KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM

Present : Shri T K Jose, Chairman
Shri B Pradeep, Member

OP No:52/2025

In the matter of	:	Average Pooled Cost of Power Purchase (APPC rate) for the purpose of settling the Net banked energy by prosumers and captive consumers in the Order dated 30. 06. 2025 in OP. No 49/2024 for Truing up of accounts of M/s KSEB Ltd for the financial year 2023-24
Petitioner	:	1. Jameskutty Thomas, Ambanadu, Jrwal- 27/13 Sahakarana Road, Janatha, Vyttila P.O., Kochi, Pin-682019 2. V Sureshkumar, Aged 60 years S/o K Viswambharan, Sivanandana MERA- 128, Chalakuzhy, Medical college PO, Thiruvananthapuram, Pin 695011 3. Mohan Varughese, TC 3/1065(5), VN - 79B, Vyasa nagar, Paruthipara, Pattom P.O. 695004, Thiruvananthapuram 4. Sabu.T, Kumpukkal, RVRA -10, Kanjirampara PO, Thiruvananthapuram-695030
Petitioner represented by	:	1. Shri. Jameskutty Thomas, Petitioner1 2. Shri. Sureshkumar V Petitioner2 3. Adv. Mohan Varughese,Petitioner 3 4. Shri. Sabu T, Petitioner4
Respondent	:	Kerala State Electricity Board Ltd (KSEBL)
Respondent represented by	:	1. Adv.Rakhi V Rajan, Counsel KSEB Ltd 2. Shri. Shine Raj, AEE TRAC 3. Smt. Asha A V, AE KSEB
Date of Hearing	:	03.12.2025 at Court Hall of the Commission

Order dated 27.07.2026

1. Shri. Jameskutty Thomas and three others has filed a petition on 27.08.2025 before the Commission with the following prayers.

1. The sentences, "The additional injection of the RE energy to the State Grid especially by the Solar prosumers during surplus day time could not help the State to meet the peak demand and night off-peak demand. Allowing settlement of such surplus energy at a rate that resulted from force majeure situations could lead to windfall benefits to a few at the cost of the vast majority of ordinary

consumers". which are accusing and insulting the solar prosumers and against ground realities may be removed from the order.

2. APPC rate Rs.4.34/- as arrived as per the KSERC (RE & Net meter) regulation 2020, may be approved as settlement rate for banked energy by RTS prosumers as on 31.03.2025.

2. Summary of the petition is given below;

(1) The petitioners are roof top solar prosumers who owns captive RTS plant installed for their own consumption believed in the promotional offers extended by the Centre, State and the utility.

Aggrieved by the arbitrary fixing of the APPC rate, violating accepted methodologies based on prevailing regulations and natural definitions, the petitioners are requesting to review the APPC rate, since the approved rate violates the natural justice and affects the financial returns on the investment made by the petitioners.

(2) As per Section 9 of the EA-2003, the Roof Top Solar Plants installed by the prosumers are captive generating plants. Further, the Section 9 of the EA-2003 deals with the basic laws related to Captive Generation and Injection of electricity from such plants to the electricity network.

(3) Section 61 of the EA-2003 stipulates that the appropriate Commission shall subject to the provisions of the Act, specify the terms and conditions for the determination of tariff. Based on the Section 61 of Electricity Act, 2003, Commission has notified the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021.

Regulation 3(9) of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021, define the definition of "Average Power Purchase Cost" or "APPC", relevant portion is extracted below;

"***Average Power Purchase Cost"*** *or "**APPC**" during a year means 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;*

Regulation 85 (10) of KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021, stipulates that '*Distribution licensee shall purchase the excess energy injected into the system by a renewable energy prosumer, as provided in sub regulation 5 of Regulation 21 of KSERC (Renewable and Net Metering) Regulations, 2020 at the Average Power Purchase Cost. The Commission shall determine the APPC every financial year based on a petition filed by the distribution licensee not later than 31st July of the succeeding year*'.

(4) The petitioners submitted that the energy exchange between utility network and the RE-Captive Generation (the solar roof top plant) is

regulated by KSERC (Renewable Energy and Net Metering) Regulations, 2020.

As per sub-regulation 5 of regulation 21, sub-regulation 5 of regulation 26 and sub-regulation 7 of regulation 27 in KSERC (RE & Net Metering) Regulation 2020, *"The licensee shall pay to the prosumer for the net electricity balance in his account at the end of the settlement period, at the Average Power Purchase Cost (APPC) approved by the Commission.*

Provided that, in case of delay in payment of the net amount due to the prosumer beyond 30 days from the settlement date, the licensee shall pay interest to the prosumer at the FBIL rate + 200 base points prevailing on Ist April of the settlement year."

Subsequently, the Commission vide the KSERC (Renewable Energy and Net Metering) (First Amendment) Regulations, 2022, inserted the definition for APPC, which is extracted below;

"Average Power Purchase Cost" or "APPC" during a year means the weighted average cost of the power purchased by KSEB Ltd including the cost of self-generation by KSEB Ltd, for the previous financial year as approved by the Commission."

(5) The petitioner submitted that the Regulation is clear and specific about the amount that to be paid to the prosumer for the net energy balance in his account at the end of the settlement period and it must be the APPC rate of the previous financial year as arrived and approved by the commission.

Deviation in arriving APPC rate for FY 2023-24 for the purpose of settling the Net banked energy by prosumers and captive consumers

(6) As per para 5.131 of the truing up order for FY 2023-24 dated 30.06.2025, the average cost of power purchase including the cost of self-generation for the FY 2023-24 for KSEBL as a distribution utility is Rs. 4.34/- per unit.

However, instead of approving the same for settling the net banked energy by prosumers as on 31.03.2025, without a specific request from the utility, unreasonably linked the events like failure of southwest monsoon, unprecedented increase in energy demand and peak demand and the cancellation of unapproved DBFOO Contract with the settling rate for the net banked energy of the prosumers and unilaterally undervalued the APPC rate arbitrarily to Rs 3.26/- per unit.
Commission vide the truing up Order dated 30.06.2025 for the FY 2023-24 observed that, the southwest monsoon failure and rate and unprecedented increase in energy demand are 'force majeure' conditions and cancellation of the unapproved DBFOO contracts are beyond the control of the utility.

Hence Commission concluded that solar prosumers do not deserve the normal APPC rate as specified in the KSERC (RE & Net-metering) regulations, 2020.

(7) Further the Commission vide the said Order also observed that the "the additional injection of the RE energy to the State Grid especially by the Solar prosumers during surplus day time could not help the State to meet the peak demand and night off-peak demand. Allowing settlement of such surplus energy at a rate that resulted from force majeure situations could lead to windfall benefits to a few at the cost of the vast majority of ordinary consumers."

APPC approved for the normal monsoon year (2022-23) having consistent electricity demand, can be considered as base year and applying the average CAGR over it may be adopted as the principle for approval of APPC for the abnormal year.

Considering these aspects, the Commission has decided to adopt the APPC @Rs 3.15/unit for the Year 2022-23 as the base and escalating the same at the inflation index @3.41% with the weighted average of CPI and WPI in the ratio of 70:30 as the principle for approving the APPC for the Year 2023-24.

As per the Honourable Commission, the southwest monsoon failure and unprecedented increase in energy demand are 'force majeure' conditions!

(8) The petitioner submitted that the KSEBL has not requested to consider ‘south west monsoon failure’ and ‘unprecedented increase in energy demand’ as 'force majeure' conditions. Moreover, the Commission did not relied upon any document from Appropriate Government or responsible department to consider reduction in southwest monsoon or the increase in energy demand as a "force majeure' condition in power sector energy transactions.

(9) Further, the Hydro generation data from the SLDC system statistics for the FY 2000-01 to FY2024-25, shows that 5734 MU hydro generation for the FY 2023-24 is not a Monsoon failure, but a reduction of 20-24% in the monsoon for the year.

(10) Moreover, it is natural that during a lean monsoon, Kerala shall have a warm year. A rise in demand for electricity is natural and expected during a warm year in Kerala. The utility must be competent enough to forecast the demand variations with required accuracy, using scientific models and data engaged for the purpose.

(11) The data in the table below which provides hydro generation, and electricity consumption for the last 25 years is self-explanatory. As per the table below the total consumption during 2024-25 with 7432 MU hydro generation is 2.2% higher than that of 2023-24 consumption.

Data for 25 years from FY 2000-01 to 2024-25 (Source: SLDC system Statistics)																										
FY	2000-2001	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Hydro Generation(MU)	6968	7142	5476	4488	6377	7601	7746	8704	6495	7240	7415	8351	5390	3796	8596	6720	4526	5963	7687	6049	7637	9977	8882	5734	7432
Total Consumption (MU)	12511	12842	12807	12503	12768	14302	15896	16779	16124	17444	17927	19614	20299	20758	21739	21144	32726	24388	24842	26010	25145	26610	27739	30966	31620

Petitioner further submitted that during 2023-24, the hydro generation was 19% of the total consumption. Even during the normal monsoon year of FY 2024-25, only 24% of the total electricity was consumed from hydro generation. As such, a variation of 5% in hydro generation with respect to the total consumption cannot be considered normally as 'forced majeure' situation.

Hence, the petitioner submitted that the Commission is wrong in the conclusion of force majeure situation prevailed in FY 2023-24 with respect to energy transactions for the state.

