

**KERALA STATE ELECTRICITY REGULATORY COMMISSION**  
**THIRUVANANTHAPURAM**

Present: **Shri. Preman Dinaraj, Chairman**  
**Shri. S. Venugopal, Member**  
**Shri. K. Vikraman Nair, Member**

**Petition No. OA 16/2017**

In the matter of : Petition to recover the additional cost incurred during the period April 2017 to June 2017 over 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 Limited

Petitioner represented by : Shri. Bipin Sankar P, Deputy CE, KSEB Ltd.  
Shri. K.G.P Nampoothiri, EE, TRAC, KSEB Ltd.  
Smt. Seema P Nair, AE, TRAC, KSEB Ltd.

**Order dated 24 .01.2018**

1. Kerala State Electricity Board Limited (KSEB Ltd), (herein after referred to as the petitioner or KSEB Ltd) filed a petition for approval of fuel surcharge for April to June 2017 vide letter No. KSEB/TRAC-D/Fuel Surcharge Petition/4220 dated 18.08.2017, with the following prayers:
  - (i) *The additional financial liability incurred by KSEBL amounting to Rs.74.60 crores due to the variation in power purchase cost resulting from the variation in cost of fuel for the period from April to June 2017 for the procurement/ generation of electricity from various thermal sources may kindly be approved.*
  - (ii) *The approved additional cost may be allowed to be recovered from consumers including bulk consumers and other licensees as fuel surcharge, as per the Regulation 88 of KSERC Tariff Regulations, 2014 with immediate effect.*
2. The details of the additional liability claimed by KSEB Ltd as fuel surcharge is summarized below.

**Table 1**  
Summary of additional liability claimed as fuel surcharge

Sl No	Source	Approved (Rs/ kWh)	Actuals (Rs/ kWh)				Energy procured at ex bus from approved sources (MU)	Addl. liability on account of variation in fuel cost over approved rate (Rs. Cr)
			Apr-17	May-17	Jun-17	Avg		
<b>Central Generating Stations</b>								
1	NTPC-RSTPS Stage I & II	2.63	2.41	2.42	2.55	2.46	440.49	-7.59
2	NTPC-RSTPS Stage III	2.69	2.36	2.36	2.49	2.40	119.05	-3.50
3	Talcher	1.48	1.82	1.87	1.65	1.78	784.47	23.63
4	Simhadri TPS Stage II	2.73	3.06	2.99	2.88	2.97	166.50	4.06
5	NLC-Stage-1	2.42	3.27	3.27	3.27	3.27	123.09	10.52
6	NLC-Stage-II	2.42	3.27	3.27	3.27	3.27	160.07	13.69
7	NLC I Expansion	2.28	3.10	3.09	3.01	3.07	109.46	8.60
8	NLC II Expansion	2.30	2.97	2.97	2.97	2.97	94.38	6.36
9	Vallur STPS	2.07	2.93	2.83	2.88	2.88	87.98	7.13
10	NTPL	2.09	2.76	2.74	2.79	2.76	113.16	7.52
<b>Independent Power Producers</b>								
11	Maithon I	2.00	1.89	1.86	1.97	1.91	283.71	-2.70
12	Maithon II	2.00	1.89	1.86	1.97	1.91	271.12	-2.56
13	Jindal	0.81	1.11	1.06	1.11	1.09	393.77	11.01
14	Jhabua	1.66	1.82	1.78	1.85	1.82	236.65	3.79
15	RTPS	2.30	2.20	2.01	2.51	2.16	54.90	-0.75
16	Mejia	2.30	2.03	2.04	2.12	2.06	193.45	-4.61
Total							3632.26	74.60

3. KSEB Ltd proposed to recover the additional liability as fuel surcharge @Rs. 0.14/unit, as detailed below.

**Table 2**  
Rate of fuel surcharge claimed by KSEB Ltd

Sl No	Particulars	Quantum
1	Amount of Fuel Surcharge (F)( Rs. Cr)	74.60
2	Energy billed for Retail sale to whole consumers including bulk licensees for the first quarter of FY 2017-18 in MU	5336.33
3	Energy billed for domestic consumers having monthly consumption less than 20 units and connected load less than 500 W during the first quarter of FY 2017-18 in MU	0.20
4	Energy billed for Retail sale to consumers other than the domestic consumers with connected load less than 500 W and monthly consumption below 20 units for the first quarter of FY 2017-18 (E) in MU = (2)-(3)	5336.13
5	Rate of fuel surcharge in Paise per unit $\{(F/E)*1000\}$	13.98
<b>Say (14 Paise per Unit)</b>		

