

# KERALA STATE ELECTRICITY REGULATORY COMMISSION

## THIRUVANANTHAPURAM

**Petition No: OP 51/ 2021**

- Present** : Shri. Preman Dinaraj, Chairman.  
: Adv. A. J. Wilson, Member (Law).
- In the matter of** : **Petition filed by M/s Kerala State Electricity Board Ltd seeking approval of Average Pooled Power Purchase of KSEB Ltd for payment at the end of the settlement period for the excess energy banked by prosumers and captive consumers**
- Petitioner** : M/s Kerala State Electricity Board Ltd.,  
Vydyuthi Bhavanam, Pattom,  
Thiruvananthapuram-695004
- Petitioner represented by** : Shri Suresh, EE, TRAC  
Smt. Latha.S.V, AEE, TRAC
- List of participants** : Annexure 1 attached
- Date of E- Hearing** : **03.11.2021, 11.00 AM**

### **Order dated 16.02.2022**

1. M/s Kerala State Electricity Board Limited is a Power utility company constituted by the State Government of Kerala for carrying out the Generation, Transmission and Distribution functions through three strategic business units. KSEB Ltd has filed this petition before the Commission for approval of Average Pooled Power Purchase cost for the financial year 2021-22 of KSEB Ltd, for payment at the end of the settlement period, for the excess energy banked by the prosumers and captive consumers as per Regulation 26(5), 27(7), and 29(4) of the KSERC (Renewable Energy and Net Metering) Regulations, 2020.
2. The details submitted in the petition are:  
Average Pooled Power Purchase Cost means the weighted average pooled price at which distribution licensee has purchased electricity including cost of self-generation if any, in the previous year from all energy suppliers, long-term and short-term, but excluding those based on renewable energy which is mentioned in Chapter II of Connectivity and Intrastate Open Access Regulations, 2013. The relevant portions are:

*3(4) "average pooled power purchase cost" means the weighted average pooled price as approved by the Commission at which distribution licensee has purchased electricity including cost of self-generation*

*if any, in the previous year from all energy suppliers, long-term and short-term, but excluding those based on renewable energy sources, as the case may be;*

3. Distribution Licensees shall at the end of the settlement period, pay for the excess energy banked by the prosumers and consumers at the Average Pooled Power Purchase Cost (APPC) of the licensee as approved by the Commission from time to time as per the KSERC (Renewable Energy and Net Metering Regulations),2020. 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, at the Average Pooled Power Purchase Cost (APPC) of the licensee as approved by the Commission, from time to time.
4. Average Pooled Power Purchase Cost for the financial year is necessary for the settlement of the energy account and banked by the grid connected solar generators in the State. The settlement period as per KSERC (Renewable Energy and Net Metering) Regulations, 2020 is the period beginning from the first day of October and ending with the thirtieth day of September in the next Year for Solar and for non-solar resources, the period from the first day of April in a year to the thirty first day of March in the next calendar year. The definition from KSERC (Renewable energy and Net Metering) Regulations, 2020 is below:

*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;*
5. According to the KSERC (Renewable Energy and Net Metering) Regulations, 2020, general conditions and charges applicable for the use of the transmission and distribution system by a Captive Consumer, the distribution 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.
6. APPC derived and approved by KSEB Ltd for the FY 2020-21 was Rs2.94 /unit. KSEB Ltd in the petition stated that, they have been computing APPC for the years 2018-19 onwards with the approved power purchase cost and transfer cost of SBU-G as per the MYT Order dated 08.07.2019, since no APPC has been approved by KSERC for the Financial Years 2018-22 in its MYT Order dated 08.07.2019.
7. The petition for the approval of the Average Pooled Power Purchase Cost for the financial year 2021-22 was submitted by KSEB Ltd on 28.09.2021, for enabling the settlement of the excess energy banked by the grid connected solar generators in the State as on 30<sup>th</sup> September 2021.