Cancellation of the unapproved DBFOO contracts is beyond the control of the utility!

(12) Petitioners submitted the RTS prosumers are not responsible for the approval of the power purchase contracts executed by the utility and undervaluing the rate of banked energy by the prosumers linking cancellation of unapproved DBFOO contracts is without any logic.

KSEBL as the distribution utility and KSERC as the regulator are responsible for long term, medium term and short-term resource planning, its approval, monitoring and implementation. Trying to transfer the consequences due to the failures in these aspects to the RTS prosumers cannot be accepted.

Even if the observation of the commission about the 'force majeure' situation and cancellation of contracts are true, the solar prosumers are suffering the consequences by way of the reduction in APPC rate decided as per the Order dated 30.06.2025 for the banked energy transactions made from 01.04.2024 to 31.03.2025 in FY 2024-25.

"The additional injection of the RE energy to the State Grid especially by the Solar prosumers during surplus day time could not help the State to meet the peak demand and night off-peak demand. Allowing settlement of such surplus energy at a rate that resulted from force majeure situations could lead to windfall benefits to a few at the cost of the vast majority of ordinary consumers."

(13) The petitioner submitted that the energy generated, consumed and injected by the RTS prosumers during the period helped distribution utility to meet the higher demand and thus helped KSEBL to save the precious hydro resources for balancing the grid variations and meeting the peak demand.

Moreover, by meeting the demand from the RTS distribution source, KSEBL saves ISTS transmission charges, internal transmission and distribution infrastructure requirements in addition to the saving in transmission and distribution losses. It is unfortunate that the Commission, instead of acknowledging and rewarding the contribution of RTS prosumers in meeting the real time demand during the warm year with less hydro resource availability, accuses them with availing windfall benefits at the cost of ordinary consumers.

The statement in the Order that, "windfall benefits to a few at the cost of the vast majority of ordinary consumers" is an accusation and insult to the RTS prosumers who installed their roof top plant, based on the assurance and encouragement given by Central and State governments, by spending money from their own pocket to participate in the green energy transition targets envisaged for the country and the state.

Accusing and insulting investors and prosumers who co- operate with the government policies and earns benefits as per the rules and regulations in the land is unfortunate. Such statements by KSERC may end up at losing its credibility and discourage private investment in the sector and investments by consumers RTS sector.

Commission has decided to adopt the APPC @Rs 3.15/unit for the Year 2022-23 as the base and escalating the same at the inflation index @3.41% with the weighted average of CPI and WPI in the ratio of 70:30 as the principle for approving the APPC for the Year 2023-24.

(14) The petitioner submitted that, for reasons unknown, the commission is prejudiced about the settling rate for the banked energy by the RTS prosumers and wants to devalue the settling rate of their banked energy. To achieve this objective, Commission decided not to follow the process specified in its own, KSERC (RE & Net-Meter) regulations, 2020.

The petitioner further submitted that the adopted mechanism does not have any legal backing and is a breach of contract and faith.

The decision of the commission to devalue the settling rate of banked energy by the prosumers as on 31/03/2025 from the APPC rate of Rs 4.34/- as per sub-regulation 5 of regulation 21 in KSERC (RE & Net Metering) Regulation 2020 to Rs 3.26/- is violation of its own regulation and natural justice.

(15) As per Section 86(1) (e) of Electricity Act 2003, The State Commission shall discharge the following functions, namely:

"Promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for

purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee.

The decision of the Commission to devaluate the APPC rate is not in tune with this function specified in the Electricity Act, 2003.

3. Commission admitted the petition as OP No. 52/2025, and conducted hearing on 03.12.2025. Petitioners Shri. Jameskutty Thomas, Shri. V. Sureshkumar, Adv. Shri. Mohan Varughese and Shri. Sabu. T, presented the matter on behalf of the petitioners. Adv. Smt. Rakhi. V. Rajan presented arguments on behalf of the respondent KSEBL. Summary of the deliberations during the hearing is given below.

(1) Petitioners during the hearing submitted the following;

(i) Shri. Jameskutty Thomas, first petitioner submitted that, the petition was filed against the APPC rate of Rs 3.26/unit fixed by the Commission for the settlement of net banked energy as on 31.03.2025, vide the Order dated 30.06.2025 in petition OP No. 49/2024, as against the actual power purchase cost including self generation of Rs 4.34/unit.

Commission has devalued the rate citing the reason that, the increase in cost of power purchase in the Year 2023-24 is due to the following force majeure events;

- Failure of South-West monsoon,
- Abnormal increase in energy demand, and
- Cancellation of DBFOO contract and the additional power purchase to compensate the same;

First petitioner also raise the issue that, in the Truing Up petition, even KSEBL has not requested before the Commission to consider these issues as force majeure.

The petitioner also submitted that, during the period of reduction in generation from hydro plants, solar prosumers had supported the system by injecting surplus energy into the grid.

First petitioner also submitted that, the prosumers had no role in the cancellation of the DBFOO contracts and consequent additional power purchase to meet the short fall.

(ii) Shri. V. Sureshkumar, second petitioner raised the issue that, the APPC rate approved by the Commission is very low. The allegation that, the solar prosumers are burden to the other consumers is not correct, in fact the prosumers are supporting the grid by generating and injecting electricity in to the grid.

(iii) Adv. Shri. Mohan Varughese, third petitioner submitted that, the respondent KSEBL is yet to file their reply. In the absence of specific reply, it is presumed that, KSEBL agrees with the arguments of the petitioners.

The APPC rate fixed by Telangana and Karnataka Regulatory Commissions are much higher than the rate fixed by KSERC.
As per the Section 56 of the Indian Contract Act, force majeure is an act of God, such as flood, cyclone, earthquake etc. Reduction of rain cannot be considered as a force majeure activity. Hence, it cannot be applicable to the calculation of APPC.

(iv) Shri. Sabu T, submitted that, the reduction in APPC rate due to the unprecedented increase in energy demand, reduction in rainfall etc cannot be accepted. As per the KSERC (Renewable Energy & Net Metering) (First Amendment) Regulations, 2022, APPC means weighted average cost of power purchased by KSEBL including cost of self generation.

(2) Respondent KSEBL submitted during the hearing that,

State witnessed drastic reduction in hydro generation by 1477MU due to the failure of monsoon, coupled with unprecedented increase in demand of 2422 MU over previous year. It has affected all electricity consumers of the State.

KSEBL has more than 140 lakh electricity consumers in the State, and out of it the prosumers are about 2.2 lakh only. Commission is duty bound to look after all electricity consumers of the State.

During most part of the day, i.e., during non solar hours including peak hours and night off-peak hours, the prosumers are drawing power from KSEBL. The licensee has purchased electricity at high cost to meet demand during Non-solar hours, including the electricity demand of the prosumers. Though the prosumers injected electricity during day time to the grid, this had not helped KSEBL in any way to meet the demand during non solar hours. But, KSEBL was forced to surrender power from CGS and IPPs during day time to absorb the electricity injected by prosumers.

KSEBL further submitted that, the market rate of electricity during day time is less than Rs 2.50/unit. But the same during peak hours is upto Rs 10/unit and rate during ‘night-off peak hours’ is in the range of Rs 6.00/unit to Rs 8.00/unit during most months in the Year 2023-24.

KSEBL further submitted that, from the petition it is not clear whether the instant petition is a review petition or not.

(3) Based on the deliberations during the hearing, Commission has directed the petitioners and respondent KSEBL to submit the following;

(i) Petitioners shall submit an affidavit with supporting documents on the maintainability of the petition.

Petitioners also allowed to submit additional clarifications, if any, on the maintainability of the petition.

(ii) KSEBL shall submit counter affidavit on the petition within two weeks, with a copy to the petitioners.

(iii) Petitioners also allowed to submit rejoinder, if any, on the counter affidavit of KSEBL.

4. In compliance of the directions of the Commission, Shri. Jameskutty Thomas, vide the affidavit dated 08.12.2025 submitted that, the petition filed is maintainable as per the provisions of the EA-2003 and KSERC Regulations, due to the following reasons;

- KSERC is a quasi judicial body functioning as per the provisions of the EA-2003. As per the provisions of the EA-2003, promotion of RE generation including generation from captive roof top solar plants are one of the statutory functions of the Commission.

- As per the Section 94 of the EA-2003, the Commission is vested with powers as that of a Civil Court.

- The cause of this petition is the Order of the Commission dated 30.06.2025 in OP No. 49/2024.

- APPC Order is not a Tariff Order passed by the Commission under Section 62 of the EA-2003. It is an administrative determination relating to procurement cost and commercial arrangements. Therefore, the bar that 'only an appeal or review lies' does not apply. Since APPC is not a tariff order, appeal under Section 111 is not the exclusive remedy.

- APPC affect consumers and stakeholders throughout the State. This petition is not to challenge the order per se, but to defend the consumers interest.

- Further, the petitioners are not parties to the original petition OP No.49/2024 in the matter of approval of Truing Up of accounts of KSEBL for the year 2023-24. Hence, the petitioners are legally precluded from invoking statutory remedies of appeal, revision or review.

- However, the petitioners are directly and substantially aggrieved by the incorrect and irregular determination of APPC for the year 2023-24.