4. KSEB Ltd has also filed an application for condonation of delay of '19 days' in filing the application for fuel surcharge. The Commission has condoned the delay and admitted the petition as OA 16/2017.
5. The public hearing on the petition was conducted on 08-11-2017 at the Court Room of the Commission.
6. Shri. Bipin Sankar.P, Dy.CE, KSEB Ltd presented the petition. The summary of the issues presented by KSEB Ltd is given below.
  - (i) The application for approval of fuel surcharge was filed as per the Regulation-88 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, and also in compliance of the directions given by the Commission in the suo-motu tariff order dated 17.04.2017.
  - (ii) The Regulation 88 provides for the recovery of the additional liability incurred in power purchase/ own generation from approved sources and on approved quantum, due to the change in cost of fuel from the approved level, from consumers.
  - (iii) Since the Commission has not provided the monthwise details of the approval of power purchase from each source, KSEB Ltd has estimated the additional liability due to variation in fuel price on the actual power purchase from each approved sources.
  - (iv) The total additional liability during the period from April-2017 to June-2017, due to variation of fuel price of Central Generating Stations is estimated at Rs 70.42 crore and the same from IPPs estimated at Rs 4.18 crore. Thus the total additional liability claimed for the 1<sup>st</sup> quarter of the financial year from April 2017 to June 2017, claimed as fuel surcharge is Rs 74.60 crore. KSEB Ltd prayed that, the above additional liability may be approved to recover from consumers including the consumers of small licensees @ Rs 0.14/unit, over a period of three months from the date of the order.
  - (v) Though the Commission has not approved any power purchase from BSES Kerala power Limited in the suo-motu tariff order dated 17.04.2017, KSEB Ltd in compliance of the direction of the Hon'ble High Court on disposing the fuel stock available at the premises of the BSES plant and subsequent order issued by the Commission, scheduled 61.55MU from BSES Ltd on UI basis. However, BSES has not raised any invoices for the power scheduled since BSES Ltd is not agreeing for UI rates. The Commission may allow the cost of power purchase from BSES at the time of truing up of accounts for the financial year 2017-18.

7. Shri A R Satheesh, President, HT & EHT Association presented the objections against the petition filed by KSEB Ltd. The main issues raised by HT& EHT association is given below.
- (i) KSEB Ltd has no locus standi to file the application for approval of fuel surcharge as per the provisions of the Tariff Regulations, 2014, since KSEB Ltd has challenged the Tariff Regulations, 2014 before the Hon'ble High Court of Kerala.
  - (ii) KSEB Ltd had not filed any application for fuel surcharge for the last eight quarters from the financial year 2015-16.
  - (iii) The fuel surcharge claimed by the KSEB Ltd is not as per the provisions of the Tariff Regulations, 2014. KSEB Ltd has not submitted the necessary documents to substantiate that, the change in cost of power purchase claimed is exclusively due to change in cost of fuel alone.
  - (iv) The energy requirement during the year 2017-18 till October-2017 was much less than the approved level. The electricity tariff at short-term market, energy exchange and traders are much less than the approved rate of Rs 4.00/unit for purchasing power from short-term market. The water position in the reservoirs owned by KSEB Ltd is better compared to the previous year. During the current financial year 2017-18, so far, the additional revenue to KSEB Ltd on account of cross subsidy surcharge from open access consumers, is around Rs 15.00 crore. Also, KSEB Ltd sold 20.48MU through energy exchange, so far during this financial year.
  - (v) KSEB Ltd saved about Rs 248.00 crore on account of reduction in consumption during the year 2017-18 so far. Further, by scheduling 61.50 MU from BSES at the average UI rate of Rs 0.70/unit, the additional benefit earned will be more than Rs 20.00 crore.
  - (vi) KSEB Ltd has not considered the impact of reduction in cost of power purchase from short-term market while claiming fuel surcharge. If that too is also considered, the net fuel surcharge would be (-) 4.72 crore which has to be given back to the consumers. If the short-term power purchase and purchase from traders are considered, the net fuel surcharge payable to the consumers may be increased to Rs 21.70 crore during the period from April-2017 to June-2017.
8. Shri P.S Sreelal, Kerala Samsthana Cherukida Rice Flour & Oil Millers Association, submitted that there was substantial increase in the electricity tariff applicable to rice mills during the last tariff revision effected from 18.04.2017. The Commission may not allow further increase in tariff.
9. Shri Dijo Kappen, representing the domestic consumers submitted that,