8. KSEB Ltd highlighted the definitions for banking and settlement of excess energy injected and banked by the prosumers/ captive consumers as per KSERC (Renewable energy and Net Metering) Regulations, 2020, which is quoted below:

*20. Banking facility for prosumers. - (1) In case the energy injected by the prosumer from his renewable energy system exceeds the energy consumed by him from the distribution licensee during the billing period, such excess energy is allowed to be banked with the distribution licensee and to be carried forward to the subsequent billing periods of the settlement period.*

9. The settlement of excess energy banked by prosumers and captive consumers quoted by KSEB Ltd as per the Regulation 29(4) of KSERC (Renewable energy and Net Metering) Regulations, 2020, is below:

*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;*

*Provided that, in case of delay in payment of the net amount due to the consumer beyond 30 days from the settlement date, the licensee shall pay interest to the consumer at the FBIL + 200 base points for the period of delay.*

*29(5) No carry forward of banked electricity shall be done beyond the settlement period.*

10. KSEB Ltd submitted the detailed calculation of APPC for the FY 2021-22 as per the methodology stipulated in the KSERC (Renewable energy and Net Metering) Regulations, 2020, which is shown in Table 1. As per this submission, the APPC derived for FY2021-22 is Rs.3.06/Unit based on the source wise details of generation and power purchase for the year 2020-21 as per KSERC MYT Order dated 08.07.2019 as shown below:

Table 1: APPC for FY 2021-22

SI No	Description	MU	Cost (Cr)
1	Own generation less RE	6229.25	533.61
2	CGS (KSEB Ltd periphery)	11274.77	4196.25
3	Traders( Long term & Medium Term)	8647.06	3518.11
4	RGCCPP		0
5	Less Surplus sale	-1231.36	-615.68
6	Total	24919.72	7632.29
	Pooled Cost		3.06

11. The Commission admitted the petition as OP No. 51/2021 and public hearing was held through Video Conference on 03.11.2021 at 11:00 AM. The list of the participants is attached as Annexure1. The deliberations and the arguments during the hearing is detailed below:

### **Hearing of the Petition**

12. Smt. Latha S.V, AEE, TRAC, represented KSEB Ltd and made a detailed presentation regarding the arguments for filing the petition. The arguments put forward by KSEB Ltd are detailed below:

- (1) 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 the Commission from time to time.
- (2) Average Pooled Power Purchase Cost is calculated as per the methodology stipulated in the Regulations of Hon'ble Commission and in line with the Regulations of CERC. KSEB Ltd also quoted the definition for Average Pooled Power Purchase Cost from CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010. The relevant portions are

### **5. Eligibility and Registration for Certificates:**

*(1) A generating company engaged in generation of electricity from renewable energy sources shall be eligible to apply for registration for issuance of and dealing in Certificates if it fulfills the following conditions:*

*a. it has obtained accreditation from the State Agency;*

*b. it does not have any power purchase agreement for the capacity related to such generation to sell electricity at a preferential tariff determined by the Appropriate Commission; and*

*c. it sells the electricity generated either (i) to the distribution licensee of the area in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase of such distribution licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price.*

*Explanation.- for the purpose of these regulations 'Pooled Cost of Purchase' means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self*

*generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be.*

*(2) The generating company after fulfilling the eligibility criteria as provided in clause (1) of this regulation may apply for registration with the Central Agency in such manner as may be provided in the detailed procedure:*

*(3) The Central Agency shall accord registration to such applicant within fifteen days from the date of application for such registration. Provided that an applicant shall be given a reasonable opportunity of being heard before his application is rejected with reasons to be recorded in writing.*

*(4) A person aggrieved by the order of the Central Agency under proviso to clause (3) of this regulation may appeal before the Commission within fifteen days from the date of such order, and the Commission may pass order, as deemed appropriate on such appeal.*

(3) The Average Pooled Cost of power purchase for the financial year 2021-22 of KSEB Ltd is derived based on the source wise details of generation and power purchases for the year 2020-21 as approved by KSERC, in the Multiyear Tariff Order dated 08-07-2019, which is shown in the below table. As per Regulation 3(4) of KSERC (Connectivity and Open access Regulations, 2013, the renewable energy sources should be excluded for deriving APPC. The Net generation excluding renewable energy is shown in Table 2 and the cost of generation of SBU-G is represented in Table 3.