- Considering the above, the petitioner requested to entertain, accept and proceed with the original petition, as the issues raised herein pertain to

the correction of manifest errors. Hence the petitioner requested to accept and proceed with the OP according to law.

5. The third petitioner Adv. Shri. Mohan Varughese, vide the affidavit dated 08.12.2025 submitted the following;

- Respondent KSEBL not filed the reply to the pleadings of the petitioners, and this in effect amounts to an implied admission of the factual averments and reliefs sought therein. It indicates that, the respondent has no objections to the claims raised or to grant the reliefs prayed for by the petitioners.

- Respondents reliance on the concept of 'force majeure' is fundamentally a contractual mechanism, that excuses the performances only when an unforeseen and uncontrollable event renders the performances impossible. In the absence of any contractual relationship between the petitioners and KSEBL, it cannot invoke force majeure as a justification for adopting a higher or irregular APPC. Further, shortfall in rainfall in one financial year bears no rational nexus to the determination of APPC for a subsequent year.

- As per the Section 61(d), 62(3) and 86(6) of the EA-2003, emphasises the promotion of cogeneration and generation of electricity from RE, and protection of consumer interest. The impugned order is contrary to the letter and spirit of these provisions.

6. The fourth petitioner Shri. Sabu.T, vide the affidavit dated 08.12.2025 submitted that;

- The reasons cited by the Commission for the downward revision is the unprecedented rise in overall electricity demand and sharp increase in peak demand. These developments are direct consequences of the failure of the KSEBL to accurately forecast demand patterns, particularly the predictable rise during summer months.

- KSEBL also not instituted any effective mechanism to manage or mitigate peak demand, which could have significantly reduced the strain on the distribution network. This is largely due to the utilities persistent reluctance to adopt modern energy management tools such as smart meters which can chop off the peak in real time.

- With respect to the cancellation of the DBFOO contracts, the prosumers were never parties to these contractual arrangements. Any financial or operational consequences flowing from such cancellation cannot, therefore, be imposed upon prosumers in the form of reduced tariffs or additional charges.

7. KSEBL vide its letter dated 19.12.2025 submitted the counter affidavit on the petition filed by the petitioners Shri. Jameskutty Thomas and others. Its summary is given below.

(1) KSERC in exercise of its powers and in accordance with Regulations 21(5), 26(5) and 27(7) of the KSERC (Renewable Energy and Net Metering) Regulations,2020 is vested with the authority to approve the APPC from time to time after considering the prevailing circumstances. Paragraphs 5.132 to 5.135 of the KSERC Order dated 30.06.2025 in OP No. 49/2024 dealt with the rationale adopted by the Commission for the determination of APPC for the Year 2023-24.
The contention of the petitioners that, the Commission has arbitrarily fixed the APPC is mis conceived.

(2) The argument of the petitioners that, the failure of the South West monsoon and the subsequent demand surge do not constitute force majeure conditions is factually incorrect. The State witnessed a drastic reduction in hydro generation by 1477MU coupled with an up-precedented increase in demand by 2422 MU over anticipated levels. These events created critical power deficit beyond the control of the utility, compelling the procurement of power at exorbitant rates.

Consequently, relying on the weighted average cost, which was inflated by the distress purchase, to determine the compensation to the solar prosumers would be legally untenable and economically unsound.

(3) KSEBL further submitted that, in 2023-24, the electricity demand increased sharply due to the extreme heat wave conditions in the Country as well as in the State. The increase in electricity consumption over previous year was upto 21% and peak demand increased upto 17% over previous year.

KSEBL has submitted these details in the Truing Up petition for the Year 2023-24.

(4) KSEBL further submitted that, as per the report of the Indian Metrological Department (IMD) vide its report No. IMDC-SR/15, published in December 2023, KER subdivision including Kerala and Mahe has a rainfall deficit of 34%. Relevant table is extracted below.

Table-3.1: Seasonal sub-divisional rainfall distribution over the SP region during the SWM season, 2020 (01st June-30th Sep 2023)

SUB-DIVISION	Actual rainfall (mm)	Normal rainfall (mm)	Percentage departure from normal (%)
COASTAL AP & YANAM (CAP)	538.8	601.4	-10
TELENGANA (TEL)	846.4	734.8	15
RAYALASEEMA (RYS)	357	408.6	-13
TAMILNADU, PUDUCHERRY & KARAIKAL (TN)	354.3	328.5	8
COASTAL KARNATAKA (CK)	2699.7	3093.9	-13
NORTH INTERIOR KARNATAKA (NIK)	429.5	480.8	-11

SOUTH INTERIOR KARNATAKA (SIK)	489.8	678.4	-28
KERALA & MAHE (KER)	1326.5	2018.6	-34
LAKSHADWEEP (LAK)	872.7	1026.6	-15

Source: IMD Report No. IMDC-SR/15 December 2023

Further as per the report, during the period between June 2023 to September 2023, severely extreme dry conditions prevailed over 7 districts Thrissur, Idukki, Kottayam, Kozhikode, Malappuram, Palakkad & Wayand. Relevant portion of the report is extracted below.

moderately dry conditions over 15 districts. In KER, *severely-extremely dry* conditions prevailed over 7 districts (Thrissur, Idukki, Kottayam, Kozhikode, Malappuram, Palakkad & Wyanad) and *mildly-moderately dry* conditions over the other 8 districts including Mahe.

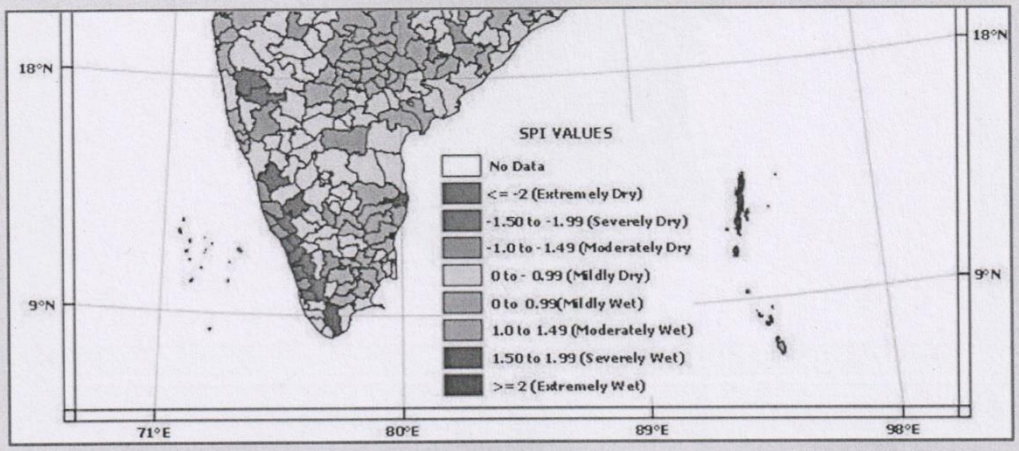

Fig.3(iv): Standardised Precipitation Index (SPI) over the SP region for Jun-Sep 2023
(Source: Climate Diagnostic Bulletin of India, IMD Pune)

Source: IMD Report No. IMDC-SR/15 December 2023

(5) KSEBL submitted that, in lieu of the unapproved DBFOO contracts alone, KSEBL has to procure about 2400MU from short term market and exchanges. However, due to the failure of monsoon, increase in demand and also heat wave prevailed through out the Country, the market rates of electricity also extremely high. As per the Section 61, 63, 64 and 86 of the EA-2003, all prudent cost has to be pass on to the consumers of the State.

(6) Claim of the petitioner that, additional injection of RE to the grid by solar prosumers during day time helps the State to meet peak demand and night-off peak demand is factually incorrect and denied.

(7) As per the data published by MNRE, Kerala rank 4th position in terms of the roof top solar (RTS) installations, and Gujarat, Maharashtra and Rajasthan only ahead of Kerala.

But as per the Resource Adequacy Report published by CEA, the day time demand of these States is much higher and their day time demand aligns with the solar generation.

In the State of Kerala, peak demand occurs between 6PM to 11 PM every day, when the solar generation is negligible or zero. The peak demand of the State is upto 80% higher than the day time demand.

(8) Significant portion of the solar energy generated from roof top solar (RtS) installation is not consumed during solar hours, and about 70% is exported to the grid for banking with KSEBL.

KSEBL is compelled to absorb the surplus solar power during day time itself, however the demand during day time is less, market also has abundant surplus power and market rates also extremely low during day time.

But the prosumers draw their banked energy back from the grid during non-solar periods, substantially during evening peak hours. To meet this demand, KSEBL is forced to purchase power from exchanges and short term market at very high rates.

(9) The cost of power purchase include the high cost power purchase to return the banked power to the prosumers, artificially inflated the APPC. This inflated APPC is proposed to compensate the prosumers who inject surplus energy during day time, when rate is extremely low during day time.

(10) The storage capacity of the hydel plants owned and operated by KSEBL is less than 4000MU only annually as against the electricity demand of more than 32000MU. Further, due to operational constraints and to avoid the threat of spill, KSEBL is not allowed to store water upto the full reservoir level. Hence, KSEBL could not absorb the solar power during day time by regulating the hydel plants.

