when the tested meters are installed, the GBI can be provided as per the meter reading.