Table 2 Net own generation less RE for year 2020-21

SI No	Particulars (for year 2020-21)	MU
1	Total Net generation	6844.83
2	SHEP	566.4
3	Wind+ solar	49.18
4	Net large hydro generation (less RE) = 1 – (2+3)	6229.25

Table 3 Costs for own generation less RE

Sl No	Particulars	Cost (Cr)
A	ARR of SBU-G for 2020-21	586.34
B	ARR of SBU-G corresponding to RE = (A)* (2+3) / 1	*52.73
C	ARR of SBU-G excluding RE = (A) – (B)	533.61

Table 4. APCC for FY 2021-22

Particulars	(MU)	Cost (Cr)
Own generation less RE	6229.25	533.61
CGS (KSEB Ltd periphery)	11274.77	4196.25
Traders (Long term & Medium term)	8647.06	3518.11
RGCCPP	0	0
Less surplus sale	-1231.36	-615.68
Total	24919.72	7632.29
<b>Pooled cost</b>		<b>3.06</b>

APCC computed by KSEB Ltd for the year 2021-22 is **Rs 3.06/unit**

(4) KSEB Ltd prayed before the Commission to adopt Rs 3.06/unit as the Average pooled Power Purchase of KSEB Ltd for 2021-22 to enable the settlement of the excess energy banked by the prosumers and captive consumers as per the Regulation 26(5), 27(7), and 29(4) of the KSERC (Renewable Energy and Net Metering Regulations) 2020.

### Comments of the stakeholders

13. Sri Sathesh A.R, President, HT & EHT Association submitted that, KSEB Ltd has not considered short term purchase of energy for APCC computation. Further, he stated that the APCC calculation is based on the ARR and ERC forecast, source wise details of generation and power purchase for the year 2020-21 as approved by KSERC. He also expressed his concern that the APCC cost furnished by KSEB Ltd is very less, and KSEB Ltd is not interested in promoting Solar projects. He also raised the issue as to why the cost of surplus sale of 1231.36 MU costing Rs 615.68 crores has been deducted from the total power purchase cost. He also enquired that, KSEB Ltd is selling power to the distribution licensees, then why that sale is not been deducted from the total power generation. He also mentioned that there are several roof top solar power plants and commercial solar power plants, most of the energy from these plants

are being utilised by local network, so there will not be any loss in this regard, that weightage should be passed on to consumers by KSEB Ltd.

14. He also mentioned that as per RPO Obligation KSEB Ltd is getting at least Rs1.00/unit benefits from the renewable energy from domestic as well as industrial consumers, which they are not passing to the consumers. He also stated that, Prime Minister in his speech on 2<sup>nd</sup> November 2021, mentioned that by the year 2030, 50% of the total energy production shall be from renewable resources, therefore he suggested that the Commission shall consider policies to promote renewable energy. He further mentioned that as per the data of SLDC, the hydel generation of KSEB Ltd was 7146.69 MU, whereas the data in the petition is 6229.25 Mus i.e., a reduction of 917.44 Mus. He also requested the Hon'ble Commission to issue orders regarding computation of Average Pooled Power Purchase Cost only after gathering relevant information and considering all factors.
15. Sri. A.C.K. Nair, CIAL, Kalamassery, appreciated the Commission's proposal to change the settlement date for prosumer solar power transacted through Net Metering Regulations, stating that there are many seasonal entities like Sabarimala which is operational only by November. If banking is considered based on the existing settlement date, then it will affect them. Further he expressed that the APPC provided by KSEB in their petition i.e., Rs 3.06/ unit is too less. He further mentioned that currently the cost of implementation of roof top solar is much higher, so further increase in APPC may attract more consumers into solar energy.
16. Sri. Pradeep M, Hindalco, Kalamassery raised the concern that APPC for 2021-22 provided by KSEB Ltd is only based on forecast data. Further he enquired, whether Long Term purchase which are not approved by the Commission is accounted by KSEB Ltd for APPC or not. He also quoted the issue raised by Sri A.R Satheesh about deducting the surplus sale of 1231.36 MU costing Rs 615.68 crores from the total generation cost and also stated that short term purchase has not been considered by KSEB Ltd. He also stated that currently the REC of Rs1.00/unit from all the solar generators is enjoyed by KSEB Ltd. He suggested to pass on at least 50-60 % to the investors of solar energy, so that it may be a motivation to common public to invest more into solar energy.
17. Sri Rajesh J. Kuruvila, CUMI, Koratty, suggested that energy sales should be included while taking account of the total generation while considering APPC. He further stated that as per the approved rates in ARR, for wind energy it is Rs 3.73/ unit and for solar energy it is Rs 3.90/unit, but while considering the energy generated by prosumer as per the petition filed by KSEB Ltd it is only Rs.3.06/ unit, which is very less and it is not inline.