(11) Solar power is available in the market at the rates below Rs 2.50/unit. In this scenario, the obligation to compensate solar prosumers at Rs 3.26/unit is not viable to KSEBL. Due to surplus injection by prosumers, KSEBL could not avail opportunities to avail cheap power during day time and pass on such benefits to the general consumers of the State.

(12) As per the Section 86(1)(e) of the EA-2003, for promoting the RE power, the Commission is authorised to specify the percentage of consumption to be met from RE sources. The target so specified by the Commission is much higher than the target prescribed by the Ministry of Power, GoI.

(13) The provisions of the Tariff Regulations, 2021 also permit the Commission to use forecasting and inflation adjustments for tariff decisions.

(14) Further, Commission is legally empowered to relax the provisions of the Regulation after recording the reasons.

8. In the rejoinder on the 'counter affidavit' filed by KSEBL, the first petitioner Shri, Jameskutty Thomas submitted the following;

(1) The petitioners have already filed detailed pleadings, submissions and replies addressing all material issues, within the schedule fixed by the Commission.

(2) Counter affidavit of KSEBL received by email from the respondent at a highly belated stage, after substantial completion of pleadings and without sufficient justification for the delays.

(3) Counter filed by KSEBL does not raise any new factual or legal issues warranting a further reply from the petitioners. Most of the averments are repetitive in nature, mis conceived or already adequately addressed in the petitioners early submission on record.

(4) Hence, in the interest of expeditious disposal of the matter, the petitioners not propose to file any further reply to the belated counter affidavit filed by the respondent. The petitioner request to the Commission to proceed with the matter on the basis of the pleadings and submissions already on record and pass appropriate orders in accordance with law.

Analysis and Decision of the Commission

9. Commission having examined the petition filed by Shri Jameskutty Thomas and three others, counter affidavit of KSEBL, additional submission of the petitioners, deliberations during the hearing held on 03.12.2025, provisions of the Electricity Act, 2003 and other relevant Rules and Regulations in force, decide on the matter as follows;

10. Commission vide the Order dated 30.06.2025 in petition OP No. 49/2024 in the matter of Truing Up of Accounts of KSEBL for the Year 2023-24, had determined the APPC rate for settling the Net surplus energy by prosumers and captive consumers as on 31.03.2025 (for settling the net surplus energy at the credit of prosumers and captive consumers at the end of the FY 2024-25).

The procedure adopted for determining the APPC rate and the rationale for adopting the same is given in paragraph 5.132 to 5.135 of the Order dated 30.06.2025. Relevant paragraphs of the Order are extracted below.

"

5.132 As per the Regulation 21(5), 26(5) and 27(7) of the KSERC (Renewable Energy and Net Metering) Regulations,2020, the net surplus banked energy available at the credit of the prosumer/ captive consumer at the end of the settlement period shall be settled at the Average Pooled Power Purchase Cost (APPC) of the licensee approved by the Commission from time to time.

5.133 However, as discussed in the previous paragraphs, the power situation in the State was very critical and extra ordinary in the Year 2023-24 due to the following reasons;

(1) Failure of southwest monsoon, which resulted in reduction in hydro generation by 1477MU during the Year 2023-24.

(2) Unprecedented increase in energy demand and peak demand including the demand increase in late night hours, which has resulted in increase of about 2422MU over the demand anticipated.

(3) Additional power procurement of about 2467MU for meeting shortfall in energy availability due to the cancellation of unapproved DBFOO contracts.

5.134 Out of the above, first two are 'force majeure' conditions and beyond the control of the utility. Further, due to the prevailing market conditions across the County, KSEBL could not tie-up adequate power at competitive rates for meeting the short fall in energy availability from the unapproved DBFOO contracts.

The additional power purchase especially for meeting the demand during peak and night off-peak hours in the extra ordinary circumstances resulted in excessive cost of power purchase and this has to be passed on to the consumers of the State.

*Further, t**he additional injection of the RE energy to the State Grid especially by the Solar prosumers during surplus day time could not help the State to meet the peak demand and night off-peak demand. Allowing settlement of such surplus energy at a rate that resulted from force majeure situations could lead to windfall benefits to a few at the cost of the vast majority of ordinary consumers.***

5.135 Considering these reasons, the Commission is of the considered view that, the APPC approved for the normal monsoon year(2022-23) having consistent electricity demand, can be considered as base year and applying the average CAGR over it may be adopted as the principle for approval of APPC for the abnormal year. Considering these aspects, the Commission has decided to adopt the APPC @Rs 3.15/unit for the Year 2022-23 as the base and escalating the same at the inflation index @3.41% with the weighted average of CPI and WPI in the ratio of 70:30 as the principle for approving the APPC for the Year 2023-24.

Accordingly, the Commission hereby approve the APPC @3.26/unit, for settling the net surplus energy banked and at the credit of the prosumers and captive consumers as on 31.03.2025."

11. The petitioners has filed the present petition against the said Order with the prayers as extracted under paragraph-1 of this Order.

As above, the first prayer of the petitioner is to remove the last proviso to the paragraph 5.134 of the Order dated 30.06.2025 in petition OP No. 49.2024, and,

Second prayer of the petitioner is to approve the APPC rate @Rs 4.34/unit as arrived as per the KSERC (Renewable Energy & Net Metering) Regulations, 2020, instead of Rs 3.26/unit.

Commission hereby clarify that, it had not determined the rate of Rs.4.34/unit as APPC for settling the surplus energy of prosumers as on 31.03.2025. The rate indicated by the petitioners may be the average cost of power purchase including the inter-State transmission charges for the Year 2023-24. Any way, as per the orders of CERC and the principles followed in previous years, the inter State transmission charges payable does not form part of the determination of APPC.

Though the petition was filed against the Order of the Commission dated 30.06.2025 in petition OP No. 49/2024, it is not clear whether the petition is filed as a review petition against the original order Or as a fresh petition for the consideration of the Commission.

12. Considering these facts, and the contentions raised which are in the nature of an appeal, the Commission during the deliberations of the subject petition has directed the petitioners to submit the maintainability of the instant petition. However, the petitioners, vide their affidavit submitted that, this petition is not for challenging the Order of the Commission dated 30.06.2025 in OP No. 49/2024, but to defend the interest of the consumers. According to them, the failure of monsoon and excessive increase in electricity demand cannot be considered as a 'force majeure' event.

13. Kerala State Electricity Regulatory Commission (KSERC) is a quasi judicial body functioning as per the provisions of the Electricity Act, 2003. Commission has been deciding on the petitions filed before it through duly laid down process including stakeholder consultation including public hearings. Commission cannot amend or modify its Order based on a request of some of the interested parties. However, the affected parties can file petition before the Commission to review its order, as per the provisions of the Electricity Act, 2003, and Code of Civil Procedure Code, 1908. Hence, the Commission has appraised the petition in detail to decide whether instant petition is maintainable and to consider whether it comes under the purview of Review Petition of the Original Order dated 30.06.2025 in petition OP No, 49/2024.

14. KSEBL has filed the petition OP No. 49/2024 before the Commission on 02.12.2024 in compliance of the Regulation 10(iii) of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2021. Relevant provisions of the Regulations is extracted below for ready reference.

" 10(iii) Every generating business/ company or transmission business/ licensee or distribution business/ licensee or State Load Despatch Centre shall file, on orbefore the thirtieth day of November of every financial year during the Control Period, the petition for Truing up of the Aggregate Revenue Requirement forthe financial years from 2021-22.

Truing up of Accounts of Distribution licensee is an integral and legally mandated part of the **tariff determination process**. It acts as the retroactive adjustment phase where the **Annual Revenue Requirement (ARR)** initially estimated is reconciled against the **audited actual expenses** and revenues of the distribution licensee. It is part of the multi-step procedures followed by the SERCs for determination of Tariff, which includes the following;

(i) **Projection of ARR.** At the beginning of the control period of the relevant financial year concerned, the licensee files an estimate of expected costs and revenue. The Commission issues a **Tariff Order** based on these projections.

(ii) **Truing Up (Reconciliation):** After the financial year ends, the licensee submits their **audited annual accounts**. The Commission performs a prudence check to compare the projected costs against actuals.

(iii) **Adjustment:** Any resulting **surplus or deficit** (revenue gap) determined during the true-up is factored into future tariff calculations, often adjusted or recovered via a Regulatory Asset to ensure cost recovery.

Thus truing up process are an essential part of the tariff determination process of the distribution licensee.

Thus 'Orders on Truing Up' are primarily governed by the Electricity Act, 2003 and the 'Conduct of Business Regulations of the respective Commissions. Truing Up orders are also part of the Tariff determination.

15. There is no specific provision in the KSERC (Conduct of Business) Regulations, 2003 empowering a stake holder to file a fresh petition on a settled Truing up order. Regulation 67 of the KSERC (Conduct of Business) Regulations, confer powers on the Commission to review its own orders as shown below:

"67. Powers of review. –

*(1) Any person or party affected by a decision, direction or order of the Commission may, **within forty-five days from the date of making such decision,** direction or order apply for the review of the same.*

(2) An application for such review shall be filed in the same manner as a petition under Chapter III of these regulations.