- (i) KSEB Ltd has challenged the Tariff Regulations, 2014 before the Hon'ble High Court of Kerala. Without withdrawing the above petition by KSEB Ltd from Hon'ble High Court, the Commission may not hear this petition.
  - (ii) KSEB Ltd has, never taken any steps to pass on the benefit due to reduction in cost of power purchase to the consumers.
  - (iii) Since KSEB Ltd has been functioning under Companies Act, 2013, the accounts should be ready by September of the ensuing year. KSEB Ltd could submit the actuals before the Commission annually by filing applications for truing up.
  - (iv) Commission may not allow to pass on the additional liability claimed by KSEB Ltd as fuel surcharge to the consumers.
10. Shri Pradeep. M, representing Hindalco, submitted that, there is considerable reduction in cost of power purchase in the short term market. M/s Hindalco could save Rs 144 Lakh over last 18 months by purchasing power under open access. KSEB Ltd is also availing power from short term at cheaper rates, and saved substantial amount in power purchase. The consumers are eligible to get subsidy instead of fuel surcharge, duly considering the reduction in cost of power purchase in the short-term markets. Hence requested the Commission to reject the petition filed by KSEB Ltd.
11. Shri Vinod. B, TCC Employees association (CITU) submitted that 50% of the cost of production of TCC is on account of electricity charges. TCC, already in the verge of being under BIFR, and they are not able to bear even an increase of 1 paise per unit. KSEB Ltd is misusing its monopoly status to burden the consumers. If necessary, KSEB Ltd can approach the State Government for getting financial assistance. He requested before the Commission to reject the petition filed by KSEB Ltd.
12. Shri N. Somarajan, Mill Owners Union, requested that the LT IV consumers may be exempted from the additional charge.
13. Shri V. Sukumaran, Powdikonam, submitted that, in the hearing conducted by KSEB, only very few people turns up to express their views since they feel that there is no use in doing so. The number of employees in KSEB Ltd is very high. The losses in KSEB Ltd is due to the inefficiencies of its employees.
14. Based on the deliberations in the public hearing, the Commission vide the daily order dated 13.11.2017 has issued the following clarifications and directions to KSEB Ltd for compliance.
  - (i) The Commission in the suo-motu order dated 17.04.2017, has approved the quantum of power purchase from CGS and other approved sources as provided by KSEB Ltd. In order to claim the fuel surcharge, KSEB Ltd has to submit and get approval of the month wise

schedule of power purchase of the approved quantum from each approved sources for the financial year 2017-18 latest by 23.11.2017.

- (ii) KSEB Ltd shall provide the documentary evidence to establish the additional liability claimed as fuel surcharge, as provided in the Regulation-88 of the Tariff Regulations, 2014, and a copy of the same may be provided to the HT&EHT association. KSEB Ltd may file the comments on the objections raised by the HT &EHT association and other stakeholders, latest by 23.11.2017. The HT&EHT Association and other stakeholders may file the additional submissions, if any, latest by 30.11.2017.
  - (iii) Henceforth, KSEB Ltd shall comply with the time schedule specified in the Tariff Regulations, 2014 for filing the application for approval of fuel surcharge.
15. In compliance of the directions given by the Commission, KSEB Ltd vide the letter dated 29.11.2017 has submitted the following details before the Commission.
- (i) Month wise schedule of power purchase for the FY 2017-18.
  - (ii) Power purchase bills in respect of the claims made in the petition for approval of fuel surcharge.
  - (iii) The comments on the objections raised by the stakeholders.

Regarding the directions of Commission that, henceforth KSEB Ltd shall comply with the time schedule specified in the Tariff Regulations, 2014 for filing the application for approval of fuel surcharges, KSEB Ltd submitted as follows.

