KERALA STATE ELECTRICITY REGULATORY COMMISSION **THIRUVANANTHAPURAM**

Present Shri T K Jose, Chairman

> Shri B Pradeep, Member Adv. A.J Wilson, Member

OP No 71/2022

In matter of: Petition on 'Proposals to recover the additional liability incurred

> during the period October 2021 to December 2021 over the approved level on Generation and Power Purchase due to variation in cost of fuel from all consumers including Bulk

Consumers and other Licensees through Fuel Surcharge'.

Petitioner Kerala State Electricity Board Ltd

OP No 74/2022

In matter of: Petition on 'Proposals to recover the additional liability incurred

> during the period January 2022 to March 2022 over the approved level on Generation and Power Purchase due to variation in cost of fuel from all consumers including Bulk

Consumers and other Licensees through Fuel Surcharge'.

Petitioner Kerala State Electricity Board Ltd

Date of hearing: 18.01.2023 (through video conference)

Common Order dated 25.01.2023

OP 71/2022

- 1. KSEB Ltd, on 17.03.2022 filed a petition for recovery of fuel surcharge for the period from October 2021 to December 2021, with prayers as follows:
 - Additional financial liability incurred by KSEBL, amounting to Rs.18.10 Cr, resulting from the variation in variable charges of power purchase from approved sources for the period from October to December 2021 as per Regulation 86 of KSERC Tariff Regulations 2018 as detailed in Annexure IV & V of this petition may kindly be approved.
 - b) This approved additional cost may kindly be allowed to be recovered from consumers including bulk consumers and other licensees as fuel surcharge as per the Regulation 86 of KSERC Tariff regulations 2018, @ 3 paise per unit from 1st April 2022 onwards.

- 2. The Summary of the petition is given below.
 - (1) The petition was filed as per the Regulation-86 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 (herein after referred to as Tariff Regulations, 2018).
 - (2) The Commission vide the Order dated 08.07.2019 in OA No. 15/2018 had approved the source wise details of the generation and power purchase for the year 2021-22.
 - (3) As per the Regulation-86 of the Tariff Regulations, 2018, KSEB Ltd shall, within 30 days after the close of each quarter, has to file the petition with all relevant details for the approval of the fuel surcharge, to be adjusted from the consumers. The fuel surcharge is the 'additional liability' savings' in power purchase cost due to the variation in cost of variable cost/fuel cost from the approved rate for the approved quantum.
 - (4) As per the Regulations, the petition for fuel surcharge has to be filed on or before 30.01.2022. But KSEB Ltd was filed the petition on 17.03.2022, with a delay of 47 days. The Commission vide the Order dated 29.03.2022 has condoned the delay.
 - (5) A comparison of the variable cost approved by the Commission and the actuals as claimed by KSEB Ltd is given below.

		Table-1			
SI		Approved	Act	ual (Rs/ kV	Vh)
No	Source	(Rs/ kWh)	Oct-21	Nov-21	Dec-21
	Centra	al Generatin	g Stations	}	
1	NTPC-RSTPS Stage I & II	2.600	2.933	2.889	2.823
2	NTPC-RSTPS Stage III	2.540	2.876	2.834	2.774
3	Talcher	1.800	1.615	1.735	1.657
4	Simhadri TPS Stage II	3.010	2.914	2.989	3.036
5	NLC-Stage-1	2.750	2.655	2.664	2.751
6	NLC-Stage-II	2.740	2.655	2.664	2.751
7	NLC I Expansion	2.540	2.401	2.427	2.448
8	NLC II Expansion	2.540	2.548	2.553	2.567
9	Vallur STPS	3.260	3.238	4.042	3.811
10	NTPL	3.340	3.239	3.516	3.716
11	NTPC Kudgi	4.060	3.399	3.334	4.286
	Indepen	dent Power	Producers	S	
12	RTPS	2.388	3.224	3.123	3.018
13	Mejia	2.558	2.974	2.953	2.926
14	Maithon I	2.483	2.823	2.729	2.645
15	Maithon II	2.483	2.823	2.729	2.645
16	Jindal Power Ltd-Bid I	1.340	1.330	1.330	1.330
17	Jhabua Power Ltd-Bid I	1.980	1.990	1.991	1.990
18	Jindal Power Ltd-Bid II	1.214	1.330	1.330	1.330

	19	Jhabua Power Ltd-Bid II	1.765	2.000	2.003	2.000
	20	JITPL	1.051	1.170	1.170	1.170
ĺ	21	BALCO	1.240	1.170	1.160	1.160

3. The summary of additional liability claimed by KSEB Ltd for the third quarter of the FY 2021-22 is given below.

Table-2

	Er	Add liability				
Source	Approved quantity	Actual	Admissible as per regulation	Actual	Admissible as per regulation	Claim of KSEBL in this
	(MU)	(MU)	(MU)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
CGS	2287.91	1629.29	1621.10	1.44	1.44	1.44
IPPs	2209.91	1990.18	1830.14	29.53	25.10	16.66
Total	4497.82	3619.47	3451.25	30.97	26.54	18.10

4. The source wise details of the additional liability claimed as fuel surcharge is given below.

Table-3

Source wise details of additional liability for the period from 01.10.2021 to 31.12.2021