(3) The Commission may after scrutiny of the application, review such decisions, directions or orders and pass such appropriate orders as the Commission deems fit within forty five days from the date of filing of such application:

Provided that the Commission may, at its discretion, afford the person or party who filed the application for review, an opportunity of being heard and in such cases

the Commission may pass appropriate orders as the Commission deems fit within thirty days from the date of final hearing:

Provided further that where the application for review cannot be disposed of within the periods as stipulated, the Commission shall record the reasons for the additional time taken for disposal of the same.]

67A. Amendment of orders.- *Clerical or arithmetical mistakes in the orders or errors arising therein from any accidental slip or omission may at any time be corrected by the Commission either on its own motion or on an application of any of the parties.]*

16. Further, there is no provision in the Electricity Act, 2003 or in the Regulations issued by the Commission (KSERC) enabling this State Electricity Regulatory Commission to entertain a tariff petition filed by an individual stake holder. As per section 64, an application for determination of tariff under section 62 is to be filed by a generating company or a licensee. Hon'ble APTEL ***in Delhi Jal Board Varunalaya Phase-II Jhandewalan New Delhi vs. Delhi Electricity Regulatory Commission and Ors. (16.02.2012 - APTEL) observed that there is no provision in the Act for individual consumers for filing petition before the State Commission for determination of their Tariff.*** Relevant portion of the said order is extracted hereunder:

"7. At the outset, we shall point out that the State Commission under Section 62 of the Act, 2003 has to determine the tariff for supply of electricity by a generating company to distribution licensees, transmission of electricity, wheeling of electricity and retail supply of electricity. According to section 64 of the Act, the application for determination of tariff under section 62 is to be made by a generating company or licensee in the manner as may be determined by regulations. The Applicant has also to publish the application in the manner as specified by the Appropriate Commission and the Commission has to decide the said application after considering all suggestions and objections received from the public. Thus, there is no provision in the Act for individual consumers filing petition before the State Commission for determination of their tariff.

8. The consumers have to file their suggestions and objections before the State Commission during the public hearing while determining the ARR and tariff of the distribution licensee.

9. Hence, in our opinion the petition filed by the Appellant on 12.03.2007 before the State Commission was not maintainable."

17. Since Truing-up orders are being part of the tariff determination process under Sections 61 and 62 of the Electricity Act, 2003, the decision of the Hon'ble APTEL that "***there is no provision in the Act for individual consumers for filing petition before the State Commission for determination of their tariff" is*** squarely applicable to OP filed by Shri. Jameskutty Thomas also.

Hence the instant petition filed by the petitioners, challenging certain portions of the Orders on Truing Up for the Year 2023-24 dated 30.06.2025 is not legally maintainable and hence the same is liable to be rejected.

18. Though the petitioners filed the instant petition 'not as a review petition, Commission has also examined whether the issues raised by the petitioners falls under the scope of a review petition.

As per the provisions of the EA-2003, review jurisdiction of the Commission is very limited. The relevant Section of the EA-2003 is extracted below.

(i) Section 94 of the Electricity Act-2003, provide as follows:

"(1) The Appropriate Commission shall, for the purposes of any inquiry or proceedings under this Act, have the ***same powers as are vested in a civil court under the Code of Civil Procedure, 1908*** *in respect of the following matters, namely: -*
(a) Summoning and enforcing the attendance of any person and examining him on oath;
(b) Discovery and production of any document or other material object producible as evidence;
(c) Receiving evidence on affidavits;
(d) Requisitioning of any public record;
(e) Issuing commission for the examination of witnesses;
(f) reviewing its decisions, directions and orders;
(g) Any other matter which may be prescribed.:

(ii) Order 47 Rule 1 of the Code of Civil Procedure dealing with review of the orders and decisions of a Civil court is quoted below:

"Application for review of judgment. - *(1) Any person considering himself aggrieved, —*
(a) by a decree or order from which an appeal is allowed, but from which no appeal has been preferred,
(b) by a decree or order from which no appeal is allowed, or
(C) by a decision on a reference from a Court of Small Causes, and who, from the discovery of new and important matter or evidence which, after the exercise of due diligence, was not within his knowledge or could not be produced by him at the time when the decree was passed or order made, or on account of some mistake or error apparent on the face of the record, or for any other sufficient reason, desires to obtain a review of the decree passed or order made against him, may apply for a review of judgment to the Court which passed the decree or made the order.

(2) A party who is not appealing from a decree or order may apply for a review of judgment notwithstanding the pendency of an appeal by some other party except where the ground of such appeal is common to the applicant and the appellant, or when, being respondent, he can present to the Appellate Court the case on which he applies for the review.
Explanation: The fact that the decision on a question of law on which the judgment of the court is based has been reversed or modified by the subsequent decision of a superior court in any other case, shall not be a ground for the review of such judgment."

As extracted above, as per the provisions of the Electricity Act - 2003 and Order 47 Rule 1 of the Code of Civil Procedure, the review

jurisdiction of the Commission is very limited. For reviewing its decisions, the discovery of new and important matter or evidence, which was not within the knowledge of the petitioner or could not be produced by him at the time when the decree was passed or order made, or on account of some mistake or error apparent on face of record, or for any other sufficient reason.

The petitioner has not submitted any new facts in this petition before the Commission. They have also not pointed out any apparent mistake or error on the face of records. Hence, the Commission observes that neither the provisions of the EA- 2003 nor the review jurisdiction of the Commission under Order 47, Rule 1 of the Code of Civil Procedure can be invoked to review the Order dated 30.06.2025 in OP No. 49/2024. Hence, this petition is not sustainable as per the above provisions and a*ccordingly, this petition is liable to be rejected.*

19. In light of the above aspects discussed under paragraphs 14 to 18 above, the petition is not maintainable and liable to rejected. However, in the interest of transparency and justice, the Commission decided to appraise the various issues raised by the petitioners in detail to see whether any appropriate motion to review any of the decisions in OP No.49/2024 is required or not. Accordingly, based on the deliberations during the proceedings of the petition, Commission has decided to appraise the following issues in detail to get a clarity on the issues raised by the petitioners.

(1) How the 'Roof Top Solar (RtS) plants installed by prosumers for their own consumption affect the State grid and other electricity consumers who fully depend on the grid power.

What is the opportunity cost of the electricity injected by the prosumers during the solar hours in the Year 2024-25?.

(2) Whether there is abnormal increase in cost of power purchase during the Year 2023-24?. If so, what are the reasons for the same and in light of the reasons whether the determination of APPC was correct?

Issue No. 1.
How the 'Roof Top Solar (RtS) plants installed by prosumers for their own consumption affect the State grid and other electricity consumers who fully depend on the grid power.

What is the opportunity cost of the electricity injected by the prosumers during the solar hours in the Year 2024-25?.

20. The petitioners content that their power generation is helping the State to meet power demand of the KSEBL economically including by reduction in transmission charges. On the contrary, KSEB Ltd content that the surplus

injection during day time is causing financial burden to the larger body of consumers. To decide on the rival contentions an analysis of evolving situation is required.

As on 31.03.2025, there are about 140 lakh electricity consumers in the State, out of it about 2.1 lakhs are prosumers, who installed roof top solar (RtS) plants for meeting their own consumption.

Existing domestic prosumers installed roof top solar plants (RtS) in the State under Soura Scheme of KSEBL, and also under the PM Surya Ghar: Muft Bijli Yojana scheme of Central Government, for meeting their own electricity requirements. The name 'prosumer' was evolved on the fact that, such consumers are simultaneously producing and consuming electricity in their own premises.

Due to the variable and diurnal nature of solar insolation, there are limitations in depending on solar energy for meeting the electricity demand of the consumers on 24x7 basis. Electricity generation from the solar plants is possible only during solar hours of the day, i.e., usually between 8.30AM to up to 5:30 to 6:00 PM in the evening, that too at varying quantum. This time period also slightly varies from season to season. The Solar hours in other States in the Country also varies due to their geographical position from the equator of the earth, i.e, its latitude and also varies from season to season.

It is noted that, average electricity generation from 1 kW RtS plant in the State is in the range of 4 units to 5 units on daily basis. Thus, domestic consumers with monthly consumption of about 300 units (10 units per day) has to install RtS upto 3kW at their premises for meeting the entire consumption from RtS.

21. But, as per the data available with the Commission, generally the domestic consumers consume about 25 to 30% of the total electricity consumption only during day time. In other words, a consumer with daily consumption of 10 units, may consume 2.5 units to 3.0 units only during day time, against solar energy available upto 12 units from a 3 kW plant.

Hence, for meeting the electricity requirements of Non solar hours (evening peak period as well as night off-peak hours and early morning hours) from the RtS plant, they have to install 'storage system' including Battery Energy Storage System (BESS) or has to get the support of the State Grid to bank the surplus solar energy and to get it back as and when required. Kerala power grid is owned and operated by KSEBL as the STU and incumbent licensee.

22. The capital cost for establishing battery energy storage system (BESS) in the year 2019-20 was excessively high compared to present cost. Also, during the Year 2019-20, the Solar penetration in the State as well as in the Country was

very limited. RtS capacity in the State as on 31.03.2020 was 43.23 MW only (as against the present capacity of 2036MW as on 31.03.2026).

Considering these reasons, Commission vide the KSERC (Renewable Energy & Net Metering) Regulations 2020 (herein after referred to as RE Regulations, 2020), has provided banking facility and net metering facility to the prosumers in the State, obviating the need for battery energy storage, as a promotional measure during the initial phase.