‘The fuel surcharge petition has been filed based on the final monthly invoice raised by the power suppliers including the Central Generating Stations (CGS). The actual energy scheduled to each beneficiary from the CGS is being finalized at Regional Energy Accounts by Southern Regional Power Committee at Bangalore. Usually two to three weeks from end of each month is being taken for finalizing the REA. The CGS and other power suppliers have been raising the final invoice only after the finalization of REA. Thus, KSEB Ltd could take minimum four weeks time to finalise and settle the monthly purchase bills from the end of every month. Further, for preparing and submitting the application for fuel surcharge with the approval of the Board of Directors of KSEB Ltd may take another two weeks after finalising the accounts of power purchase of the month at the end of each quarter. Thus, usually ‘5 to 6 weeks’ time may be necessary for filing the application for fuel surcharge from the end of each quarter. Hence, Hon’ble Commission may kindly consider the above facts and condone the delay in filing the application for fuel surcharge within one month from the end of each quarter’.

## Analysis and Decision

16. The Commission has examined in detail the petition filed by KSEB Ltd, the objections made by the stakeholders, additional submissions made by KSEB Ltd, with reference to the provisions of the Electricity Act, 2003 and Tariff Regulations, 2014 notified by the Commission and directions issued by the Hon'ble Appellate Tribunal for Electricity (APTEL) to the State Commissions.
17. 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 than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.”*

18. Hon'ble APTEL vide the 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 the following directions to the State Commissions:*

.....

*(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 no case 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 put in place such formula/ mechanism.”*

19. The Regulation-88 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 (herein after referred as Tariff Regulations, 2014), deals with the 'Fuel Surcharge Formula' and related aspects, which is extracted below for ready reference.

**88. 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 for adjustment by the distribution business/licensee, by way of recovery from or by way of refund to the consumer, 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 of power 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 application 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 close of each quarter, submit to the Commission an application with all relevant details required for the approval of the amount of fuel surcharge to be adjusted from the consumers and of the rate and period of such adjustment: Provided that distribution licensees who purchase electricity from KSEB Limited 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 may be.*

*(8) The adjustment on account of fuel surcharge as approved by the Commission shall be effected 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 month-wise details of the changes in the cost of power purchase with 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 Form-I.

(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, 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.

20. The fuel surcharge formula specified under Annexure X to the Tariff Regulations, 2014 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

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

$$= \sum_1^n Q_g \times (R_1 - R_2)$$

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

$$= \sum_1^n Q_p \times (P_1 - P_2)$$

( $F_g$  and  $F_p$  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

$Q_g$  = 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

$R_1$  = Actual price of fuel in rupees per metric ton

$R_2$  = Approved price of fuel in rupees per metric ton

$P_1$  = Actual price of purchased energy in rupees per kWh

$P_2$  = Approved price of purchased energy in rupees per kWh

21. The Commission vide the tariff order dated 17.04.2017 for the financial year 2017-18 has issued directions to KSEB Ltd to submit regularly, at specified intervals, the application for approval of fuel surcharge and also submit proposals for passing on the impact of change in hydro-thermal mix as per provisions of the Tariff Regulations, 2014.
22. The Commission has examined in detail the fuel surcharge claimed by KSEB Ltd for the first quarter of the financial year 2017-18, i.e., for the period from 1<sup>st</sup> April-2017 to 30<sup>th</sup> June 2017, with reference to the following.
- Source wise quantum of power purchase and cost approved during the first quarter.
  - Actual power purchase details submitted by KSEB Ltd with supporting documents.
  - Provisions in the Tariff Regulations, 2014 regarding fuel surcharge and related issues.
23. The Commission, while approving the tariff order for the financial year 2017-18, had adopted the quantum of power purchase from CGS and other approved long term contracts, as claimed by KSEB Ltd after prudence check. However, in the application for fuel surcharge, the KSEB Ltd has submitted that, since the Commission has not given the approval for month wise power purchase from each sources, the actual quantum of power purchase during the months of April-2017, May-2017 and June 2017 was adopted for claiming additional liability on fuel surcharge. The Commission vide the daily order dated 13.11.2017 has directed the KSEB Ltd to get the approval of the month wise schedule of power purchase based on the annual power purchase approved vide the tariff order dated 17.04.2017 for claiming fuel surcharge as per the Tariff Regulation, 2014. KSEB Ltd vide its additional submission dated 29.11.2017 has provided the same. The Commission has examined the details submitted by KSEB Ltd and decided to approve the same for claiming the fuel surcharge for the FY 2017-18.
24. The additional liability as fuel surcharge claimed by KSEB Ltd from each approved sources in the Tariff order dated 17.04.2014, the actual against the approval and the same admissible as per the Tariff Regulations, 2014 is given in the following tables.