	Approved	Actual	Per ur	nit cost	Additio	nal liability
Source	energy requirement	Energy procurement	Approved	Actual	Actual	Admissible
	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
CGS						
RSTPS I & II	448.77	294.62	2.60	2.89	8.50	8.50
RSTPS III	126.93	63.46	2.54	2.83	1.82	1.82
Talcher STPS	741.31	670.49	1.77	1.67	-6.86	-6.86
Simhadri TPS Stage-II	157.82	120.42	3.01	2.99	-0.28	-0.28
NLC Stage-I	98.68	59.34	2.75	2.70	-0.31	-0.31
NLC Stage-II	129.76	98.34	2.74	2.69	-0.48	-0.48
NLC 1 Expansion	117.61	93.61	2.54	2.43	-1.06	-1.05
NLC II Expansion	75.97	71.76	2.54	2.56	0.13	0.11
Vallur STPS	84.38	43.93	3.26	3.65	1.72	1.72
NTPL	137.40	41.60	3.34	3.53	0.79	0.79
Kudgi	169.28	71.73	4.06	3.71	-2.51	-2.51
Sub Total CGS	2287.91	1629.29	2.45	2.51	1.44	1.44
Private IPPs outside the S	tate					
DVC RTPS	64.70	56.56	2.39	3.11	4.11	3.05
DVC Mejia	194.56	124.79	2.56	2.95	4.90	4.90
Maithon Power Ltd-I	201.93	261.91	2.48	2.73	6.51	3.42
Maithon Power Ltd-II	304.55	261.91	2.48	2.73	6.51	6.51
Jindal Power Itd-Bid I	377.56	382.78	1.34	1.33	-0.38	-0.36
Jhabua Power Ltd-Bid I	217.09	157.52	1.98	1.99	0.17	0.16
BALCO	188.78	135.01	1.24	1.16	-1.07	-1.02
Sub total IPPs	2209.91	1990.18	1.49	1.66	29.53	16.66
Total claim						18.10

Note. Claim excluding unapproved DBFOO sources

- 5. KSEB Ltd submitted that, as per the earlier orders on fuel surcharge approved by the Commission for the first quarter of the FY 2020-21 dated 14.02.2020 and for the second quarter of the FY 2020-21 dated 27.04.2020, the Commission had not allowed the claim of the fuel surcharge for the following three unapproved DBFOO contracts.
 - (1) Jhabua Power Limited (100 MW)- Bid-2
 - (2) Jindal Power Limited (150 MW) -Bid-2
 - (3) Jindal India Thermal Power Ltd (100MW) Bid-2

The Commission is yet to approve the PSA of the above stations, for want of approvals from Central Government and State Governments. The Commission has limited the payment to these stations at the rate of BALCO at Kerala periphery, which is the L1 in Bid-2.

Accordingly, KSEB Ltd withheld Rs 19.17 crore during the third quarter by limiting the payment at BALCO rate at Kerala periphery, including the variation in fuel cost amounting to Rs 8.44 crore.

- 6. The summary of the issues raised in the petition is given below.
 - (1) The variation in quantity of the power scheduled and the approval in the year 2021-22 is mainly due to the following.
 - (i) Changes in annual maintenance schedule.
 - (ii) Unscheduled outages in generating stations as well as transmission lines.
 - (iii) Variation in normative auxiliary consumption and plant load factor for various CGS in the Tariff Regulations, 2019-24 issued by CERC in March 2019.
 - (2) Energy charges depends on the gross calorific value of the primary and secondary fuel and also the landed price of primary and secondary fuel. Further there is variation in the per unit variable cost in the year 2021-22, over the approved level on account of variation in normative SHR and auxiliary consumption (consequent to the notification of CERC Tariff Regulation for control period 2019-24).

The Commission has estimated the variable cost during the MYT period from 2018-19 to 2021-22 by providing 2% annual escalation on the actual variable cost in the first half of the year 2018-19.

(3) Scheduling of CGS and IPP's being strictly monitored on a day-to-day basis to ensure that the generators are not diverting power to other utilities by backing off supply to KSEB Ltd. Invoices for the power supplied are processed based on the REA statements published by SRPC. In the case of power stations, whose tariff is determined by CERC, variable charges and landed cost of fuel are verified with the details in Form 15. The Price of coal is taken from the latest price

- notifications by Coal India Ltd/ Singareni Collieries Ltd. In the case of IPPs, the invoices are processed as per the provisions of the PPA.
- (4) In the case of coal-based stations the linkage of fuel is mainly from Coal India Ltd (CIL) and Singareni Collieries Ltd (SCCL). Due to shortage from linkage sources, the generating stations has to augment coal from other domestic sources and imported coal as well. Coal from Eastern Coal Fields (ECL) and SECL is expensive as compared to coal from Mahanadi coal fields (MCL) under Coal India Ltd due to the variations in grade of coal and other reasons. Price of coal from Singareni Collieries (SCCL) is based on the price notifications of Singareni Collieries from time to time whereas price of Coal India Ltd (CIL) is based on the notification dated 08.01.2018. Fuel price also depends on the transportation cost.
- (5) KSEBL further submitted that, the purchase from following sources during the quarter is not eligible for fuel price escalation as per the Tariff Regulations, 2018.
 - (a) KSEBL purchased 5.073 MU through exchanges and 58.18 MU export through deviation settlement mechanism during the third quarter of FY-2021-22.
 - (b) KSEBL sold 745.25 MU during third quarter through exchanges. The details of power procurement/sale through short term transactions are enclosed as Annexure VI.
- (6) KSEB Ltd further submitted that as per the regulation 86(8) of the Tariff regulations, "the adjustment of fuel surcharge as approved by the Commission shall be effected from the third month of subsequent quarter onwards as directed by the Honorable Commission" ie; the fuel surcharge for the third quarter of FY-2022 is to be adjusted from March 2022 onwards as per Regulation. For calculation purpose, KSEBL is considering the energy sales for the period of three months for calculating the rate of fuel surcharge recovery. Based on the above, KSEB Ltd requested to approve the fuel surcharge recovery @3 paise per unit from 1st April 2022 onwards.

