

**BEFORE THE HONOURABLE KERALA STATE ELECTRICITY REGULATORY
COMMISSION**

at its office at C.V. Raman Pillai Road, Vellayambalam. Thiruvananthapuram.

FILING NO /2017

CASE No.

IN THE MATTER OF:

Filing of petition on 'Proposals to recover the additional cost incurred during the period July 2017 to September 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.

AND

IN THE MATTER OF:

Kerala State Electricity Board Limited, Vydyuthi Bhavanam, Pattom, Thiruvananthapuram

Applicant

**Deputy Chief Engineer (Commercial Planning)
with full powers of Chief Engineer
Kerala State Electricity Board Limited**

Affidavit verifying the application for filing the 'Proposals to recover the additional cost incurred during the period July 2017 to September 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.

I, **B.Pradeep**, son of Sri.P.Balachandran, aged 52 years residing at Vipanchika, Anayara P.O., Thiruvananthapuram do solemnly affirm and state as follows:

I am the **Deputy Chief Engineer (Commercial & Planning) with full powers of Chief Engineer** of the Kerala State Electricity Board Limited, Vidyuthi Bhavanam, Pattom, Thiruvananthapuram, and the petitioner in the above matter and I am duly authorized by the Board to make this affidavit on its behalf. I solemnly affirm at Thiruvananthapuram on this the 24th day of November 2017 that the contents of the above petition are true to my information, knowledge and belief. I believe that no part of it is false and no material has been concealed there from.

Deponent

**Deputy Chief Engineer (Commercial Planning)
with full powers of Chief Engineer**
Kerala State Electricity Board Limited,
Vidyuthi Bhavanam, Pattom
Thiruvananthapuram – 695 004

VERIFICATION

I, the above named deponent, solemnly affirm at Thiruvananthapuram on this, the 24th day of November, 2017 that the contents of the affidavit are true to my information, knowledge and belief, that no part of it is false and that no material has been concealed there from.

Deponent

**Deputy Chief Engineer (Commercial Planning)
with full powers of Chief Engineer**
Kerala State Electricity Board Limited
Vidyuthi Bhavanam, Pattom
Thiruvananthapuram – 695 004.

Solemnly affirmed and signed before me.

Advocate and Notary

**BEFORE THE HONOURABLE KERALA STATE ELECTRICITY REGULATORY
COMMISSION**

IN THE MATTER OF: **Proposal to recover the additional cost incurred during the period July 2017 to September 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.**

PETITIONER: **Kerala State Electricity Board Limited
Vydyuthi Bhavanam, Pattom,
Thiruvananthapuram – 695 004**

The petitioner, KSEBL, respectfully submits this petition based on the following provisions of the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 notified as per No. 787/SEA/2011/KSERC dated 14th November 2014.

- I. As per Regulation 88 of the Tariff Regulations 2014, KSEBL is eligible to recover the additional liability on account of variation in actual fuel cost over approved level through fuel surcharge at the rates approved by the Hon'ble Commission. Regulation 88 (5) of KSERC Tariff Regulations, 2014 stipulates that *"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"*.
- II. Further, Honourable Commission in the tariff order dated 17.04.2017 has directed that KSEB Ltd shall submit regularly, at specified intervals, 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.
- III. As per order dated 17.04.2017 this Honorable Commission had approved the power purchase cost of KSEBL as Rs.7339.34 crore and the quantum of generation and power purchase as 25292.45 MU, for the year 2017-18. However, month wise schedule of each source was not specified in the order. Hence KSEBL has prepared this petition based on the variation in fuel cost on actual monthly power purchase from approved sources for the second quarter.
- IV. There has been considerable change in the actual per unit variable cost of generation and power purchase from various sources over the approved level on account of increase in the price of primary fuel, secondary fuel and changes in

calorific value of fuel. An abstract of comparison of approved variable cost and actual and the additional liability due to the variation is given in the **Table 1** below.

