

		<p>based on the feed-in tariff determined by the Commission. The monetary value of the exported energy is deducted from the monetary value of imported energy to arrive at the net amount to be billed. If the cumulative credit amount exceeds the debit amount during any billing cycle, the net credit is carried over to the next billing cycle. At the end of a 12-month settlement period, the consumer has the option to receive payment of the net credit balance (if any) or have such credit balance carried-over to the next settlement period;</p> <p>Gross-metering: 6.8 Gross metering is permitted for eligible consumer or generator who opt to sell all generated solar energy to the distribution licensee. An eligible consumer or generator under the gross metering scheme shall inject the entire power generated from the GISS station to the distribution system of the distribution licensee to the nearest HT network of same voltage. The exported solar energy is credited at the feed in tariff determined by the Commission. The amount is credited in the Generator/consumers electricity bill for every billing cycle or paid to the solar generator/ GISS station owner if the generator/ station owner is not a consumer; Network charges are leviable for the total energy generated in Net metering and Net billing or Net feedin mechanisms. Network charges are not applicable to Gross metering mechanism.</p>
2	Karnataka	<p>The State has also introduced 'Gross Metering' scheme as follows:</p> <p>For each billing period, in the case of gross metering, the licensee shall show the quantum of electricity exported by the eligible consumer during the billing period. In case of any import of energy is recorded in the bidirectional meter during a billing period, such energy shall be billed at a rate which is higher of the</p> <p>A) Tariff agreed to in the PPA. OR B) Prevailing retail supply tariff applicable to the consumer.</p>
3	Gujarat	<p>Banking is allowed only within one billing cycle. Peak charges are applicable for peak hour consumption of the banked energy.</p>
4	Madhya Pradesh	<p>The State has also introduced 'Gross Metering' scheme. Energy Accounting and Settlement for Gross Metering adopted:</p> <p>(i) For each billing period, the Distribution Licensee shall show the quantum of electricity injected into Licensee</p>

		<p>'s system by the consumer/prosumer and quantum of electricity supplied by the Distribution Licensee, separately.</p> <p>(ii) The energy injected into Licensee 's system by the consumer/ prosumer during the billing period shall be payable by the Distribution Licensee at the rate equal to the lowest tariff rate discovered in the solar /wind bidding, as the case may be, for the State of MP in that Financial Year. In case no rate discovered in that financial year, the lowest tariff rate discovered in the latest previous financial year shall be considered.</p> <p>(iii) The energy supplied by the distribution Licensee during the billing period shall be billed as per the terms and conditions of applicable Retail Supply Tariff Order and Madhya Pradesh Electricity Supply Code, 2021, as amended from time to time.</p>
5	Rajasthan	<p>There are following schemes in addition to 'Net metering'</p> <p>(a) Net Metering arrangements; (b) Net Billing arrangements; (c) Grid Interactive Distributed Renewable Energy generating systems connected behind the meter and operating in parallel with Distribution Licensees' grid and who have not opted either for Net Metering arrangement or Net Billing arrangement:</p> <p>Under Net Billing entire power generated is sold to the Distribution Licensee under the Connection Agreement at the tariff agreed in the Connection Agreement with the Distribution Licensee, and the amount payable by the Distribution Licensee is reduced from the amount payable by the consumer for electricity supplied by the Distribution Licensee. The Distribution Licensee shall enter into Connection Agreement at the weighted average tariff discovered through Competitive Bidding for respective technology in previous Financial Year and adopted by the Commission, plus an incentive of 25%. In case no bidding is done in previous Financial Year, then the latest tariff discovered through competitive bidding plus an incentive of 25% shall be applicable: Provided that, in case no bidding is done for respective technology, the latest weighted average tariff of large-scale solar projects of 5 MW and more, discovered through Competitive Bidding and adopted by the Commission, plus an incentive of 25% shall be applicable:</p>