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- 7. KSEB Ltd, on 22.09.2022 filed a petition for recovery of fuel surcharge for the period from January 2022 to March 2022, with prayers as follows:
 - (a) Additional financial liability incurred by KSEBL, amounting to Rs.16.05 Cr, resulting from the variation in variable charges of power purchase from approved sources for the period from January to March 2022 as per Regulation 86 of KSERC Tariff Regulations 2018 as detailed in Annexure IV & V of this petition may kindly be approved.

- (b) This approved additional cost may kindly be allowed to be recovered from consumers including bulk consumers and other licensees as fuel surcharge as per the Regulation 86 of KSERC Tariff regulations 2018, @ 3 paise per unit from 1st September 2022 onwards.
- 8. Summary of the petition is given below.
 - (1) The petition was filed as per the Regulation-86 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 (herein after referred to as Tariff Regulations, 2018).
 - (2) The Commission vide the Order dated 08.07.2019 in OA No. 15/2018 had approved the source wise details of the generation and power purchase for the year 2021-22.
 - (3) As per the Regulation-86 of the Tariff Regulations, 2018, KSEB Ltd shall, within 30 days after the close of each quarter, has to file the petition with all relevant details for the approval of the fuel surcharge, to be adjusted from the consumers. The fuel surcharge is the 'additional liability' savings' in power purchase cost due to the variation in cost of variable cost/fuel cost from the approved rate for the approved quantum.

As per the Regulations, the petition for fuel surcharge has to be filed by 30.04.2022. However, KSEB Ltd could file this petition only on 22.09.2022, with a delay of 145 days from 30th April 2022. KSEB Ltd has also filed a petition for delay condonation along with the petition.

The reasons for the delays submitted by the KSEB Ltd are summarized below.

- (i) Delay in finalizing the REA accounts in the SRPC meetings.
- (ii) Delay in admitting the bills and preparing the monthly power purchase statements after finalizing the REA accounts.
- (6) A comparison of the variable cost approved by the Commission and the actuals as claimed by KSEB Ltd is given below.

Table-4
Monthly variation of variable cost compared to approval

CI		Approved	Actual (Rs/ kWh)		Vh)		
SI No	Source	(Rs/ kWh)	Jan-22	Feb-22	Mar-22		
	Central Generating Stations						
1	NTPC-RSTPS Stage I & II	2.600	2.880	2.961	3.034		
2	NTPC-RSTPS Stage III	2.540	2.824	2.907	2.981		
3	Talcher	1.800	1.693	1.557	1.725		
4	Simhadri TPS Stage II	3.010	3.005	2.526	2.954		
5	NLC-Stage-1	2.750	2.649	2.649	2.651		
6	NLC-Stage-II	2.740	2.649	2.651	2.651		

7	NLC I Expansion	2.540	2.434	2.439	2.439				
8	NLC II Expansion	2.540	2.582	2.590	2.590				
9	Vallur STPS	3.260	3.971	3.630	3.381				
10	NTPL	3.340	3.601	3.600	3.610				
11	NTPC Kudgi	4.060	4.257	3.636	4.534				
	Independent Power Producers								
12	RTPS	2.390	3.149	2.987	2.981				
13	Mejia	2.560	2.825	2.975	3.017				
14	Maithon I	2.480	2.637	2.468	2.415				
15	Maithon II	2.480	2.637	2.468	2.415				
16	Jindal Power Ltd-Bid I	1.340	1.330	1.330	1.330				
17	Jhabua Power Ltd-Bid I	1.980	1.990	1.990	1.990				
21	BALCO	1.240	1.170	0.000	1.170				

9. The summary of additional liability claimed by KSEB Ltd for the fourth quarter of the FY 2021-22 is given below.

Table-5 Summary of the fuel surcharge for the fourth quarter (Jan-2022 to March-2022) of the FY 2021-22

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	Er	ergy procu	rement	Add liability					
Source	Approved quantity	Actual	Admissible as per regulation	Actual	Admissible as per regulation	Claim of KSEBL in this			
	(MU)	(MU)	(MU)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)			
CGS	2393.62	2098.31	2027.92	6.34	7.06	7.06			
IPPs	1541.67	1357.04	1223.06	10.37	9.00	9.00			
Total	3935.29	3455.35	3250.98	16.71	16.05	16.05			

10. The summary of the source wise details of the fuel surcharge claimed is given below.

Table-6
Summary of the source wise details of additional liability for the fourth quarter of the FY 2021-22

,	Approved Actual		Per un	it cost	Additional liability		
Source	energy requiremen t	Energy procuremen t	Approve d	Actual	Actual	Admissible	
	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)	
CGS							
RSTPS I & II	466.91	352.01	2.60	2.97	12.94	12.94	
RSTPS III	116.59	110.69	2.54	2.91	4.10	3.95	
Talcher STPS	810.93	811.33	1.80	1.66	-11.24	-10.80	
Simhadri TPS Stage-	160.26	140.69	3.01	2.84	-2.36	-2.34	
NLC Stage-I	101.97	107.62	2.75	2.65	-1.08	-0.99	
NLC Stage-II	154.07	126.35	2.74	2.65	-1.18	-1.18	
NLC 1 Expansion	96.63	128.33	2.54	2.44	-1.32	-0.99	
NLC II Expansion	75.15	54.06	2.54	2.59	0.26	0.24	
Vallur STPS	94.42	70.20	3.26	3.61	2.44	2.44	