Table - 1 - Comparison of approved and actual variable cost at exbus of various sources

Sl No	Source	Approved	Actuals (Rs/ kWh)			Total additional liability for second quarter for 2016-17 (Rs in crores)
		(Rs/ kWh)	Jul-17	Aug-17	Sep-17	
	Central Generating Stations					
1	NTPC-RSTPS Stage I & II	2.63	2.25	2.37	2.40	-14.17
2	NTPC-RSTPS Stage III	2.69	2.21	2.32	2.31	-4.87
3	NTPC-Talcher II STPS	1.48	1.45	1.36	1.33	-7.01
4	NTPC Simhadri TPS Stage II	2.73	2.74	2.83	2.62	0.27
5	NLC-TPS-II Stage-1	2.42	2.76	2.71	2.74	3.63
6	NLC-TPS-II Stage-2	2.42	2.76	2.72	2.74	5.47
7	NLC –TPS-I Expansion	2.28	2.52	2.55	2.57	3.41
8	NLC –TPS-II Expansion	2.30	2.52	2.52	2.54	1.58
9	Vallur STPS	2.07	2.63	2.59	2.82	3.94
10	NTPL	2.09	3.16	3.11	3.13	12.34
11	NTPC Kudgi	2.69	3.32	3.46	3.48	3.85
	Independent Power Producers					
12	Maithon Power Limited-I	2.00	1.96	1.93	2.01	-1.03
13	Maithon Power Limited-II	2.00	1.96	1.93	2.01	-1.03
14	Jindal Power Limited	0.81	1.11	1.11	1.08	10.85
15	Jhabua Power Limited	1.66	1.88	1.69	1.69	1.62
16	DVC RTPS	2.30	2.58	2.59	2.71	0.99
17	DVC Mejia	2.30	2.31	2.31	2.23	-0.11
	Total					19.74

- V. KSEBL has incurred an additional liability of Rs 19.74 crore for purchasing 3460.10 MU of energy from various approved sources during the second quarter of financial year 2017-18. Details in this regard as per the provisions of fuel surcharge formula specified in 'Annexure X' to Tariff Regulations, 2014, are furnished in **Annexure I**. A summary of additional financial liability during the period from July 2017 to September 2017 is furnished in **Annexure II**.
- VI. Therefore it is earnestly appealed that Honourable Commission may approve the additional liability of Rs 19.74 crores for the second quarter of financial year 2017-18 and allow KSEBL to recover this additional cost as fuel surcharge from all categories of

consumers including bulk consumers/licensees from December 2017 onwards @ 4 paise per unit as per the regulations. The details of calculation are furnished in **Annexure III**.

PRAYER

KSEBL humbly prays before this Hon'ble Commission that,

- (a) The additional financial liability incurred by KSEBL, amounting to Rs 19.74 crore, due to the variation in power purchase cost resulting from the variation in cost of fuel for the period from July to September 2017, for the procurement/ generation of energy from various thermal sources as detailed in **Annexure I & II** to 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 88 of KSERC Tariff Regulations, 2014 from December 2017 onwards @ 4 paise per unit.

Deputy Chief Engineer (Commercial & Planning)
with full powers of Chief Engineer

Acc: 1. Formats 1 to 4
2. Annexure I, II & III

Format-I
Details of energy billed for the second quarter

Month	Retail Sales (MU)		T&D loss (%)		Energy Input(MU)	
	Actual	Approved	Actual	Approved	Actual	Approved
July	1638.45		13.59		1896.17	
August	1705.19		13.62		1973.94	
September	1619.45		14.00		1883.14	
	4963.08		13.73		5753.25	

1	Energy sales within the State	Actual
(a)	Total energy sales to LT, HT and EHT consumers, excluding sales to bulk consumers/ other Licensees (MU)	4811.21
(b)	Sale to bulk consumers/ other licensees (MU)	151.87
(c)	Total energy sales (MU)	4963.08
2	Energy Input (Excluding External losses, open access & captive generation) (MU)	5753.25
3	T & D Losses (Internal) (%)	13.73

Format –II
Month wise details of generation from own sources

Month	Energy Generation (MU)	Aux. Consumption (MU)	Net Generation (MU)	Station Heat Rate (kCal/ kWh)	Calorific value of fuel (Kcal/ kg)	Quantity of fuel used			Price of fuel		
				LSHS	LSHS	Diesel (litre)	LSHS (MT)	Lube Oil (Litre)	Diesel (Rs/ Litre)	LSHS (Rs/MT)	Lube Oil (Rs/ Litre)
Jul-17											
BDPP	0.00	0.0466	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KDPP	0.00	0.47	0	0	0	0	0.00	0	0	0	0
Aug-17											
BDPP	0.3149	0.0718	0.2431	2560.80	10610	18252	63.21	1298	43.36	27352	142.56
KDPP	0.09	0.48	-0.40	2063.43	10272.21	1335	17.68	381	46.88	25791.66	117.65
Sep-17											
BDPP	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
KDPP	0.00	0.42	-0.42	2063.43	10272.21	540	0.00	540	46.88	25791.66	117.65