By availing the facility, the grid connected prosumers who install RtS plant are allowed to export surplus electricity from their RtS after meeting the day time consumption, to the KSEBL grid.

As the prosumers are also electricity consumers of KSEBL, they are allowed to consume electricity from KSEBL grid during non solar hours including peak hours, night off peak hours and early morning hours.

23. Further, under net metering facility, these prosumers are allowed to adjust the electricity consumed from KSEBL during Non Solar hours, against the surplus electricity exported to the grid during solar hours which is credited to the prosumers account.

The accounting and settlement of such transactions, including export of surplus energy to the grid during solar hours, drawl of electricity from KSEBL during Non Solar hours etc are done on monthly basis, as per the provisions of the RE Regulations.

24. Meanwhile, over the years, with the accelerated growth of solar power deployment in the country, including that through solar RTS, the state and the country is witnessing an abundance of power during solar hours while at the same time is facing a significant shortage of power in the non-solar hours. In recent years, this phenomena has resulted into a peculiar price discovery pattern in the Indian power exchanges wherein power is traded at prices near to zero during many time blocks in solar hours(average of about Rs. 2.85 per unit in 2024-25, which has come down to less than Rs 1.50/unit in 2026-27, so far) while during many time blocks in non-solar hours the price discovered is the ceiling rate of Rs.10 per unit. Thus, within the same day huge price excursions resulting in daily price variations upto 100 times(upto 9900%) is regularly witnessed.

Central Electricity Authority (CEA), a statutory technical body under MoP, GoI and functioning as per Section 73 of the EA-2003 has been monitoring the power market of the Country and publishing the Market Monitoring Report on monthly basis.

Monthly abstract of the market rates for different time periods during 2024-25 from the market monitoring report published by CEA is given below.

Time zone wise details of the market rate in DAM during the Year 2024-25

Month	Morning MCP (07:00-10:00)	Day MCP (11:00-17:00)	Evening MCP (18:00- 23:00)	Night MCP (01:00-06:00, 23:00-24:00)
	(Rs/ kWh)	(Rs/ kWh)	(Rs/ kWh)	(Rs/ kWh)
Apr-24	3.93	3.50	5.47	3.23
May-24	3.36	3.19	7.47	6.56
Jun-24	3.50	3.00	7.40	7.19
Jul-24	3.14	2.49	8.35	5.77
Aug-24	3.14	2.49	8.35	5.77
Sep-24	2.70	2.39	7.78	4.05
Oct-24	2.98	2.48	6.48	3.74
Nov-24	3.45	2.43	4.44	2.69
Dec-24	6.33	3.09	4.65	2.40
Jan-25	8.55	3.22	5.71	2.53
Feb-25	7.57	3.14	5.51	3.10
Mar-25	4.29	2.77	7.05	4.22
Average	4.41	2.85	6.56	4.27

Source. Monthly market monitoring report published by CEA

As above, the average market rate of electricity during day time of the Year 2024-25 in the day ahead market (DAM) is Rs 2.85/unit.

Hence, the price of electricity drawn by prosumers during Peak hours is valued upto Rs 10/units(average of about Rs.6.56per unit in 2024-25), whereas the opportunity cost of surplus electricity exported to the grid by prosumers during day time is near to zero in many time blocks and is averaging at about Rs.2.85per unit.

25. Commission has examined the details of the electricity generation and consumption of the prosumers during the Year 2024-25. The details are given below.

Details of the electricity generation and consumption by prosumers

Sl No	Source	Tariff category	Installed capacity	Generation at exbus	Consumption against captive generation at source (before export)	Export to the grid	Consumption adjustment against export to the grid	Consumption met from Captive plant	Settlement against APPC	Losses adjustments etc
			(MW)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)
			(1)	(2)	(3)	(4)	(5)	(6)=(3)+(5)	(7)	(8)=(2)-(6)-(7)

1	Maniar SHP (Carbourandum Industries)	EHT	12.00	28.59	0.00	28.59	25.11	25.11		3.48
2	Kuthumkal SHP (Indsil Industries)	EHT	21.00	50.38	0.00	50.38	44.20	44.20		6.18
3	CIAL Solar	EHT	39.44	40.10	19.07	21.03	17.87	36.94		3.16
4	KMRL Solar	EHT	10.60	12.82	9.12	3.70	3.47	12.59		0.23
5	HINDALCO Solar	EHT	5.00	7.31	4.30	3.02	2.65	6.95		0.36
6	EHT total		88.04	139.20	32.49	106.72	93.30	125.79		13.41
7	Bharat Hospital	HT-II (B)	1.10	0.92	0.00	0.92	0.81	0.81		0.11
8	Moulana Hospital	HT-II (B)	2.70	4.22	0.00	4.22	3.56	3.56		0.66
9	Solar Prayrelal	HT-! (A)	1.00	0.98	0.00	0.98	0.84	0.84		0.14
10	HT-Solar subtotal		4.80	6.12	0.00	6.12	5.21	5.21		0.91
11	Wind-Manorama	HT	10.00	22.16	0.00	22.16	19.23	19.23		2.93
12	Wind - Greenland	HT-1(A)	0.25	0.38	0.00	0.38	0.31	0.31		0.07
13	Wind -KK plastic	HT-1(A)	0.25	0.33	0.00	0.33	0.27	0.27		0.06
14	Wind- KIK Platic	HT-1(A)	0.25	0.32	0.00	0.32	0.28	0.28		0.04
15	Wind Malayokam	HT-1(A)	0.25	0.31	0.00	0.31	0.27	0.27		0.04
16	Wind sub total		11.00	23.50	0.00	23.50	20.36	20.36		3.14
17	Other Solar grid connected prosumers	HT&EHT	108.30	114.94	96.95	17.99	14.22	111.17	0.89	2.88
18	**Solar prosumers LT**	**LT**	**1100.88**	**1075.81**	**259.40**	**816.41**	**592.13**	**851.53**	**216.41**	**7.87**
19	Solar off-grid prosumers	LT	1.09	2.80	2.80			2.80		
20	Total		1314.11	1362.37	391.64	970.74	725.22	1116.86	217.30	28.21

As above, item No.18 gives the details of the LT solar prosumers in which the petitioners belongs to, including the installed capacity, electricity generation from their RtS plant, self consumption during solar hours, electricity export to the grid, electricity consumed from the grid and net surplus at their credit as on 31.03.2025.

LT solar prosumers had generated 1075.81 MU from their RtS plant during solar hours. Out of it they consumed 259.40 MU during the solar hours and exported 816.41 MU to the Kerala grid during solar hours.

The prosumers had consumed 592.13 MU from the grid during Non- Solar hours and the same was adjusted against the 816.41 MU exported to the grid during solar hours. At the end of the financial year as on 31.03.2025, about 216.41 MU was at the credit of the consumers.

26. In order to accommodate/ absorb the electricity exported by Solar prosumers during day time of the Year 2024-25, KSEBL has been surrendering the RTC power from CGS, IPPs and even the short term RTC power purchase.

Month wise, time zone wise details of surrender of electricity from various sources during the Year 2024-25 is given below.

Time zone wise details of surrender of power during the Year 2024-25

Month	Hours during the day					(%) of total surrender during day time
	0:00 hrs to 06:00 hrs	06:00 hrs to 18:00 hrs	18:00hrs to 22:00 hrs	22:00 hrs to 24:00 hrs	Total	
Apr-24	0.1	17.6	0.0	0.0	17.7	99%
May-24	25.6	108.7	10.4	3.9	148.7	73%
Jun-24	2.5	40.6	0.1	0.0	43.1	94%
Jul-24	5.4	45.3	0.0	0.0	50.8	89%
Aug-24	10.9	43.2	0.1	0.0	54.1	80%
Sep-24	0.4	34.3	0.0	0.0	34.7	99%
Oct-24	15.9	86.5	3.0	1.6	107.0	81%
Nov-24	11.2	72.4	4.0	2.0	89.5	81%
Dec-24	16.6	35.7	5.1	2.6	60.0	60%
Jan-25	8.8	35.7	3.7	1.8	50.0	71%
Feb-25	6.1	49.9	2.0	1.0	59.0	85%
Mar-25	9.6	49.6	2.9	1.4	63.5	78%
Total	113.0	619.4	31.2	14.4	778.0	80%

It can be seen from the above that, about 80% of the electricity surrendered during the Year 2024-25 is during day time. It is also noted that, even during extreme summer months, KSEBL has been surrendering considerable quantum of electricity during day time and still bearing fixed charges as per the CERC tariff norms. Since this forced surrender of power was made even after conserving hydro power generation to the extent possible, the contention that solar power generation has helped in conserving hydro power is also without merit. The fact is that the surplus solar injection is resulting in technical, operational & financial implications for the State's power sector.

Since under net metering facility, the quantum of electricity drawn from the grid is set off against the surplus electricity exported to the grid, time zone wise price difference is not passed on to the prosumers who avail the net metering facilities.

In other words, the financial loss incurred by KSEBL for purchasing electricity at high cost during Non Solar Hours and supplying the same to the prosumers against the surplus quantum of electricity exported by them, is being socialised among the ordinary consumers who are solely depending on KSEBL.