18. Sri Terance Alex, KREEPA submitted that out of 1.20 crore consumers in the State of Kerala, the consumption of 90 lakh consumers is below 200 units. Most of the roof top solar plants are installed by the NRIs in the view that the solar system will generate money. Even though it is not economically feasible, any action taken for reduction of APPC will not attract any more of them. So KREEPA's suggestion was that if there is any increase in APPC, then the Commission should consider that too. He also commented that Tamil Nadu Electricity Regulatory Commission on Grid Interactive PV Solar Energy System provide Rs 3.60/unit for 1-10kW.
19. Further, he submitted additional comments vide Letter dated 8<sup>th</sup> November 2021. He said that in the state of Kerala, Solar energy production is far behind as compared to other states, due to poor response of vendors attending solar tenders, on poor bench mark price and also labour cost is much high in Kerala. He further stated that some of the states have CUF 21% or higher, but in Kerala it is 17% or below and solar yield is accordingly less. He also mentioned that GST on Solar power plants specified by GST council is at 70:30 ratio, i.e., 70% on supply part and rest 30% on installation, testing, commissioning, O&M, and other overheads; but in the second part for 30% the cost in Kerala is almost 2.5 times as compared to other northern states. He further mentioned that the supply cost in Kerala is much higher. KREEPA requests KSERC to look into these facts.

#### **Submission of KSEB Ltd**

20. KSEB Ltd vide Letter No. KSEB/TRAC/CG/Renewables/2021-22/670 dated 25.01.2022 submitted before the Commission that the settlement of excess solar energy at the rate of Rs.3.06/unit, which they claimed in their petition will incur huge financial loss to KSEB Ltd. The excess solar injected by prosumers at the end of the settlement period of FY 2020-21, i.e., upto September 2021 is 24.31 MU and the amount which KSEB Ltd have to pay to the consumers at the rate of Rs.3.06/unit is Rs.7.44Cr. They have requested the Commission to permit withdrawal of the petition and has requested the following;
- a) for fixing the rate which is equal to the lowest purchase rate of solar for each year as the rate payable to solar prosumers and captive consumers for the excess energy injected to the grid;
  - b) for fixing a rate which is equal to the lowest purchase rate of wind for each year as the rate payable to wind prosumers and captive consumers for the excess energy injected to the grid;
  - c) to modify the KSERC (Renewable Energy and Net Metering Regulations),2020;



21. KSEB Ltd also requested the Commission to allow to pay the prosumers for the excess energy injected to the grid at the end of September 2021 at Rs 2.44/unit, the lowest rate of solar as per the offer of SECI.