NTPL	114.00	57.64	3.34	3.60	1.52	1.52				
Kudgi	202.69	139.41	4.06	4.22	2.26	2.26				
Sub Total CGS	2393.62	2098.31	2.55	2.50	6.34	7.06				
Private IPPs outside the State										
DVC RTPS	92.46	66.02	2.39	3.04	4.27	4.27				
DVC Mejia	189.49	131.10	2.56	2.95	5.10	5.10				
Maithon Power Ltd-I	297.97	218.26	2.48	2.52	0.93	0.93				
Maithon Power Ltd-II	195.35	218.26	2.48	2.52	0.93	-0.45				
Jindal Power Itd-Bid I	369.35	400.22	1.34	1.33	-0.28	-0.26				
Jhabua Power Ltd-	212.37	223.31	1.98	1.99	0.13	0.13				
BALCO	184.68	99.87	1.24	1.17	-0.72	-0.72				
LTA subtotal	1541.67	1357.04	1.99	2.05	10.37	9.00				
Total	3935.29	3455.35	2.33	2.32	16.71	16.05				

Note. FS was not claimed for unapproved DBFOO contracts

- 11. KSEB Ltd submitted that, as per the earlier orders on fuel surcharge approved by the Commission for the first quarter of the FY 2020-21 dated 14.02.2020 and for the second quarter of the FY 2020-21 dated 27.04.2020, the Commission had not allowed the claim of the fuel surcharge for the following three unapproved DBFOO contracts.
 - (1) Jhabua Power Limited (100 MW)- Bid-2,
 - (2) Jindal Power Limited (150 MW) -Bid-2
 - (3) Jindal India Thermal Power Ltd (100MW) Bid-2

The Commission yet to approve the PSA of the above stations, for want of approvals from Central Government and State Governments. The Commission has limited the payment to these stations at the rate of BALCO at Kerala periphery, which is the L1 in Bid-2.

- 12. The summary of the issues raised in the petition is given below.
 - (1) There is variation in energy availability from various approved sources, due to the following.
 - (i) Changes in annual maintenance schedule.
 - (ii) Unscheduled outages in generating stations as well as transmission lines.
 - (iii) Variation in normative auxiliary consumption and plant load factor for various CGS in the Tariff Regulations, 2019-24 issued by CERC in March 2019.
 - (2) Energy charges depends on the gross calorific value of the primary and secondary fuel and also the landed price of primary and secondary fuel. Further there is variation in the per unit variable cost in the year 2021-22, over the approved level on account of variation in normative SHR and auxiliary consumption (consequent to the notification of CERC Tariff

Regulation for control period 2019-24). Grade of fuel, source of fuel and transportation cost (depends on the distance from coal source and mode of transport), price notified for each mine etc will impact on the variable cost.

The Commission has estimated the variable cost during the MYT period from 2018-19 to 2021-22 by providing 2% annual escalation on the actual variable cost in the first half of the year 2018-19.

- (3) In the case of power stations, whose tariff is determined by CERC, variable charges and landed cost of fuel are verified with the details in Form 15. The Price of coal is taken from the latest price notifications by Coal India Ltd/ Singareni Collieries Ltd. In the case of IPPs, the invoices are processed as per the provisions of the PPA.
- (4) Due to coal shortages, the generating stations has to augment coal from imported sources. In case of blending of fuel from different sources, the weighted average GCV of primary fuel is arrived in proportion of the blending ratio. Fuel price also depends on the transportation cost.
- (5) Scheduling of CGS and IPP's being strictly monitored on a day-to-day basis to ensure that the generators are not diverting power to other utilities by backing off supply to KSEB Ltd. Invoices for the power supplied are processed based on the REA statements published by SRPC.
- (6) Invoices for the power supplied are processed based on the REA statements published by SRPC. In the case of power stations, whose tariff is determined by CERC, variable charges and landed cost of fuel are verified with the details in Form 15. The Price of coal is taken from the latest price notifications by Coal India Ltd/ Singareni Collieries Ltd. In the case of IPPs, the invoices are processed as per the provisions of the PPA.
- (7) KSEBL has submitted that there is a net liability amounting to Rs 7.06Cr during fourth quarter of FY2021-22 while purchasing power from CGS and a net additional liability of Rs.9.00 Cr on purchasing from various IPPs. The total additional liability claimed as fuel surcharge for the fourth quarter is Rs 16.05 crore as detailed in Table-5 above.
 - KSEB Ltd proposed to recover the additional liability @ps 3/unit.
- (8) KSEB Ltd submitted that, it had also purchased 40.241 MU of wind energy through SECI, 503.521MU through medium term contracts, 48.64MU through exchanges and 12.63MU (export) through deviation settlement. KSEB Ltd has also availed 17.9659MU through banking arrangements.