Table-3  
Talcher-II Super Thermal Power Station

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x[(7)-(6)]
Apr-17	246.41	264.54	264.54	246.41	1.48	1.82	9.05	8.38
May-17	254.63	254.20	254.20	254.20	1.48	1.87	9.89	9.91
Jun-17	246.41	265.72	265.72	246.41	1.48	1.65	4.69	4.19
Total							23.63	22.48

Table-4  
Ramagundam Stage –I &II

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x[(7)-(6)]
Apr-17	140.68	142.67	142.67	140.68	2.63	2.41	9.05	-3.10
May-17	145.37	159.01	159.01	145.37	2.63	2.42	9.89	-3.05
Jun-17	140.68	138.01	138.01	138.01	2.63	2.55	4.69	-1.10
Total							23.63	-7.25

Table-5  
Ramagundam STPS Stage-III

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	35.39	41.26	41.26	35.39	2.69	2.36	9.05	-1.17
May-17	36.57	42.96	42.96	36.57	2.69	2.36	9.89	-1.21
Jun-17	35.39	34.83	34.83	34.83	2.69	2.49	4.69	-0.70
Total	107.34	119.05	119.05	106.78			23.63	-3.07

Table-6  
NLC-TPS-II Stage-1

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	30.77	40.42	40.42	30.77	2.42	3.27	3.44	2.62
May-17	31.80	49.90	49.90	31.80	2.42	3.27	4.27	2.70
Jun-17	30.77	32.77	32.77	30.77	2.42	3.27	2.80	2.62
Total	93.35	123.09	123.09	93.35			10.51	7.93

Table-7  
NLC-TPS-II Stage-2

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	43.97	57.73	57.73	43.97	2.42	3.27	4.92	3.74
May-17	45.43	64.34	64.34	45.43	2.42	3.27	5.51	3.86
Jun-17	43.97	38.00	38.00	38.00	2.42	3.27	3.25	3.23
Total	133.37	160.07	160.07	127.40			13.68	10.83

Table-8  
NLC-I- Expansion

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	35.86	44.28	44.28	35.86	2.28	3.10	3.63	2.94
May-17	37.06	26.84	26.84	26.84	2.28	3.09	2.18	2.17
Jun-17	35.86	38.34	38.34	35.86	2.28	3.01	2.80	2.62
Total	108.79	109.46	109.46	98.57			8.60	7.73

Table-9  
NLC-II- Expansion

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	36.29	36.71	36.71	36.29	2.30	2.97	2.47	2.43
May-17	37.50	27.59	27.59	27.59	2.30	2.97	1.86	1.85
Jun-17	36.29	30.08	30.08	30.08	2.30	2.97	2.03	2.02
Total	110.07	94.38	94.38	93.96			6.36	6.30

Table-10  
Simhadri STPS

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	52.65	45.77	45.77	45.77	2.73	3.06	1.51	1.51
May-17	54.41	65.34	65.34	54.41	2.73	2.99	1.71	1.41
Jun-17	52.65	55.40	55.40	52.65	2.73	2.88	0.83	0.79
Total	159.71	166.51	166.51	152.83			4.06	3.71

Table-11  
Vallur STPS

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	28.93	31.83	31.83	28.93	2.07	2.93	2.75	2.49
May-17	29.89	34.59	34.59	29.89	2.07	2.83	2.64	2.27
Jun-17	28.93	21.56	21.56	21.56	2.07	2.88	1.74	1.75
Total	87.74	87.98	87.98	80.38			7.13	6.51

Table-12  
NLC Tamilnadu Power Ltd (NTPL)

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	42.04	46.03	46.03	42.04	2.09	2.76	3.05	2.82
May-17	43.44	42.84	42.84	42.84	2.09	2.74	2.78	2.78
Jun-17	42.04	24.29	24.29	24.29	2.09	2.79	1.69	1.70
Total	127.52	113.16	113.16	109.17			7.52	7.30

Table-13  
Maithon- contract-1

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	85.83	90.24	90.24	85.83	2.00	1.89	-1.04	-0.94
May-17	88.69	96.72	96.72	88.69	2.00	1.86	-1.39	-1.24
Jun-17	85.83	96.75	96.75	85.83	2.00	1.97	-0.26	-0.26
Total	260.36	283.71	283.71	260.36			-2.70	-2.44