Format-III					
Month Wise Details of Purchase of Energy for the second quarter (claiming for fuel surcharge cost)					
Source	Energy Purchase (MU) at generator bus	Variable Cost (Rs/kWh)		Total variable cost (Rs.Cr)	Approved (E=A*C)
	Actual(A)	Actual (B)	Approved ('C)	Actual (D=A*B)	
Jul-17					
CGS					
NTPC-RSTPS Stage I & II	165.30	2.25	2.63	37.23	43.43
NTPC-RSTPS Stage III	38.95	2.21	2.69	8.60	10.49
NTPC-Talcher II STPS	252.38	1.45	1.48	36.52	37.30
NTPC Simhadri TPS Stage II	62.80	2.74	2.73	17.21	17.15
NLC-TPS-II Stage-1	33.44	2.76	2.42	9.23	8.08
NLC-TPS-II Stage-2	62.05	2.76	2.42	17.12	14.99
NLC –TPS-I Expansion	44.82	2.52	2.28	11.28	10.23
NLC –TPS-II Expansion	30.22	2.52	2.30	7.61	6.94
Vallur STPS	26.00	2.63	2.07	6.83	5.38
NTPL	49.48	3.16	2.09	15.62	10.36
NTPC Kudgi	0.55	3.32	2.69	0.18	0.15
Sub total CGS	766.00			167.43	164.49
Long Term contracts with generators outside the State					
DVC RTPS	11.77	2.58	2.30	3.04	2.71
DVC Mejia	45.37	2.31	2.30	10.49	10.43
Maithon Power Limited- I	98.35	1.96	2.00	19.26	19.67
Maithon Power Limited-II	98.35	1.96	2.00	19.26	19.67
Jindal Power Limited	137.64	1.11	0.81	15.28	11.20
Jhabua Power Limited	57.37	1.88	1.66	10.77	9.50
TOTAL LTA	448.86			78.10	73.19
Total	1214.86			245.53	237.68
Aug-17					
NTPC-RSTPS Stage I & II	173.29	2.37	2.63	41.07	45.53
NTPC-RSTPS Stage III	40.69	2.32	2.69	9.44	10.95
NTPC-Talcher II STPS	222.02	1.36	1.48	30.11	32.81
NTPC Simhadri TPS Stage II	52.28	2.83	2.73	14.77	14.28
NLC-TPS-II Stage-1	49.02	2.71	2.42	13.30	11.85
NLC-TPS-II Stage-2	50.84	2.72	2.42	13.83	12.28
NLC –TPS-I Expansion	44.24	2.55	2.28	11.27	10.10
NLC –TPS-II Expansion	12.56	2.52	2.30	3.17	2.88
Vallur STPS	23.92	2.59	2.07	6.20	4.95
NTPL	51.87	3.11	2.09	16.13	10.86
NTPC Kudgi	30.52	3.46	2.69	10.55	8.21
Total	751.25			169.83	164.71

Long Term contracts with generators outside the State					
DVC RTPS	10.28	2.59	2.30	2.66	2.37
DVC Mejia	35.44	2.31	2.30	8.19	8.15
Maithon Power Limited- I	104.35	1.93	2.00	20.16	20.87
Maithon Power Limited-II	104.35	1.93	2.00	20.16	20.87
Jindal Power Limited	120.25	1.11	0.81	13.35	9.78
Jhabua Power Limited	59.80	1.69	1.66	10.11	9.90
TOTAL LTA	434.46			74.63	71.94
Total	1185.72			244.46	236.65
Sep-17					
NTPC-RSTPS Stage I & II	151.28	2.40	2.63	36.25	39.75
NTPC-RSTPS Stage III	38.76	2.31	2.69	8.97	10.43
NTPC-Talcher II STPS	233.92	1.33	1.48	31.04	34.57
NTPC Simhadri TPS Stage II	25.88	2.62	2.73	6.78	7.07
NLC-TPS-II Stage-1	31.76	2.74	2.42	8.70	7.67
NLC-TPS-II Stage-2	55.37	2.74	2.42	15.18	13.38
NLC –TPS-I Expansion	41.59	2.57	2.28	10.68	9.49
NLC –TPS-II Expansion	25.15	2.54	2.30	6.40	5.77
Vallur STPS	16.60	2.82	2.07	4.68	3.44
NTPL	17.48	3.13	2.09	5.47	3.66
NTPC Kudgi	18.85	3.48	2.69	6.55	5.07
Total	656.63			140.70	140.30
Long Term contracts with generators outside the State					
DVC RTPS	8.96	2.71	2.30	2.43	2.06
DVC Mejia	31.18	2.23	2.30	6.96	7.17
Maithon Power Limited- I	100.72	2.01	2.00	20.23	20.14
Maithon Power Limited-II	100.72	2.01	2.00	20.23	20.14
Jindal Power Limited	120.28	1.08	0.81	12.99	9.79
Jhabua Power Limited	41.03	1.69	1.66	6.93	6.80
TOTAL LTA	402.89			69.78	66.10
Total	1059.52			210.48	206.41
Total for second quarter	3460.10			700.47	680.74