### **Comments of the Commission**

22. The Commission during the deliberations stated that APCC data provided by KSEB Ltd is based on the source wise details of generation and power purchase for the year 2020-21 as approved by KSERC in the MYT order dated 08-07-2019 and not based on actual power purchase during this period. Hence, the Commission can issue only provisional orders regarding the same. The Commission further is of the opinion that, short term power purchase is also a power purchase and KSEB Ltd is claiming it as power purchase cost in their yearly truing up petition as well as in their Annual Accounts. Hence, it is not correct to leave this purchase cost and these details including its quantum and this cost too has to be necessarily factored into the computation of power purchase cost of KSEB Ltd for all purposes.

23. The Commission in response to Sri A.R Satheesh, informed that in the Truing up Orders the Power Purchase Cost allowed by the Commission is the difference between total power purchase cost and income realised from sale of power. In the matter of deducting the sale of power outside the state from the total energy generated, the Commission responded that KSEB Ltd is selling power to the licensee as per the commitment/ contracted power purchase through proper scheduling and any excess will have to be sold so as to realise appropriate revenue. Hence, the sale cost cannot be deducted while determining APCC. In the case of roof top solar, the Commission mentioned that the power production from roof top solar is very limited and is less than 25 MW and is available only during daytime. The Chairman also reminded that under the CERC regulation/ regulation of the states the Rs 1.00 /unit RPO benefit is not passed to the consumers by the licensee.

24. The Commission also noted that vide its Order dated 15-03-2021 in OP No.02/2021, they have allowed Rs 100 crores to RGCCPP. This liability arose as a result of the agreement between KSEB Ltd and NTPC for purchase of power from Rajeev Gandhi Combined Cycle Power Project (RGCCPP) of capacity 359.59 MW. Since this payment has its origin in a PPA and is also included by KSEB Ltd in the computation of cost, it is incorrect not to include this amount in the Power Purchase Cost.

25. The Commission also mentioned that the Annual Accounts of KSEB Ltd for 2020-21 has been closed and the complete data for power purchase is available with KSEB Ltd. This must be the basis of determination of APCC especially since the actual cost data is readily available with KSEB Ltd. The Commission also directed KSEB Ltd to furnish the Annual Accounts before the Commission

at the earliest. The Commission also directed KSEB Ltd to specifically mention as to whether the cost paid, if any, in excess of L1 cost at Kerala periphery delivery in the DBFOO contracts has been included in the power purchase cost. If so, this additional cost has to be deducted from the power purchase cost, since these PPA's have not been approved by the Commission.

26. The Chairman also mentioned that KSEB Ltd had failed to file the APPC petition for the financial years 2018-2021. Hence, it is incorrect to state that KSERC did not approve the APPC for these years. The Chairman, KSERC also mentioned that he has been receiving numerous complaints regarding KSEB Ltd settling the bills for the respective years using unapproved and hence objectionable APPC rates. He wondered as to how KSEB Ltd could resort to such adjustments, if made bypassing the Commission. He therefore directed KSEB Ltd to file petitions for each of the respective financial years of this period.
27. Based on the hearing, KSEB Ltd submitted the audited accounts and details of actual generation and power purchases for the financial year 2020-21. The Commission has gone through the audited accounts for the financial year 2020-21 and noted that the quantum and cost of the short-term power purchase, Renewable energy sources its quantum and cost are not clearly specified in the audited accounts. Based on that Commission sought clarification from KSEB Ltd vide Letter dated 12.01.2021 on the above observations, but KSEB Ltd has not provided any further response.

### **Analysis and decision of the Commission**

28. At the outset, the Commission examined as to what elements constitute the term Average Power Purchase Cost (APPC) and the provision regarding settlement of excess energy exported by prosumers to the grid and the basis of its pricing. The Commission also took note of the fact KSEB Ltd. has since made available to the Commission the audited accounts for 2020-2021, wherein details of power purchase along with its cost is mentioned.
29. The Commission also took note of Regulation 21(5) of Kerala State Electricity Regulatory Commission (Renewable Energy and Net Metering) Regulations, 2020 which provides as follows:
- “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 approved by the Commission”.*
30. The Commission also noted that in their petition, KSEB Ltd. has submitted the APCC at Rs.3.06/unit, based on the source wise details of generation and power purchase for the year 2020-21 as approved by KSERC in the MYT Order dated 08-07-2019. However, since the audited Annual Accounts of KSEB Ltd for

2020-21 is available and the complete power purchase data is available, so this data must be the basis for determination of APPC. The Commission has accordingly considered both the quantum of power purchased and its cost for the computation of APPC.