6	Punjab	<p>The State has also introduced 'Gross Metering' and 'Net Billing' schemes.</p> <p>Net Billing scheme:</p> <p>The Distribution Licensee shall raise bill on the prosumer in accordance with the following equation: Energy Bill of consumer = Fixed Charges + other applicable charges and levies + (EDL x TRST)- ERE x TRE) – Billing Credit (carried forward from last billing cycle); Where: a) Fixed Charges means the Fixed/Demand Charges as applicable to the consumer category as per the applicable retail supply Tariff Order; b) Other charges and levies mean any other charges such as electricity duty, municipal tax, cess, etc.; c) EDL means the energy imported from the Distribution Licensee's supply system by the Consumer for the billing cycle; d) TRST means the applicable Retail Supply Tariff of the concerned consumer category as per the applicable retail supply tariff order of the Commission; e) ERE means the energy units exported to the grid by the consumer for the billing period; f) TRE means the feed-in-tariff approved by the Commission; g) Billing Credit is the amount by which the value of solar generation in a particular billing cycle is more than the value of all other components of consumer bill. 13.3 In case the consumer is subjected to time of day tariffs, energy bill (EDL x TRST) shall be computed accordingly. 13.4 In case (ERE x TRE) is more than {Fixed charges + other applicable charges and levies + (EDL x TRST)}, utility shall give credit of amount equal to difference (Billing Credit), which shall be carried forward to the next billing cycle. 13.5 Such Billing Credit would be carried forward for the settlement period. At the end of the settlement period, if there is any outstanding Billing Credit, it shall not be paid by the distribution licensee.</p> <p>Gross Metering arrangement- Energy Accounting and Settlement The energy consumed by the consumer during the billing cycle shall be billed at the retail tariff applicable for the relevant category as determined by the Commission in the tariff order whereas energy generated during the billing cycle shall be billed at feed-in-tariff approved by the Commission. A single invoice may be raised by the distribution licensee.</p>
8	Haryana	<p>The State has also introduced 'Gross Metering' scheme as follows:</p> <p>. The energy accounting and settlement procedure for eligible consumers installing and operating rooftop solar PV system under gross metering arrangement shall be as per the</p>

		following procedure: The Distribution Licensee shall reimburse the eligible consumer for the quantum of injected electricity by the rooftop solar PV system during the billing period by way of 'Solar Injection Compensation'. Provided that the energy drawl by such eligible consumer/ prosumer and energy injected by them under gross metering arrangement shall be considered as two separate transaction and the payables for energy drawn by the prosumer shall not be set off against his receivable for export of power to the distribution licensee.
9	Uttar Pradesh	The State has also introduced 'Gross Metering' scheme same as that of Haryana.

The relevant pages of the Regulations of the above states are enclosed as **Annexure-1.**

17. Considering the present scenario of Solar penetration and the developments as submitted above, it is humbly requested that 'Gross metering scheme' and 'Net Billing' scheme as envisaged in "The Electricity (Rights of Consumers) Rules,2020 notified on 31-12-2020 and the Electricity(Rights of Consumers)Amendment Rules,2021 notified on 28-6-2021 may kindly be introduced in the State as early as possible by suitably amending the KSERC(Renewable Energy and Net Metering)Regulations,2020.
18. KSEBL had earlier, on 7-10-2021 filed a petition before Hon'ble Commission to amend KSERC Regulations including KSERC (Renewable Energy and Net Metering) Regulations, 2020 in line with the rules notified by MoP. A copy of the petition is enclosed as **Annexure-2.** However, the petition has not been admitted so far for hearing.

Issue No.2: Settlement of excess energy at Average Pooled Power Purchase Cost

19. As per KSERC (Renewable Energy and Net Metering Regulations),2020, the distribution licensee shall at the end of the settlement period pay for the excess energy banked by the prosumers and captive consumers at the Average Pooled Power purchase Cost (APPC) of the licensee as approved by Commission from time to time. The relevant provisions of the Regulations are extracted below.

"26(5) The licensee shall pay, within one month, for the net surplus energy available at the credit of the prosumer at the end of the settlement period as per sub Regulation (4) above, at the Average Pooled Power Purchase Cost (APPC) of the licensee approved by the Commission, from time to time.

27 (7) The licensee shall pay, within one month, for the net surplus energy available at the credit of the prosumer at the end of the settlement period as per sub Regulation (4) above, at the Average Pooled Power Purchase Cost (APPC) of the licensee approved by the Commission, from time to time.

29(4) The licensee shall pay for the net electricity banked by the prosumer/ captive consumer at the end of the settlement period, at the Average Power Purchase Cost (APPC) approved by the Commission;”

20. As per the regulation, the “settlement period” means the period beginning from first day of October and ending with thirtieth day of September in the next Year for solar and for non-solar sources, the period from the first day of April in a year to the thirty first day of March in the next calendar year.

”2(1)(bk) ‘Settlement Period’ means, the periods for the purpose of accounting of electricity from the following categories of renewable sources,- (i) from solar sources, the period from the first day of October in a Gregorian calendar year to the thirtieth day of September in the next calendar year; and (ii) from non-solar sources, the period from the first day of April in a Gregorian calendar year to the thirty first day of March in the next calendar year;”

21. Hon’ble Commission in the KSERC (Terms and Conditions for determination of Tariff) Regulations, 2021 has defined “Average Power Purchase Cost” or “APPC” during a year as the weighted average cost of power purchased by the distribution licensee including the cost of self-generation by the Licensee, for the previous year as approved by the Commission.
22. It is submitted that the settling rate proposed at the end of the settling period is an additional incentive provided prosumers for the banked energy in addition to the banking facility provided to the prosumers for the full accounting year. The APPC approved by Hon’ble Commission for the FY 2021-22 is Rs.3.22/unit. This rate is significantly high compared to the prevailing rate of solar.
23. In this connection, following are humbly submitted:

Since the APPC rate is high compared to the prevailing solar tariff, many states have modified the settlement rates to be in line with the prevailing solar tariff.