Format-IV

Source wise Energy Input from July-2017 to September-2017 in MU										
Sl No	Particulars	Jul-17		Aug-17		September-17		Total		
		Actual	KSERC order	Actual	KSERC order	Actual	KSERC order	Actual	KSERC order	Differe nce
		(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)
1	Hydro									
	(a) Gross Gen	409.66		478.57		614.25		1502.49		
	(b) Less Aux consumption	2.05		2.39		3.07		7.51		
	(c) Net Hydro Gen	407.62		476.18		611.18		1494.97		
2	KSEB thermal									
	(a) BDPP	0.00		0.31		0.00		0.31		
	(b) KDPP	0.00		0.09		0.00		0.09		
	(c) Subtotal	0.00		0.40		0.00		0.40		
	(d) Less Aux consumption	0.00		0.00		0.00		0.00		
	(e) Net BDPP+KDPP	0.00		0.40		0.00		0.40		
3	Wind Generation(net)	0.18		0.15		0.09		0.41		
4	Solar Generation(net)	0.98		0.91		0.99		2.88		
	Total own generation(net)	408.77		477.64		612.25		1498.67		
3	CGS (Import)	922.31		823.00		796.00		2541.32		
4	IPPs									
	RGCCPP	0.00		4.05		0.00		4.05		
	BSES	0.00		0.00		0.00		0.00		
	KPCL	0.00		0.00		0.00		0.00		
	Wind	15.80		13.03		8.73		37.56		
	Ullunkal(EDCL)	1.29		2.28		2.41		5.98		
	Iruttukanam Stage-I	2.54		2.64		2.54		7.72		
	Iruttukanam Stage-II	1.35		1.39		1.33		4.07		
	Karikkayam HEP	2.95		5.35		6.38		14.68		
	Meenvallom (PSHCL)	1.02		1.65		1.71		4.38		
	Pathamkayam	0.00		3.82		2.47		6.30		
	Subtotal	24.95		34.21		25.58		84.73		
6	Purchase through Longterm contract									
	DVC RTPS	11.77		10.28		8.96		31.02		
	DVC Mejia	45.37		35.44		31.18		111.98		
	Maithon Power Limited- I	98.35		104.35		100.72		303.42		

	Purchase from Maithon power-2 ,ER	98.35		104.35		100.72		303.42		
	Purchase from (JPL STAGE2) -DBFOO	137.64		120.25		120.28		378.17		
	Purchase from Jhabhua- DBFOO	57.37		59.80		41.03		158.21		
	Sub Total	448.86		434.46		402.89		1286.21		
	Purchase through short term contracts							0.00		
	Purchase through exchanges(net)	96.41		192.28		51.60		340.29		
	Deviation settlement mechanism	56.89		58.32		51.47		166.68		
	Total Power Purchase	1549.42	0.00	1542.27	0.00	1327.54	0.00	4419.23	0.00	
	PGCIL losses	55.76		45.97		56.35		158.09		
	Net Power Purchase	1493.66		1496.30		1271.19		4261.15		
	Sale outside the State/Swap	6.27		0.00		0.30		6.57		
	Net Energy demand within the State	1896.17		1973.94		1883.14		5753.25		

DETAILS OF ADDITIONAL LIABILITY**I. CENTRAL GENERATING STATIONS****i. NTPC-RSTPS Stage I & II**

Month	Actual Energy purchased at generator bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	165.30	2.63	2.25	-6.21
Aug-17	173.29	2.63	2.37	-4.46
Sep-17	151.28	2.63	2.40	-3.50
Total	489.88	2.63	2.34	-14.17

ii. NTPC-RSTPS Stage III

Month	Actual Energy purchased at generator bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	38.95	2.69	2.21	-1.88
Aug-17	40.69	2.69	2.32	-1.52
Sep-17	38.76	2.69	2.31	-1.46
Total	118.40	2.69	2.28	-4.87

iii. NTPC Talcher-II STPS

Month	Actual Energy purchased at generator bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	252.38	1.48	1.45	-0.78
Aug-17	222.02	1.48	1.36	-2.70
Sep-17	233.92	1.48	1.33	-3.53
Total	708.33	1.48	1.38	-7.01