Thus, the unrestricted injection of surplus solar power by RTS prosumers to the grid during periods of power abundance and setting off such injected power against power drawn during time periods when grid faces shortage is causing financial strain on licensees and as per the prevailing framework such expenses are passed on to the general body of electricity consumers who has not installed RTS plants. Evidently, such unrestricted injection and drawal cannot be evaluated as being always helpful to the state grid or economising the grid operations.

27. The claim of the petitioners that the daytime solar injection helps the state in reducing transmission charges is similarly erroneous in light of the operational pattern of prosumers. A transmission system is designed and operated to meet the peak demand with sufficient redundancy, in a reliable manner. Since the peak demand of the State occurs between 6:00PM and 11:00PM of a day the RTS plants of prosumers is in no position to help reduce the peak demand in any manner. The State has to contract GNA capacity from the inter-State transmission system to import sufficient power to meet the peak demand after taking into account the maximum internal generation during the peak time periods. Since, solar power is not available during the peak time periods, it cannot be factored in to reduce the GNA requirement and thus there can be no reduction in transmission charges on this account. Similarly, the investments required for developing intra-state transmission network also cannot be reduced as the network capacity needs to be constantly upgraded to meet the growing demand during peak periods, when solar generation is not available.

28. RE generation including Solar generation, is highly susceptible to variations in weather patterns. Hence, solar prosumers are, further allowed to bank surplus energy, if any, at their credit at the end of each month, after monthly settlement under net metering facility, to the subsequent months, upto the month of March of the relevant financial year concerned. Thus, the prosumers are benefitted by intra-day, intra-month and inter-month energy banking and the cost of such banking is presently socialised among the ordinary consumers of the state. If there is any surplus at the credit of the prosumers, as on 31st of the March of the financial year concerned, the same shall be settled at the APPC rate, as approved by the Commission.

29. In order to settle the payment for the net surplus electricity at the credit of the prosumers at the end of March every year, the APPC rate has to be approved at the beginning of the subsequent financial year. Hence the Commission has been approving the APPC based on the latest audited accounts and its orders on Truing Up of the relevant year concerned. In case the APPC rate is abnormally higher than the value of day time power, the additional burden on account of such compensation is also to be borne by the general body of consumers who have not installed RTS plants. Thus, the Commission has to adopt a balanced approach while determining rate for compensating the surplus banked power of the prosumers.

30. The above discussion establishes that while solar prosumers are generally benefitted by utilising the electricity grid as a free storage, their excess power injection during surplus grid conditions creates a cost on the grid operations and such cost is now socialised among other consumers. Also, the opportunity cost of power injected by prosumers in 2024-25 is Rs.2.85/- per unit which is less than the APPC rate approved by the Commission.

Issue No.2. Whether there is abnormal increase in cost of power purchase during the Year 2023-24?. If so, what are the reasons for the same and inlight of the reasons whether the determination of APPC was correct?

31. Commission vide the Order dated 30.06.2025 in OP No. 49/2024 has appraised the monthly variation of electricity demand, availability of electricity from different sources including its rate, additional power purchase necessitated during the year 2023-24 etc in detail, and the same is given under Chapter-4 and paragraphs 5.9 to 5.135 of the Chapter-5 of the said Order. As against an approved quantum of 22,684MU of power procurement, KSEB Ltd has to procure 25,711MU during 2023-24 which is a significant variation. Similarly as against the approved cost of Rs. 10,564 Cr, KSEB Ltd had to incure Rs 12,982Cr for power procurement, which is substantial increase.

32. Among various reasons, the main reasons for the very critical power situation and excessive power purchase at high cost during the Year 2023-24 was due to the following as noted in the Order dated 30.06.2025;

(i) Failure of south-west monsoon, which resulted in reduction in hydro generation by 1477MU during the Year 2023-24(A reduction of 20.66% from that approved).

(ii) Unprecedented increase in electricity demand by 2422MU over the approved level.

(iii) Additional power purchase of 2467MU in lieu of the unapproved DBFOO contracts, as per the Orders of the Hon'ble APTEL and Hon'ble Supreme Court.

33. It is a fact that, the South West monsoon was very week in the State during the Year 2023-24. As per the report of the Indian Meteorological Department (IMD) (Report No. IMDC – SR/15), published in December 2023), the South West Monsoon in the KER division was less by upto 34%. Details are given below.

Table-3.1: Seasonal sub-divisional rainfall distribution over the SP region during the SWM season, 2020 (01st June-30th Sep 2023)

SUB-DIVISION	Actual rainfall (mm)	Normal rainfall (mm)	Percentage departure from normal (%)
COASTAL AP & YANAM (CAP)	538.8	601.4	-10
TELENGANA (TEL)	846.4	734.8	15
RAYALASEEMA (RYS)	357	408.6	-13
TAMILNADU, PUDUCHERRY & KARAIKAL (TN)	354.3	328.5	8
COASTAL KARNATAKA (CK)	2699.7	3093.9	-13
NORTH INTERIOR KARNATAKA (NIK)	429.5	480.8	-11
SOUTH INTERIOR KARNATAKA (SIK)	489.8	678.4	-28
KERALA & MAHE (KER)	**1326.5**	**2018.6**	**-34**
LAKSHADWEEP (LAK)	872.7	1026.6	-15

Source: IMD Report No. IMDC-SR/15 December 2023

As per IMD classification a variation of ±10% from Long Period Average(LPA) is considered as normal, a rainfall of <10% below LPA is below normal and <20% of LPA is deficient rainfall. Thus, as per data available rainfall was deficient in Kerala for the year 2023-24.

34. Consequent to the failure of monsoon, the hydel generation in the State was less by 1477MU over the approved level. Details are given below.

Comparison of hydel generation (anticipated vs actuals) in the Year 2023-24

Month	Generation target	Actual hydel generation	Reduction as (%) of anticipated generation	
	(MU)	(MU)	(MU)	(%)
Apr-23	724	584	140	19%
May-23	731	701	30	4%
Jun-23	532	458	74	14%
Jul-23	581	501	80	14%
Aug-23	606	473	133	22%
Sep-23	535	326	210	39%
Oct-23	558	496	63	11%
Nov-23	473	362	111	24%
Dec-23	508	381	127	25%
Jan-24	549	413	137	25%
Feb-24	533	423	110	21%
Mar-24	747	483	264	35%
Total	7077	5600	1477	21%

35. Due to the failure of monsoon, and the consequent hot and humid climate prevailing in the State, and also due to the extreme heat wave conditions prevailed in the Country as well as in the State, the electricity demand in the State during the Year 2023-24 increased abnormally upto 21% over the previous year 2022-23, as against the normal anticipated increase of upto 5%. The details are given below.

Increase in electricity demand in 2023-24 over 2022-23

Sl No	Month	Energy Consumption (MU)			Peak demand (MW)		
		2022-23	2023-24	Month wise increase	2022-23	2023-24	Month wise increase
1	April	2480	2785	12%	4385	5024	15%
2	May	2376	2868	21%	4182	4862	16%
3	June	2273	2455	8%	3989	4641	16%
4	July	2142	2322	8%	3615	3999	11%
5	August	2213	2621	18%	3807	4366	15%
6	September	2226	2381	7%	3867	4113	6%
7	October	2343	2489	6%	4352	4159	-4%
8	November	2251	2445	9%	3934	4300	9%
9	December	2328	2578	11%	3959	4275	8%
10	January	2333	2581	11%	3993	4354	9%
11	February	2268	2626	16%	4210	4841	15%

12	March	2746	3086	12%	4517	5301	17%
Total		27977	31238	12%			

36. Actual electricity demand in the State also increased by about 2422 MU over the estimate as per the MYT Order dated 25.06.2022 in Op No. 11/2022. Details are given below.

Comparison of the projected energy demand as per MYT Order dated 25.06.2022 and actuals for the Year 2023-24

Sl No	Month	Energy Consumption (MU)			
		Approved	Actual	Increase	Month wise increase
1	April	2727	2785	58	2%
2	May	2796	2868	72	3%
3	June	2353	2455	102	4%
4	July	2172	2322	150	7%
5	August	2138	2621	482	23%
6	September	2215	2381	166	7%
7	October	2260	2489	229	10%
8	November	2246	2445	199	9%
9	December	2399	2578	179	7%
10	January	2455	2581	126	5%
11	February	2300	2626	326	14%
12	March	2754	3086	333	12%
Total		28816	31238	2422	8%

37. Commission vide the Order dated 29.12.2023 in petition RP No. 03/2023 had ordered to schedule power from the four DBFOO contracts as per the terms of the PSA signed between them. However, Hon'ble Appellate Tribunal for Electricity vide the Judgment dated 26th July 2024 in petition APL 38 of 2024 and 47 of the 2024, against the appeal filed by the generators, had set aside the Order of this Commission. Subsequently, Hon'ble Supreme Court in Judgment dated 30th September 2024 in Civil Appeal No. 10046 of 2024 has also endorsed the decision of the Hon'ble APTEL. Due to the decision of the Hon'ble APTEL and Supreme Court, generators who signed PSA with KSEBL was reluctant to schedule power from these projects in compliance of this Commissions' Order dated 29.12.2023. KSEBL faced a short fall in power availability of about 2467MU, from these sources alone.

38. During the period of severe power crisis during the past, KSEBL with the approval of the Commission had imposed power restrictions and load shedding in the State to reduce the power purchase, especially during peak hours.