Public hearing

- 13. Public hearing on both the petitions are conducted on 18.01.2023 through video conference. The summary of the deliberations during the hearing is given below:
 - (1) KSEB Ltd team led by Shri R. Biju, Financial Advisor holding full additional charge of Director (Finance) along with Shri.M.P. Rajan, DY CE, Smt.Seema.P.Nair AEE, were present during the deliberations. The summary of the issues raised by KSEB Ltd is given below.
 - (i) The petitions OP No. 71/2022 and OP No. 74/2022 was filed in accordance with Regulation 86 of KSERC (Terms and Conditions For Determination of Tariff) Regulations,2018, and also as per the Order of the Commission dated 08.07.2019 in OP No:15/2018 in the matter of ARR, ERC and Tariff for the MYT period 2018-19 to 2021-22.
 - (ii) The fuel surcharge is claimed for twelve (12) Central Generating Stations and seven (7) Independent Power Producers (IPPs), from which the power purchase was approved by the Commission in the MYT Order dated 08.07.2019 in petition OP No. 15/2018.
 - (iii) The Commission in the ARR Order dated 08.07.2019 has estimated the 'variable cost' by escalating the average actual variable cost from April 2018 to September 2018 by 2% annually.
 - (iv) However, the actual Variable cost has varied due to the following reasons:
 - Changes in the normative values of SHR and auxiliary consumption in the CERC Tariff Regulations 2019 dated 07.03.2019.
 - Landed price of primary and secondary fuel,
 - Increase in rail freight charges for coal transportation
 - Variation in calorific value of coal
 - Blending of imported coal due to shortage in domestic coal
 - (v) KSEB Ltd submitted that it has been scheduling the power from each generating stations strictly based on the Merit Order of variable cost. The total additional liability due to variation in fuel cost during the third quarter of the FY 2021-22 is Rs 18.10 crore and the same claimed for fourth quarter of the year 2021-22 is Rs 16.05 crore.
 - (vi) KSEB Ltd proposed to recover the fuel surcharge claimed in third and fourth quarter @ps 3/unit along with the electricity charges for continuously for six months.

(2) During the hearing the Commission raised serious apprehensions on the purchase of power from various CGS and IPPs. The Commission noted that the power purchase from the low variable cost stations such as BALCO, Jindal Power Ltd, NLC stations etc. are less than the quantum approved in the ARR Order. Further, the low-cost variable cost stations such as BALCO etc has not declared availability during most of the months under consideration.

Hence the Commission directed the licensee to submit the reasons for the variation.

- (3) Shri. Saji Mathew presented the comments on behalf of the HT & EHT Consumers Association and its summary is given below;
 - (i) There was considerable delay in filing the Fuel Surcharge petitions by KSEB Ltd.
 - (ii) During the third quarter the FY 2021-22, variation in variable Cost of NTPC RSTPS station is in the range of 11-13%. However, the Variable cost of DVCs Raghunathpur Thermal power station was up to 35%. KSEB Ltd has purchased power from Vallur STPS in the month of November 2021 and December 2021 even though the energy exchange rate was considerably less than the Variable Cost of Vallur STPS.
 - (iii) The Association also pointed out that the IEX rate in January 2022 was much less than the KUDGI station of NTPC. If KSEB Ltd procured power from IEX instead of KUDGI station it would have resulted in a savings of ₹3.06 Crores.
 - (iv) The association pointed out that, in the first quarter of the FY 2022-23, the variable cost of RSTPS station was increased up to 65% and 53% in the case of KUDGI station of NTPC.
 - (v) The association also pointed out that the amount of ₹33.3 Crores withheld by KSEB Ltd during the 1st quarter of FY 2022-23 upto July 2022 may be deducted from the Energy Charges of various generating stations while allowing the fuel surcharge.
 - (vi) The association also raised the issue that since the BALCO has been declaring nil availability from April 2022 onwards, KSEB Ltd may be directed to take legal action and impose penalty against BALCO as per the provisions of the agreement. The penalty received may be deducted from the fuel surcharge claimed.
- (4) Shri. Prasanna Kumar, a consumer submitted during the hearing that the surcharge may be imposed only to consumers having regular

- income. He also requested to not to increase electricity tariff for next 10 years.
- (5) Shri. Sharfuddin raised the issue that the surcharge claimed by the KSEB Ltd is the liability incurred during the past period from October 2021 to June 2022. However, KSEB Ltd proposed to raise the surcharge from all consumers existing as on date which includes the newly added consumers after the surcharge period. He submitted that the surcharge may be imposed only on the consumers existing during the period the surcharge liability was incurred.
- (6) Shri. Raymant Antony requested before the Commission to direct KSEB Ltd to resort to monthly billing instead of the 'bi-monthly billing' now in force. He further submitted that there is lack of clarity in the petition and hence the same may be rejected.
- (7) Shri. Rajesh Kuruvilla, Carborundum Universal Ltd, submitted that the fuel surcharge at the rate of 20paise per unit may result in an additional liability of₹70 Lakhs to their Company. Hence the Commission may not approve the same at this stage.
- (8) Shri. Jiju.R., Patspin India Ltd submitted that the Commission may take a decision on the Fuel Surcharge petitions only after getting clarifications on the issues raised by the Commission.
- (9) Shr. Prabhakaran Office Manager of the HT & EHT association submitted that the commencement date of the Order on Fuel Surcharge may be fixed at the beginning of the month so as to facilitate easy implementation of the surcharge. Shri. Pradeep M, Hindalco submitted that they fully endorse the views of the association.
- (10) Regarding the zero declaration by BALCO, KSEB Ltd during the hearing submitted that, it has been reducing the fixed charges payable to BALCO as per the provisions of the Power Supply Agreement. KSEB Ltd further submitted that, it had through the State Government has raise the issue of zero declaration with the Central Government. KSEB Ltd further that, the details sought for by the Commission may be submitted within two weeks. However, Commission clarified that, the details sought are readily available information with State Load Dispatch Center and the details shall be submitted by return. The Commission further directed that, henceforth, the officials of the SLDC shall also appear before the Commission during all important hearings.
- 14. In compliance of the directions of the Commission, KSEB Ltd on 20.01.2023, submitted the month wise details of the total availability, actual drawal, surrender and the reasons for the variations over approval.