31. On analysing the audited accounts of KSEB Ltd for FY 2020-21, the Net Hydro generation of KSEB Ltd for FY 2020-21 is 7071.37 MU, which includes the small hydro generation also. The quantum of power from the Central Generating Stations at KSEB Ltd periphery is 9167.26 MU. The cost of Power Purchase for the FY 2020-21 is Rs.7439.15 Crores.
32. The Commission vide Order dated 08.07.2019 in OA No.15/2018 mentioned that, Commission was constrained to use the rate equivalent to the cost of power from M/s BALCO, which is the L1 to the Bid 2, for the scheduling of power from the three projects of Bid-2, i.e., 100MW of power from M/s Jindal India Thermal Power Ltd, 100MW of power from M/s Jhabua Power Limited and 150 MW of power from M/s Jindal Power limited. The relevant portions from the Order of the Commission in OA No.15/2018 is below:

*5.103 Though KSEB Ltd has approached the Government of India for approval of deviations from the guidelines, it has so far not furnished this clearance to the Commission. Subsequently, as per the request of KSEB Ltd and in view of the Government Order G.O.(Ms) No.22/2017/PD dated 21-10-2017, the Commission as per the letter dated 22-12-2017, allowed KSEB Ltd to schedule the contracted power of 350MW from 1-10-2017 from three projects of bid 2, ie., 100 MW of power from M/s Jindal India Thermal Power Ltd, New Delhi, 100 MW of power from M/s Jhabua Power Limited and 150 MW of power M/s Jindal Power Limited. In the said letter, the Commission has made it clear that since the G.O dated 21-10-2017 is only an interim measure and final orders are yet to be issued, the Commission may approve the power purchase proposal including the rate for the pending approvals under DBFOO only after State Government accords final approval for the entire power purchase under DBFOO.*

*5.104 Hence the Commission has considered scheduling power from the three projects of Bid-2, ie., 100 MW of power from M/s Jindal India Thermal Power Ltd, New Delhi, 100 MW of power from M/s Jhabua Power Limited and 150 MW of power M/s Jindal Power Limited for the limited purpose of estimating the ARR&ERC for the control period. Since the required approvals from Gol and State Government is still awaited, the Commission is constrained to use the rate equivalent to the cost of power from Balco, which is the L1 of Bid 2. The Commission*

*emphasises that this consideration is only for the purposes of estimating the cost of power provisionally in the ARR and shall not be construed as an approval of the power purchase, rate or of the PPA itself as per Section 63 of the Act which can be considered only after the fulfilment of conditions specified by the Commission in its order dated 31-8-2016. It is relevant here to note that the Commission in their Order on suo motu determination of Tariff dated 17-4-2017 had approved Rs.4.00 per unit for the purchase of additional quantity of power for meeting the deficit from traders and exchanges.*