Table-14  
Maithon- contract-2

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	85.83	77.61	77.61	77.61	2.00	1.89	-0.89	-0.85
May-17	88.69	96.73	96.73	88.69	2.00	1.86	-1.39	-1.24
Jun-17	85.83	96.78	96.78	85.83	2.00	1.97	-0.27	-0.26
Total	260.36	271.12	271.12	252.14			-2.56	-2.35

Table-15  
DVC Mejia

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	57.99	68.22	68.22	57.99	2.30	2.03	-1.86	-1.57
May-17	59.92	61.13	61.13	59.92	2.30	2.04	-1.59	-1.56
Jun-17	57.99	64.10	64.10	57.99	2.30	2.12	-1.17	-1.04
Total	175.89	193.45	193.45	175.89			-4.61	-4.17

Table-16  
DVC RSTPS

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	27.94	6.15	6.15	6.15	2.30	2.20	-0.06	-0.06
May-17	28.87	34.17	34.17	28.87	2.30	2.01	-0.99	-0.84
Jun-17	27.94	14.58	14.58	14.58	2.30	2.51	0.30	0.31
Total	84.74	54.90	54.90	49.60			-0.75	-0.59

Table-17  
Jindal Power Limited

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	104.70	130.42	130.42	104.70	0.81	1.11	3.86	3.14
May-17	108.19	132.32	132.32	108.19	0.81	1.06	3.26	2.70
Jun-17	104.70	131.03	131.03	104.70	0.81	1.11	3.88	3.14
Total	317.59	393.77	393.77	317.59			11.01	8.99

Table-18  
Jhabua Power Limited

Month	Quantum (MU)				Rate (Rs/ kWh)		Addl liability as FS (Rs.Cr)	
	Approved	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Regulation	Approved	Actual	Claimed by KSEB Ltd	Approved for recovery as 'FS'
(1)	(2)	(3)	(4)	(5)= Lesser of (2) & (3)	(6)	(7)	(8)	(9)= (5)x((7)-(6))
Apr-17	60.65	78.33	78.33	60.65	1.66	1.82	1.28	0.97
May-17	62.67	79.72	79.72	62.67	1.66	1.78	0.99	0.75
Jun-17	60.65	78.60	78.60	60.65	1.66	1.85	1.52	1.15
Total	183.96	236.65	236.65	183.96			3.80	2.87

25. The summary of the fuel surcharge claimed by KSEB Ltd and the same admissible as per the Tariff Regulations 2014 is given below.

Table-19  
Additional liability claimed by KSEB Ltd and admissible as per Tariff Regulation's 2014

Sources	Quantum (MU)				Addl liability as FS (Rs.Cr)	
	Approved vide the order dated 17.04.2017	Actual	Claimed by KSEB L for 'FS'	Eligible for 'FS' as per Tariff Regulation' 2014	Claimed by KSEB Ltd	Admissible as per Tariff Regulations,2014
Talcher-II	747.45	784.46	784.46	747.02	23.63	22.48
Ramagundam I&II	426.74	439.69	439.69	424.07	-7.59	-7.25
Ramagundam-III	107.34	119.05	119.05	106.78	-3.50	-3.07
NLC TPS-II Stage-1	93.35	123.09	123.09	93.35	10.51	7.93
NLC TPS-II Stage-2	133.37	160.07	160.07	127.40	13.68	10.83
NLC-1 Expansion	108.79	109.46	109.46	98.57	8.60	7.73
NLC-II Expansion	110.07	94.38	94.38	93.96	6.36	6.30
Simhadri	159.71	166.51	166.51	152.83	4.06	3.71
Vallur STPS	87.74	87.98	87.98	80.38	7.13	6.51
NTPL	127.52	113.16	113.16	109.17	7.52	7.30
Maithon-1	260.36	283.71	283.71	260.36	-2.70	-2.44
Maithon-2	260.36	271.12	271.12	252.14	-2.56	-2.35
DVC-Mejia	175.89	193.45	193.45	175.89	-4.61	-4.17
DVC-Regunathpur	84.74	54.90	54.90	49.60	-0.75	-0.59
Jindal Power Ltd	317.59	393.77	393.77	317.59	11.01	8.99
Jhabua Power Ltd	183.96	236.65	236.65	183.96	3.80	2.87
Total	3384.99	3631.45	3631.45	3273.06	74.59	64.78

26. As detailed above, the additional liability on power purchase from the approved sources during the first quarter of the FY 2017-18 from 1<sup>st</sup> April-2017 to 30<sup>th</sup> June 2017, due to variation in change in cost of fuel, admissible as fuel surcharge as per the provisions of the Tariff Regulations, 2014 is Rs 64.78 crore as against the claim of Rs 74.59 crore by KSEB Ltd.
27. The Commission has also examined the following while taking final decision on whether the additional liability incurred as above may be allowed to be recovered from the consumers immediately or not.
- (1) Overall cost of purchase incurred by KSEB Ltd during the first quarter.
  - (2) The cost incurred for short term power purchase by KSEB Ltd during the first quarter.