However, during the year 2023-24, KSEBL has resorted to additional power purchase through short term contracts including 'Energy Exchanges' at high cost to avoid inconvenience to the electricity consumers due to power restrictions and load shedding.

39. Details of the additional short term power purchase made during the Year 2023-24 through various sources is given below.

(1) Details of short term purchase through Power Exchanges

Source	Energy at generator bus	Energy at KSEB periphery	PP Cost	Avg. rate
	MU	MU	Rs Cr	(Rs/kWh)
IEX	2841.71	2741.31	1357.29	4.95
PXIL	209.07	201.99	175.48	8.69
HPX	723.10	698.40	553.71	7.93
Transaction charges for Purchase of Power through power exchange		36.42	36.42	0.01
Application fee for purchase of power through power exchange		0.26	0.26	
Subtotal	3773.89	3641.70	2123.16	5.83

(2) Summary of power purchase from short term market during the Year 2023-24 is given below.

Month	Quantity	Energy scheduled at Kerala periphery	Amount	Avg. tariff
	(MW)	(MU)	(Rs. Cr)	(Rs/ kWh)
Apr-23	100	61.32	48.74	7.95
May-23	50	2.20	2.04	9.27
Aug-23	220	146.71	76.72	5.23
Sep-23	250	170.86	92.17	5.39
Oct-23	150	103.91	53.26	5.13
Nov-23	250	166.91	90.22	5.41
Dec-23	250	169.98	93.26	5.49
Jan-24	175	128.31	70.44	5.49
Feb-24	250	167.22	94.34	5.64
Mar-24	225	157.77	97.26	6.16
Total		1275.19	718.44	5.63

40. From the above discussion on Issue no.2, it is evident that there is an above normal increase in power purchase cost/rate and the reason for the same is failure of monsoon which is a force majeure event and non-availability of power from DBFOO contracts due to litigations. In light of the above, whether the determination of APPC rate was correct, justifiable and is in the interest of equity and fairness?

41. The petitioners, as the prosumers and consumers of electricity are consuming electricity from the grid during 'Non solar hours including peak hours and off-peak hours'. Thus, petitioners are also the direct beneficiaries of this high cost power purchase. But, by availing the net metering facility, they are allowed to adjust the surplus energy exported to the grid during solar hours against the energy drawn/ consumed from KSEBL grid. Thus, the petitioners are not liable to bear the high cost power purchase during Non Solar hours including peak hours.

42. But as already discussed earlier, the opportunity cost of the electricity injected into the grid during solar hours is in the range of Rs 2.85/unit in the year 2024-

25. But to return this electricity injected into the grid during solar hours, KSEBL has been purchasing electricity at high cost, up to the rate of Rs 10/-unit during evening peak hours.

But as per the provisions of the Electricity Act, 2003, and Regulations, and directions of the Hon'ble Supreme Court and Hon'ble APTEL, all the prudent cost incurred by KSBEL for the purchase of power has to be passed on to the electricity consumers of the State. Thus, if a higher APPC rate is allowed to prosumers, the said additional cost is also to be passed on to other consumers through subsequent tariff increases.

However, though the prosumers including the petitioners (about 2.1 lakh out of 140 lakh consumers) are consuming the high cost power from KSEBL during 'Non-solar hours;, by availing the net metering facility, the petitioners are not liable to bear these cost. Thus, the additional liability incurred on power purchase at high cost is on the shoulder of the about 138 lakh electricity consumers excluding the prosumers.

43. The fact being so, the prosumers are presently immune to the high cost power purchase, but they are already the beneficiary of such high cost power purchase, which is intended to provide uninterrupted power supply to the electricity consumers of the State.

44. In the instant petition, the petitioners who are the prosumers of KSEBL, want compensation for the net surplus electricity at their credit as on 31.03.2025, at the average rate of higher cost of power purchase of KSEBL in the Year 2023-24. There is no rational and justification for raising such claim, due to the following;

(1) As already explained, the high cost power purchase was due to the reasons beyond the control of the licensee, such as failure of monsoon, and unprecedented increase in electricity demand. The details are appraised in the Order dated 30.06.2025 in petition OP No. 49/2024.

(2) The high cost power purchase was in public interest for providing uninterrupted power supply to the electricity consumers(including prosumers) of the State with out load shedding and power restrictions.

If KSEBL was allowed to impose load shedding and power restrictions to compensate such short fall, the cost of power purchase could have been reduced to that extent and APPC also will get reduced. But it will severely affect the electricity consumers including the prosumers.

(3) Prosumers including the petitioners are benefited through the high cost power purchase during the Year 2023-24. In effect, KSEBL has purchased the power including the electricity consumed by the prosumers during the Year 2023-24. However, by availing the net metering facility, the prosumers are generally immune to the high cost power purchase.

(4) APPC rate is for compensating the net surplus electricity at their credit as on 31.03.2025, which was exported to the grid during solar hours. The opportunity cost of such electricity exported by prosumers are as low as Rs 2.85/unit in the year 2024-25.

(5) The electricity exported by the prosumers during solar hours of the day time to the State Grid, has not helped the licensee to meet its electricity requirement during Non-Solar hours.

45. As observed in paragraph 24 above, the average opportunity cost of electricity injected into the grid and banked with KSEBL in the year 2024-25 is around Rs 2.85/unit only. Meanwhile, the day time price has further come down in the subsequent years 2025-26 and 2026-27 (till date). As against the same, the APPC rate approved by the Commission for settling the net surplus out of the day time export from the RtS plant of the prosumers as on 31.03.2025 is Rs 3.26/unit, which is also higher than the rate of Rs 3.15 per unit allowed for settling the surplus energy as on 31.03.2024. The determination of the said rate is based on the Regulations notified by the Commission and the inherent powers vested therein in the Commission and is in public interest.

46. It is incorrect to content that KSEB Ltd has not sought a lower rate for settlement of surplus banked energy. KSEB Ltd has been continuously seeking a rate comparable to their solar procurement price and has proposed a rate of Rs 2.44 per unit for the FY 2023-24 being the rate at which they procure solar energy on long term basis, which the Commission has not agreed to. Commission has also examined the settlement rate approved in other states to settle the net surplus out of the solar energy exported to the State grid at the end of the settlement period. Details are given below.

Settlement rate for settling the net surplus electricity at the credit of the prosumers at the end of the settlement period/ billing period

Sl No	Name of the State	Settlement rate for settling the surplus electricity exported by prosumers in the Year 2024-25	
		(Rs/kWh)	Remarks
1	Kerala	3.26	Banking facility and carry forward upto the end of the FY
2	Andhra Pradesh	2.09	At the end of the billing period
3	Bihar	Nil	Lapses
4	Chhattisgarh	2.48	At the end of the settlement period
5	Gujarat	2.25	Billing cycle
6	Haryana	Nil	Lapses at the end of the settlement period
7	Himachal Pradesh	1.402	If capital subsidy of the RTS is less than 50% of the capital cost
		1.051	If capital subsidy is more than 50% and upto 70% of the capital cost
		0.876	If capital subsidy is more than 70% and upto 90% of the capital cost
		0.526	If capital subsidy is more than 90% of the capital cost
8	Karnataka	2.30	1 to 2kW under PM Suray Hgar
		2.48	3kW under PM Suray Hgar
		2.93	Above 3 kW

9	Maharashtra	2.90	At the end of the settlement period
10	Madhya Pradesh	2.14	1st day of Oct to 31st day Sep next year
11	Odissa	Lapses	At the end of the settlement period
12	Punjab	Lapses	At the end of the settlement period
13	Rajasthan	2.87	At the end of the settlement period for domestic category
14	Tamil Nadu	Lapses	At the end of the settlement period
15	Utter Pradesh	2.00	Carry forward to the end of the settlement period
16	West Bengal	2.09	Carry forward to the end of the settlement period

47. It can be seen that, in few states, the surplus electricity at the credit of the prosumers at the end of the settlement periods get lapses. Further, in almost all other States, the settlement rate for settling the surplus electricity at the credit of the prosumers in the Year 2024-25 is much less than the settlement rate approved by this Commission @ Rs 3.26/unit for the Year 2024-25.

48. Commission, after examining the entire aspects in details, has concluded that, the petitioner has failed to substantiate their contentions and there is no ground to initiate any appropriate motion to review the Order dated 30.06.2025, in Petition OP No. 49/2024 in the matter of Truing Up of Accounts of KSEBL for the Year 2023-24. Hence the Commission is of the considered view that, the petition is liable to be rejected, and ordered accordingly.

Order of the Commission

49. Commission after carefully examining the petition filed by Shri Jameskutty Thomas and three others, counter affidavit of KSEBL, additional submission of the petitioners, deliberations during the hearing held on 03.12.2025, provisions of the Electricity Act, 2003 and other relevant Rules and Regulations in force, concluded that, the petition is not maintainable and there is no merit in the contentions and prayers of the petitioner and other issues raised during deliberations, to initiate review and reconsider the Order of the Commission dated 30.06.2025 in petition OP No. 49/2024, in the mater of Truing Up of Accounts of KSEBL for the year 2023-24.

Petition disposed of. Ordered accordingly.

Sd/-
T K Jose
Chairman

Sd/-
B Pradeep
Member

Approved for issue

Sd/-
Rajendran K.V
Secretary