33. Commission noted that from the invoices and other documents submitted by KSEB Ltd for the fuel surcharge; for the period from 01.04.2020 to 30.06.2020 (first quarter) in OA No. 15/20 and the fuel surcharge for the period from 01.07.2020 to 31.09.2020 (second quarter) in OA No. 20/20, the actual tariff paid by KSEB Ltd for procuring power from these three sources during first quarter is much higher as compared with the rate of M/s BALCO at Kerala periphery, which is the L1 of the Bid 1 and 2. The excess amount paid to these stations during the first quarter ( 01.04.2020 to 30.06.2020) is Rs.25.94 Cr and excess amount paid to these stations during 01.07.2020 to 30.09.2020 (second quarter) is Rs.25.12Cr. totalling Rs.51.06 Cr.
34. The Commission further noted that, KSEB Ltd in the petition for the fuel surcharge for the period from 01.10.2020 to 31.12.2020 (third quarter) filed as OP No. 26/21 submitted that, they have limited the payment towards power purchase from Jindal India Thermal Power Ltd -100MW, Jhabua power Ltd - 100MW, and Jindal Power Ltd – 150MW, to the rate of M/s BALCO at Kerala periphery. Further they submitted that, KSEB Ltd has filed separate petition before the Hon'ble Commission seeking final and conclusive order in the matter of drawal of power contracted against the PSAs of these three generating stations. KSEB Ltd has withheld Rs.14.79 Cr during the period from 01.10.2020 to 31.12.2020, by limiting the payment towards power purchase from the three stations to the rate of M/s BALCO at Kerala periphery, complying the Order of the Hon'ble Commission. KSEB Ltd further submitted that they have not claimed the additional liability from these three stations amounting to Rs.7.91 Cr.
35. Further in the petition for the fuel surcharge for the period from 01.10.2020 to 31.12.2020 (final quarter) filed as OP No. 26/21 KSEB Ltd submitted that, KSEB Ltd has withheld Rs.18.34Cr during this quarter by limiting the payment towards power purchase from the three stations mentioned in Para 32 above, at the rate of M/s BALCO at Kerala periphery, complying with the Orders of the Hon'ble Commission. Hence KSEB Ltd has not claimed the additional liability from these three stations amounting to Rs.8.62 Cr.

36. As per the submission of KSEB Ltd for the fuel surcharge petition for the first and second quarter of FY 2020-21 mentioned in Para 33 above, the payment of unapproved DBFOO contracts claimed by KSEB Ltd is Rs.51.06 Cr (i.e., Rs 25.94Cr in first quarter and Rs. 25.12 Cr for the second quarter). This amount is to be disallowed from the cost of power purchase for FY 2020-21 while approving the APPC for the FY 2021-22, since KSEB Ltd lacks the Commission approval for payment of this additional amount made, disregarding the Commission direction in OP No.15/2018 in Order dated 08.07.2019 in the matter of approval of ARR and ERC for the MYT Tariff period 2018-22.

37. Regarding the request of KSEB Ltd for withdrawal of the petition and for;

- a) fixing the rate which is equal to the lowest purchase rate of solar for each year as the rate payable to solar prosumers and captive consumers for the excess energy injected to the grid;
- b) fixing a rate which is equal to the lowest purchase rate of wind for each year as the rate payable to wind prosumers and captive consumers for the excess energy injected to the grid; and
- c) to modify the KSERC (Renewable Energy and Net Metering Regulations),2020,

The Commission considered the request at (a) above and noted that the auction discovered tariff of Rs.2.44/unit is for purchase in Megawatt capacities, ranging between 200 MW and 500 MW. Further such bids have been received from large scale solar generators located in Solar parks having all facilities for the establishment and upkeep of such plants.

38. The issue here is that of roof top solar plants installed by individual consumers on their roof tops with capacities ranging between 1kWp and say 6 to 8kWp. Obviously, such prosumers cannot and should not be compared with commercial solar park generators. Hence the Commission rejects the submission of KSEB Ltd at (a) above. Regarding (b) and (c) in the Para 37 above, the Commission notes that the issues raised have no relevance to fixing the APPC for the FY 2021-22. Hence these requests are rejected. If at all KSEB Ltd desires to pursue these issues, they shall file separate petitions in this regard.