**Overall cost of purchase incurred by KSEB Ltd during the first quarter**

28. The summary of the source wise details of generation and power purchase, approved and the actuals during the first quarter of the financial year 2017-18 is given below.

Table-20

Summary of the Generation and power purchase for the first quarter of the FY 2017-18

Source	Approved	Actual	Difference (-) Reduction, (+) Excess
	(MU)	(MU)	(MU)
Hydro	1567.94	1231.25	-336.69
CGS	2701.31	2394.19	-307.12
IPPs (RE)	39.32	48.17	8.85
BSES	0.00	61.50	61.50
Traders	1621.61	1857.06	235.45
Short-term market	432.10	603.23	171.13
Total	6362.28	6195.40	-166.88

It is seen that, during the first quarter, there is reduction in actual hydel generation and also availability of power from CGS over the approved levels, and this reduction to a certain extent was met by purchasing power from traders as well as from short term market. Further, there is a reduction of about 3% in energy demand over the approved level during the same period.

29. The summary of the month wise power purchase approved and the actuals during the first quarter of the financial year from April-2017 to June 2017 is given below.

Table 21

Total cost of power purchase incurred by KSEB Ltd as against the approval

Month	Approval			Actual			Excess over approval	
	Quantum	Avg rate	Amount	Quantum	Avg rate	Amount	Quantum	Amount
	(MU)	(Rs/ unit)	(Rs.Cr)	(MU)	(Rs/ unit)	(Rs.Cr)	(MU)	(Rs.Cr)
Apr-17	1644.37	3.90	641.30	1680.76	3.87	650.35	36.39	9.05
May-17	1671.86	3.90	652.03	1717.29	3.83	657.23	45.43	5.20
Jun-17	1478.11	3.90	576.46	1504.60	3.83	576.49	26.49	0.03
Total	4794.34	3.90	1869.79	4902.65	3.843	1884.07	108.31	14.28

30. As detailed above, as against the approved quantum of 4794.34MU, the actual power purchased during the first quarter of the financial year 2017-18 was 4902.65 MU, i.e., an increase of 108.31 MU over the approved level. The excess purchase was to compensate the short fall in hydel generation. Similarly, the actual cost of power purchase incurred was Rs 1884.07 crore at the average rate of Rs 3.84/unit, as against the approved cost of Rs 1869.79 crore at the average rate of Rs 3.90/unit. However, the above purchase and its cost does not include the quantum of 61.50 MU scheduled from BSES

Kochi to exhaust the stock of Naphtha with them as per the direction of the Hon'ble High Court.

31. As per the Regulation 89 of the Tariff Regulation, 2014, the additional cost incurred by the distribution licensee due to increase in power purchase over the approved level due to change in hydro-thermal mix can be claimed only after the close of the financial year . The relevant Regulation is extracted below for ready reference.

**“89. Recovery of additional cost due to change in hydro-thermal mix.– (1) The distribution business/licensee shall, within thirty days from the close of every financial year, file separately the particulars relating to additional cost, incurred if any, due to change in hydro-thermal mix on account of reduction in rainfall and consequent increase in cost of purchase of power.**

*(2)The Commission may, after prudence check, approve the additional cost of power purchase on account of change in hydro-thermal mix, after prudence check of all the relevant information submitted by the distribution business/licensee and make appropriate decision on the recovery of such amount.”*

32. Accordingly, the additional cost incurred by KSEB Ltd for excess power purchased over and above the approved quantum, on account of hydro-thermal variation can be considered as per the Regulation-89 of the Tariff Regulations, 2014.
33. Thus the actual cost incurred by the KSEB Ltd for purchasing the approved quantum of 4794.34MU, at the actual average rate of Rs. 3.843/unit amounts to Rs 1842.30 crore, against Rs 1869.79 crore approved by the Commission, i.e., the actual cost incurred for purchasing the approved quantum is Rs 27.34 crore less than the approved amount.