(i) The summary of the of month wise details of the power availability and actual drawls from CGS is given below.

Table-7
CGS- monthly availability and actual drawl

		ny avanasint			
	KSERC				
	Approval				Surrender as
	in the		Actual		(%) of total
	ARR*	Availability	drawal	Surrender	availability
Month	(MU)	(MU)	(MU)	(MU)	(%)
Oct-21	964.37	938.62	823.21	115.41	12.3%
Nov-21	932.13	925.39	653.29	272.1	29.4%
Dec-21	945.98	1029.99	895.27	134.72	13.1%
Jan-22	974.22	1079.42	898.22	181.2	16.8%
Feb-22	910.37	986.83	905.40	81.43	8.3%
Mar-22	1094.7	1062.2	1041.63	20.57	1.9%
Apr-22	952.42	960.76	954.01	6.75	0.7%
May-22	984.17	937.45	928.07	9.38	1.0%
Jun-22	952.42	1045.27	1020.51	24.76	2.4%

^{*} KSERC approval upto March 2022 includes the purchase from Bhavini Nuclear station also, but not achieved COD as scheduled

(ii) The month wise details of the surrender from each CGS is given below.

Table-8
Surrender details of CGS

	Oct- 21	Nov- 21	Dec- 21	Jan- 22	Feb- 22	Mar- 22	Apr- 22	May- 22	Jun- 22
RSTPS Stage I & II	15%	44%	23%	31%	16%	2%	2%	14%	4%
RSTPS Stage III	38%	72%	35%	21%	8%	1%	1%	7%	1%
Talcher Stg II	6%	22%	6%	7%	0%	0%	0%	1%	0%
Simhadri	29%	46%	20%	40%	25%	2%	1%	16%	7%
NLC II Stage I	42%	45%	16%	13%	5%	0%	1%	2%	0%
NLC II Stage II	11%	14%	7%	11%	4%	0%	0%	2%	0%
NLC Exp Stg I	25%	40%	11%	10%	1%	0%	0%	1%	0%
NLC II Exp Stg II	4%	7%	1%	9%	2%	0%	0%	2%	0%
MAPS	0%	0%	0%	0%	0%	0%	0%	0%	0%
KAIGA Stg I II III & IV	0%	0%	0%	0%	0%	0%	0%	0%	0%
Kudamkulam Stg I & II	0%	0%	0%	0%	0%	0%	0%	0%	0%
NTECL, Vallur	44%	58%	33%	44%	31%	9%	3%	19%	7%
NTPL,Tuticorin	11%	34%	28%	39%	9%	10%	1%	29%	9%
Kudgi Unit I,II & III	13%	89%	56%	54%	43%	13%	4%	49%	14%
NNTPP	8%	6%	7%	7%	0%	0%	0%	0%	0%

(iii) The summary of the of month wise details of the power availability and actual drawls from IPPS is given below.

Table-9
IPPs monthly availability and actual drawl

				, -	
	KSERC Approval in the ARR*	Availability	Actual drawal	Surrender	Surrender as (%) of total availability
Month	(MU)	(MU)	(MU)	(MU)	(%)
Oct-21	687.15	571.69	542.53	29.16	5.1%
Nov-21	733	783.79	687.9	95.89	12.2%
Dec-21	789.7	801.65	759.7	41.95	5.2%
Jan-22	687.1	790.7	736.5	54.2	6.9%
Feb-22	711.13	625.31	607.26	18.05	2.9%
Mar-22	789.77	688.34	687.8	0.54	0.1%
Apr-22	727.66	645.75	645.36	0.39	0.1%
May-22	751.91	673.42	662.53	10.89	1.6%
Jun-22	727.66	657.26	655.34	1.92	0.3%

(iv) The monthwise details of surrender from each IPPs is given below.

Table-10

Month wise details of surrender from IPPs

	Oct-	Nov-	Dec-	Jan-	Feb-	Mar-	Apr-	May-	Jun-
	21	21	21	22	22	22	22	22	22
Maithon I	9%	23%	8%	12%	4%	0%	0%	1%	0%
Maithon II	9%	23%	8%	12%	4%	0%	0%	1%	0%
DVC Mejia	17%	52%	28%	35%	25%	0%	0%	10%	2%
DVC RTPS	6%	35%	23%	25%	14%	2%	0%	9%	1%
Jindal 200 MW	0%	0%	0%	0%	0%	0%	0%	0%	0%
Jindal 150 MW	0%	0%	0%	0%	0%	0%	0%	0%	0%
JITPL 100 MW	0%	5%	0%	0%	0%	0%	0%	0%	0%
Jhabua 115 MW	0%	0%	0%	0%	0%	0%	0%	0%	0%
Jhabua 100 MW	0%	0%	0%	0%	0%	0%	0%	0%	0%
Balco 100 MW	1%	6%	0%	0%	0%	0%	0%	0%	0%

Analysis and Decision

- 15. The Commission has examined in detail the petitions filed by KSEB Ltd for the approval of the fuel surcharge for the third quarter of the FY 2021-22 (October 2021 to December 2021) and fourth quarter of the FY 2021-22 (January 2022 March 2022), the objections made by the stakeholders as per the provisions of the Electricity Act, 2003, KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018, Judgment of the Hon'ble Appellate Tribunal for Electricity (APTEL), and other relevant documents and records, hereby decide as follows.
- 16. The Section 62(4) of the Electricity Act, 2003 provides for recovery of fuel surcharge as per the fuel surcharge formula specified by the Commission.

The Section 62(4) of the Electricity Act-2003 is extracted below for ready reference.