39. After deducting these amounts as mentioned in Para 34 above, from the audited accounts of KSEB Ltd for FY 2020-21 presented by KSEB Ltd, the APPC for FY 2021-22 is derived as Rs.3.22/Unit. The details are shown in the Table 5 (APPC For FY 2021-22) below:

Table 5. APPC for FY 2021-22 based on audited accounts of FY 2020-21

SI No	Description	Quantity	Cost
		(MU)	(Rs in Cr)
1	Own Generation		
	Hydel	7071.37	648.76
	BDPP+KDPP	7.85	
	Wind	1.14	
	Solar	28.73	
	Sub Total	7109.09	
	Less auxiliary consumption	51.19	
	Net Own Generation	7057.9	
2	Power Purchase		
	(1)CGS (at Kerala periphery)	9167.26	7439.15
	(2)RGCCPP	92.53	
	(3)Wind IPPs	110.53	
	(4)SHP IPPS	92.5	
	(5)Solar IPPS	93.15	
	(6)Long Term IPPS	8104.65	
	(7)Short Term IPPS	167.02	
	(8)Power Exchanges	94.71	
	(9)Swap	122.28	
	(10)DSM	139.43	
	Sub Total	18184.06	
3	Total	25241.96	
	Less surplus Sale		
4	Sale through contracts	-261.43	-102.5
5	Swap return	-334.82	
6	Disallowed amount (DBFOO for 1 <sup>st</sup> and 2 <sup>nd</sup> quarter)		-51.06
7	Net Generation & PP for KSEB use	24645.71	7934.35
	<b>Average Pooled Cost of Power Purchase (Rs/unit)</b>		<b>3.22</b>

## Order of the Commission

40. The Commission after duly considering the petition filed by KSEB Ltd, the arguments of M/s KSEB Ltd and the stakeholders during the hearing, the audited accounts of KSEB Ltd for the FY 2020-21 and as per the Regulations 21(5), 26(5), 27(7) and 29(4) of the KSERC (Renewable Energy and Net Metering Regulations), 2020 hereby orders as follows:

- 1) The Commission rejects the submission of KSEB Ltd for fixing the lowest rate of solar purchase for the year instead of APPC, as the roof top solar plants installed by individual consumers on their roof tops with capacities ranging between 1kWp and say 6 to 8kWp cannot be compared with the large-scale solar generators of capacities ranging between 200 MW and 500 MW or more located in Solar parks having all facilities for the establishment and upkeep of such plants.
- 2) The Commission also rejects the submissions of KSEB Ltd mentioned in items (b) and (c) of Para 37 above, as the issues raised have no relevance to fixing the APPC for the FY 2021-22. If KSEB Ltd desires to modify the 'KSERC (Renewable Energy and Net Metering) Regulations,2020', they shall file a separate petition in this regard before the Commission.
- 3) The APPC derived and approved by the Commission for the FY 2021-22 for payment at the end of the settlement period for the excess energy banked by the prosumers and Captive Consumers is Rs.3.22/unit.
- 4) KSEB Ltd should make the payments/adjustments to the consumers within one month of the issue of this Order.

The petition is disposed off as ordered above

Sd/-  
**Adv. A. J. Wilson**  
Member (Law)

Sd/-  
**Preman Dinaraj**  
Chairman

Approved for issue

Sd/-  
C R Satheesh Chandran  
Secretary

**List of stakeholders participated in the public hearing held on 03.11.2021**

1. Sri. Suresh, Executive Engineer, TRAC, KSEB Ltd
2. Smt. Latha S.V, AEE, TRAC, KSEB Ltd
3. Sri. Satheesh A.R, President, HT & EHT Association
4. Sri. Pradeep M, Hindalco, Kalamassery
5. Sri. A.C.K Nair, CIAL, Nedumbassery
6. Sri. Renjit Jacob, Apollo, Koratty
7. Sri. Rajesh. J. Kuruvila, CUMI, Koratty
8. Sri.Terance Alex ,KREEPA
9. Sri. Sivaramakrishnan, KREEPA
10. Sri. Saji Mathew, MRF, Kottayam
11. Sri. Jacob Cherian, Malayala Manorama
12. Sri. K.K. George, HT & EHT Association
13. Sri. Saju Thomas, BPCL, Kochi Refinery
14. Sri. Anoop Thulasidasan, Kochi Metro Rail Ltd, Kochi
15. Smt. Prini Peter, CUMI, Edapally
16. Sri. Abdul Zalam, CIAL, Nedumbassery
17. Sri. Prabhakaran. K.V, HT & EHT Association