### **Cost incurred for short-term power purchase**

34. The summary of the month wise details of power purchased from short term market, which is already included in Table 21, during the 1<sup>st</sup> quarter of the financial year 2017-18 is given below.

Table 22  
Details of short term power purchase during the first quarter

Month	Approval			Actual			Excess over approval	
	Short term purchase	Rate	Cost	Quantum of Power Purchase	Avg cost of PP	Cost of power purchase	Quantum	Amount
	(MU)	(Rs/unit)	(Rs.Cr)	(MU)	(Rs/unit)	(Rs.Cr)	(MU)	(Rs.Cr)
Apr-17	210.00	4.00	84.00	253.11	3.07	77.70	43.11	-6.30
May-17	186.00	4.00	74.40	259.45	3.05	79.13	73.45	4.73
Jun-17	36.10	4.00	14.44	90.67	2.79	25.31	54.57	10.87
Total	432.10	4.00	172.84	603.23	3.02	182.14	171.13	9.30

35. As shown above, in the tariff order dated 17.04.2017, the Commission had approved to purchase 432.10 MU from short-term market @Rs 4.00/unit during the first quarter. However, the actual purchase was 603.23MU @ Rs.3.02/unit, and thus, though the actual purchase was 171.13 MU higher than the approved level, the additional cost incurred on short term power purchase over approved level during the first quarter was only Rs 9.30 crore, and this was due to the reduction in prices in the short-term market compared to the rate approved for short term purchase.
36. The Commission also notes that, if KSEB had limited the short term purchase to the approved level of 432.10 MU, the cost incurred for the short term power purchase would be only Rs 130.49 crore instead of Rs 172.84 crore approved by the Commission. However, in reality, KSEB Ltd had purchased additional quantum, by restricting the hydel generation as well as to meet the shortfall in generation from CGS, at a cheaper rate than the rate for short term purchase approved by the Commission. The benefit of conserving more water will be available to the consumers in the subsequent months, especially during the high demand summer months.
37. Further, the short term power purchase ceiling rate of Rs 4.00/unit is the ceiling rate approved by the Commission for the whole FY 2017-18. If the actual short-term purchase rate for the whole year is more than Rs 4.00/unit, the Commission may be constrained to approve the short term power purchase cost at Rs 4.00/unit in the process of truing up.
38. As per the Regulation-88 of the Tariff Regulations, 2014, there is no provision to factor the additional liability on short term power purchase on account of increase in short term power purchase rate over approved level.
39. The Commission has analysed all these facts, for taking a considered decision on this matter. Over the years, the Commission has been approving the power purchase and its cost as uncontrollable expenses, except the additional power purchase and its cost on account of under achievement of T&D losses. The fuel surcharge formula and its recovery mechanism was introduced to minimize the distribution licensees from the risk of increase in cost of power purchase on account of variation in fuel prices. However, in the quarter from 1<sup>st</sup> April-2017 to 30<sup>th</sup> June, 2017, though KSEB Ltd has incurred an additional amount of Rs 64.78 Cr on account of increase in cost of fuel for the purchase of power from the approved sources as per the fuel surcharge formula specified by the Commission in the Tariff Regulations, 2014, the power purchase cost incurred by K S E B Ltd. for the approved quantum is 27.34 Crores less than the approved amount. However, K S E B Ltd. has incurred an amount of Rs 14.28 Crore, as shown in Table 21 above, the power purchase cost approved for the quarter due to hydro-thermal mix variation which can be approved only on completion of the financial year . Considering these facts, the Commission decided to defer the recovery of the fuel surcharge approved for the first quarter of the financial year 2017-18.

### **Order of the Commission**

40. Considering the facts and circumstances as detailed in the preceding paragraphs, as well as the relevant statutory provisions in the Electricity Act, 2003 and Regulations, the Commission hereby issues the following orders,-
- (i) Approved an amount of Rs 64.78 crore as fuel surcharge for the first quarter of the financial year 2017-18 from 1<sup>st</sup> April-2017 to 30<sup>th</sup> June 2017.
  - (ii) Defer the recovery of the approved amount of Rs 64.78 crore from consumers till further orders.

The petition is disposed off. Ordered accordingly.

Sd/-  
**K.Vikraman Nair**  
Member

Sd/-  
**S.Venugopal**  
Member

Sd/-  
**Preman Dinaraj**  
Chairman

Approved for issue

**Secretary**