- "(4) No tariff or part of any tariff may ordinarily be amended more frequently thanonce in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified."
- 17. Hon'ble APTEL vide judgment dated 11.11.2011 in OP No. 1 of 2011 had issued directions to all the State Commissions in the Country, regarding the fuel surcharge as follows.
 - 65. In view of the analysis and discussion made above, we deem it fit to issue thefollowing directions to the State Commissions:

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- (vi) Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the generating companies but in nocase exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this order must putin place such formula/ mechanism."
- 18. The Regulation-86 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 (herein after referred as Tariff Regulations, 2018), deals with the 'Fuel Surcharge Formula' and related aspects, which is extracted below for ready reference.
 - "86. Fuel surcharge formula (1) The tariff or part of any tariff determined in accordance with these Regulations, shall not ordinarily be amended, more frequently than once in any financial year, except in respect of any changes expressly permitted by the Commission under the terms of fuel surcharge formula specified in this Regulation.
 - (2) Fuel surcharge is the amount approved by the Commission in terms of the formula specified under Annexure X, by way of recovery from or refund to the consumer, so as to enable the distribution business/licensee to pass through to the consumer additional expenditure or savings due to:
 - (i) the difference between the actual cost of fuel and the cost of fuel approved in Aggregate Revenue Requirement by the Commission for the generation of electricity in the generating stations owned by the distribution business/licensee; and
 - (ii) the difference on account of the change in cost of fuel, between the actual cost ofpower purchase and the cost of power purchase as approved by the Commission in the Aggregate Revenue Requirement.

- (3) The distribution business/licensee may be allowed by the Commission to adjust the fuel surcharge on a quarterly basis at the rate and the period of adjustment, as approved by the Commission based on the petition submitted by the distribution business/licensee specifically for this purpose.
- (4) (a) The amount of fuel surcharge to be adjusted shall be determined by the Commission in accordance with the formula specified in Annexure X.
- (b) The difference between the actual cost of fuel and the approved cost of fuel for own generation shall be computed for each quarter with respect to the month wise quantity of generation as approved by the Commission in the Aggregate Revenue Requirement of the distribution business/licensee, based on merit order.
- (c) The difference between the actual cost of power purchase and the approved cost of power purchase on account of change in cost of fuel shall be computed for each quarter with respect to the month wise quantity of power purchase as approved by the Commission in the Aggregate Revenue Requirement of the distribution business/licensee, based on merit order.
- (5) Every distribution business/licensee shall, within thirty days after the closeof each quarter, submit to the Commission a petition with all relevant details required for the approval of the amount of fuel surcharge to be adjusted from the consumers and the rate and period of such adjustment:

Provided that distribution licensees who purchase electricity from KSEBLimited in bulk for retail sale, are exempted from the above requirement.

- (6) The Commission may, after prudence check, approve with modifications if any, the amount of fuel surcharge to be adjusted from the consumers and stipulate the rate and the period of such adjustment.
- (7) The rate of adjustment of fuel surcharge shall be expressed as paise per kWh and it shall be adjusted in the energy charges as per the existing tariff for the energy billed to each consumer, on a monthly or bi-monthly basis, as the case maybe.
- (8) The adjustment on account of fuel surcharge as approved by the Commission shall be affected from the third month of the subsequent quarter onwards or as directed by the Commission.
- (9) The fuel surcharge adjustment shall be uniformly applicable to all consumers in the State except the domestic consumers with connected load of and below 500 W and having monthly consumption of and below 20 units.
- (10) The Commission may decide appropriate rate and period of adjustment of the amount of fuel surcharge, considering the impact on the tariff of consumers.
- (11) (a) The distribution business/licensee shall submit to the Commission, the month-wise details of the changes in the cost of fuel with respect to the approved cost for all its generating stations using liquid fuel or gas or coal, for each quarter separately.
- (b) The distribution business/licensee shall submit to the Commission, the source wise and month-wise details of the changes in the cost of power purchasewith respect to the approved cost of power purchase on account of

change in cost of fuel, for each quarter separately.

- (c) The month-wise details as specified in clauses (a) and (b) above, shall be submitted in the Form-I as specified in Annexure-X to these Regulations, on a quarterly basis.
- (12) (a) Distribution licensees who purchase electricity from KSEB Limited in bulk for retail sale, shall within fifteen days of the close of each month, provide to KSEB Limited with a copy to the Commission, the month-wise details of retail sale of energy to facilitate the estimation of fuel surcharge.
- (b) KSEB Limited shall consolidate the details of such retail sales and indicate with calculations, the provisional amount and rate of fuel surcharge to be adjusted along with the details in Annexure X.
- (13) The distribution licensees who purchase electricity in bulk from KSEB Limited shall promptly adjust with KSEB Limited on a monthly basis, the amount of fuel surcharge adjusted from their consumers.
- (14) The Commission may seek additional information or any documents, if any, required from the distribution business/licensee and the distribution business/licensee shall submit the details within the time limit stipulated by the Commission.
- 19. The fuel surcharge formula specified under Annexure X to the Tariff Regulations, 2018 is extracted below.