	State	Settlement of excess energy injected by prosumers
1	Tamilnadu	Energy at the end of settlement period gets lapsed
2	Karnataka	DISCOM to enter a PPA with the consumer for settling the excess energy injected at a tariff.

3	Gujarat	<p>Domestic and Government: At the rate of Rs. 2.25 per unit or the rate, if any, specified by the Commission for Surplus Injection Compensation (SIC) from time to time for the whole life of the Rooftop Solar PV System.</p> <p>Industries and Commercial: At the rate Rs. 1.75 per unit or the rate, if any, specified by the Commission for Surplus Injection Compensation (SIC) from time to time for whole life of the Rooftop Solar PV System.</p> <p>Banking is allowed only within one billing cycle. Peak charges are applicable for peak hour consumption of the banked energy.</p>
4	Madhya Pradesh	Settlement of excess energy at the rate equal to the lowest tariff rate discovered in the solar/wind bidding, as the case may be, for the state of Madhya Pradesh. In case, no rate is discovered in that financial year, the lowest tariff rate discovered in the previous Financial year is taken.
5	Rajasthan	At the weighted average tariff of large scale solar projects of 5MW and above discovered through competitive bidding in last financial year and approved by the Commission.
6	Punjab	Electricity generated from RT Solar system shall not exceed 90% of the consumption. Energy injected in excess of 90% are not paid by the licensee and not allowed to be carried forwarded. Year end settlement is same as that of Gujarat.
7	Delhi	<p>Domestic and Government: At the rate of Rs. 2.25 per unit or the rate, if any, specified by the Commission for Surplus Injection Compensation (SIC) from time to time for the whole life of the Rooftop Solar PV System.</p> <p>Industries and Commercial: At the rate Rs. 1.75 per unit or the rate, if any, specified by the Commission for Surplus Injection Compensation (SIC) from time to time for whole life of the Rooftop Solar PV System.</p>
8	Haryana	Excess energy at the end of the settlement period gets lapsed.
9	Uttar Pradesh	Settlement at the weighted average tariff of large scale solar projects of capacity 5MW or more discovered through competitive bidding in last FY and adopted by the Commission plus an incentive of 25%.

24. The lowest rate for procurement of solar energy in recent contracts entered by KSEBL is RS.2.44/unit (PPA with SECI for 300MW Solar power, PSA with TP Sourya for 110MW Solar power).
25. Considering all the above, KSEBL request Hon'ble Commission for approving Rs.2.44/unit for settling the excess energy banked for the settlement period starting from 1st October 2021 to 30th September 2022.
26. Regulation 66 of the KSERC(Renewable Energy and Net Metering)Regulations,2022 empowers the Commission to time add, vary, alter, suspend, modify, amend or repeal any provisions of these Regulations as extracted below.
"66. Power to amend.- The Commission may from time to time add, vary, alter, suspend, modify, amend or repeal any provisions of these Regulations."
27. It is humbly requested that 'Gross metering scheme' and 'Net Billing' scheme as envisaged in "The Electricity (Rights of Consumers) Rules,2020 notified on 31-12-2020 and the Electricity (Rights of Consumers) Amendment Rules,2021 notified on 28-6-2021 may kindly be introduced in the State as early as possible by suitably amending the KSERC (Renewable Energy and Net Metering) Regulations,2020. It is also requested that Hon'ble Commission may approve Rs.2.44/unit for settling the excess energy banked for the settlement period starting from 1st October 2021 to 30th September 2022.

Prayer

KSEBL humbly request before Hon'ble Commission that:

1. 'Gross metering scheme' and 'Net Billing' scheme as envisaged in "The Electricity (Rights of Consumers) Rules,2020 notified on 31-12-2020 and the Electricity (Rights of Consumers) Amendment Rules,2021 notified on 28-6-2021 may kindly be introduced in the State as early as possible by suitably amending the KSERC (Renewable Energy and Net Metering) Regulations,2020.
2. It is also requested that Hon'ble Commission may approve Rs.2.44/unit for settling the excess energy banked for the settlement period starting from 1st October 2021 to 30th September 2022.

Chief Engineer (Commercial & Tariff)