'The Formula for adjustment of fuel surcharge shall be as under:

The rate of fuel surcharge adjustment in paise per $kWh = F \div E \times 100$ Where -

F =The amount of fuel surcharge in rupees, which is the sum of **Fg**, **Fp and A**

E = Energy billed for retail sale to the consumers other than the domestic consumers with connected load of and below 500 W and consumption of and below 20 kWh, in the relevant quarter, based on the approved level of transmission and distribution loss

Fg = Change in the cost of fuel for generation of electricity from own stations

$$=\sum_{1}Qg\,X\,(R1-\,R2)$$

Fp = Change in cost of the energy purchased, due to the change in fuel cost

$$=\sum_{1}^{n}Qp\ X\ (P1-P2)$$

(Fg and Fp shall be calculated **for each station month-wise** and added up)

A = Balancing term to take care of difference, if any, in the energy sales

Qg = Quantity of fuel used for generation of electricity in own stations

= (Approved station heat rate in kilo calories per kWh X

Actual or approved energy whichever is less in MU X 1000) ÷

Calorific value of the fuel in kilo calories per kilo gram

Q p = Actual quantity of energy purchased or approved whichever is lesser

R1 = Actual price of fuel in rupees per metric ton

R2 = Approved price of fuel in rupees per metric ton

P1 = Actual price of purchased energy in rupees per kWh P2 = Approved price of purchased energy in rupees per kWh

- 20. The Commission vide the paragraph 7.13 of the Order dated 08.07.2019 in OA No.15/2018 has directed KSEB Ltd to strictly comply with the Regulation 86 of the Tariff Regulations, 2018 in filing the petition on fuel surcharge.
- 21. The Commission vide Order dated 08.07.2019 in OA No. 15/2018 in the matter of approval of the 'ARR, ERC and Tariff for the MYT period 2018-19 to 2021-22' has approved the source wise details of the power purchase and cost from various sources including 'Central Generating Stations (CGS)' and also the power purchase under long term contracts from private IPPs.

Further, the Commission vide letter dated 06.08.2019 has communicated to KSEB Ltd the month wise details of the energy schedule approved from each of the CGS and long-term contracts during the MYT period from 2018-19 to 2021-22.

- 22. The provisions for recovery of fuel surcharge in the Tariff Regulations 2018, is to recover the additional liability incurred by the licensee for the purchase of power or to pass on the savings if any in power purchase from the various approved sources to the consumers. While calculating the fuel surcharge, the variations in cost of power purchase due to fuel cost from the approved sources in ARR are only considered.
- 23. The Commission also noted that, the petition OP No. 71/2022 is to approve the additional liability of Rs 18.10 crore incurred in generation and power purchase due to variation in cost of fuel over the approved level during the third quarter of the FY 2021-22, i.e., from October 2021 to December 2021. Similarly, the petition OP No. 74/2022 is to approve the additional liability of Rs 16.05 crore incurred due to variation in cost of fuel in generation and power purchase over the approved level during the fourth quarter of the FY 2021-22, i.e., from January 2022 to March 2022.

The Commission noted that, there was considerable delay in filing these petitions. The financial year 2021-22 is over by 9 ½ months now. The accounts of KSEB Ltd including the cost of power purchase has already finalized and its statutory audit also completed. KSEB Ltd on 23.12.2022 filed the petition for Truing up of accounts of KSEB Ltd for the year 2021-22. The Commission is in the process of appraising the various cost elements including power purchase cost for the year 2021-22 as per the Truing up petitions.

As part of the appraisal of Truing Up petition for the FY 2021-22, the Commission shall appraise the source wise details of the power purchase including its quantum, fixed cost, variable/fuel cost and other levies incurred by KSEB Ltd in the year 2021-22. However, the fuel cost covers only the variation in the cost of fuel over approved level only. Further, fuel surcharge provision is to ensure early recovery of the additional liability from the consumers without waiting for Truing up.

The petition for Truing Up for the 2021-22 is already filed before the Commission. The cost of purchase including the fuel cost for the third and fourth quarter is included in the said petition. Further the surcharge claimed for the third and fourth quarter of the FY 201-22 is a meagre amount when considering the revenue of KSEB Ltd. Hence the Commission is of the considered view that, it is not reasonable to approve fuel surcharge for the third and fourth quarter of the FY 2021-22 at this stage.

Hence, the Commission decided to close the petition OP No.71/2022 and 74/2022 with the clarification that all the issues raised in the fuel surcharge petitions for the third and fourth quarter of the FY 2021-22 may be considered as part of the appraisal of the Truing up petition for the FY 2021-22.

Orders of the Commission

24. The Commission after examining the petition filed by KSEB Ltd for the approval of the fuel surcharge for the third and fourth quarter of the FY 2021-22, the objections raised by the stake holders, the additional details submitted by the petitioner, and after having duly considering the provisions of the Electricity Act, 2003 and the Tariff Regulations 2018, the Commission hereby orders to close the petitions due to the reasons given in paragraph-23 of this Order.

The petitions OP No. 71/2022 and 74/2022 disposed of. Ordered accordingly.

Sd/- Sd/- Sd/Adv. A J Wilson B Pradeep T K Jose
Member Member Chairman

Approved for issue

Sd/-C R Satheeshchandran Secretary

Annexure 1

List of stakeholders participated in the public hearing held on 18.01.2023

- 1. Sri. Sri. Biju.R, Financial Advisor holding full additional charge of Director (Finance)
- 2. Shri. Rajan.M.P, DY CE, TRAC, KSEB Ltd
- 3. Smt. Seema P Nair, AEE, TRAC, KSEB Ltd
- 4. Sri. Prabhakaran K.V, HT & EHT Association
- 5. Sri. Rajesh J Kuruvilla, Carborandum
- 6. Sri. Saji Mathew, MRF Ltd
- 7. Shri. Prasannakumar, Consumers association
- 8. Shri. Sharafudin Alangadan, Consumer
- 9. Shri. Raymant Antony, Consumer
- 10. Shri. Jiju.R., Patspin India Ltd
- 11. Shri. Pradeep.M. Hindalco