iv. **NLC-TPS-II Stage-1**

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	33.44	2.42	2.76	1.14
Aug-17	49.02	2.42	2.71	1.45
Sep-17	31.76	2.42	2.74	1.03
Total	114.21	2.42	2.73	3.63

v. **NLC-TPS-II Stage-2**

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	62.05	2.42	2.76	2.13
Aug-17	50.84	2.42	2.72	1.54
Sep-17	55.37	2.42	2.74	1.80
Total	168.26	2.42	2.74	5.47

vi. **NLC-TPS-1 Expansion**

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	44.82	2.28	2.52	1.05
Aug-17	44.24	2.28	2.55	1.18
Sep-17	41.59	2.28	2.57	1.19
Total	130.65	2.28	2.54	3.41

vii. **NLC-TPS-II Expansion**

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	30.22	2.30	2.52	0.67
Aug-17	12.56	2.30	2.52	0.28
Sep-17	25.15	2.30	2.54	0.62
Total	67.93	2.30	2.53	1.58

viii. NTPC Simhadri TPS- Stage-II

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	62.80	2.73	2.74	0.06
Aug-17	52.28	2.73	2.83	0.50
Sep-17	25.88	2.73	2.62	-0.28
Total	140.96	2.73	2.75	0.27

ix. Vallur STPS

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	26.00	2.07	2.63	1.45
Aug-17	23.92	2.07	2.59	1.25
Sep-17	16.60	2.07	2.82	1.24
Total	66.52	2.07	2.66	3.94

x. NTPL

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	49.48	2.09	3.16	5.26
Aug-17	51.87	2.09	3.11	5.27
Sep-17	17.48	2.09	3.13	1.81
Total	118.83	2.09	3.13	12.34

xi. NTPC KUDGI

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	0.55	2.69	3.32	0.03
Aug-17	30.52	2.69	3.46	2.34
Sep-17	18.85	2.69	3.48	1.48
Total	49.91	2.69	3.46	3.85

xii. Private Generators outside the State

i. Maithon Power Ltd (150 MW) - Contract I

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	98.35	2.00	1.96	-0.41
Aug-17	104.35	2.00	1.93	-0.71
Sep-17	100.72	2.00	2.01	0.09
Total	303.42	2.00	1.97	-1.03

ii. Maithon Power Ltd (150 MW) - Contract II

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	98.35	2.00	1.96	-0.41
Aug-17	104.35	2.00	1.93	-0.71
Sep-17	100.72	2.00	2.01	0.09
Total	303.42	2.00	1.97	-1.03

iii. Jindal Power Limited (200 MW)

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	137.64	0.81	1.11	4.08
Aug-17	120.25	0.81	1.11	3.56
Sep-17	120.28	0.81	1.08	3.20
Total	378.17	0.81	1.10	10.85

iv. **Jhabua Power Limited (115 MW)**

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	57.37	1.66	1.88	1.27
Aug-17	59.80	1.66	1.69	0.21
Sep-17	41.03	1.66	1.69	0.14
Total	158.21	1.66	1.76	1.62

v. **DVC Mejia (100 MW)**

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	45.37	2.30	2.31	0.05
Aug-17	35.44	2.30	2.31	0.04
Sep-17	31.18	2.30	2.23	-0.21
Total	111.98	2.30	2.29	-0.11

vi. **DVC RTPS (50 MW)**

Month	Energy purchased at ex bus	Rate of power Purchase at ex bus		Additional Liability on account of variation in fuel cost over approved rate
		Approved	Actuals	
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)
Jul-17	11.77	2.30	2.58	0.34
Aug-17	10.28	2.30	2.59	0.29
Sep-17	8.96	2.30	2.71	0.37
Total	31.02	2.30	2.62	0.99

xiii. **Details of other power purchases**

i. **Energy generation from liquid fuel stations KDPP,BDPP & Energy procurement from RGCCPP during the period July to September 2017**

Hon'ble Commission had not approved scheduling of power from RGCCPP for the year 2017-18 in the tariff order dated 17.04.2017. KSEBL has scheduled 150 MW on 12.08.2017 and 13.08.2017 generating 4.05 MU of energy, due to the following reasons.

1. Reduction of 242 MW in CGS availability due to annual maintenance of Talcher II Unit IV, Kudamkulam Unit I and NLC Exp Unit 5.
2. Reduction of 379 MW from CGS availability due to forced outage of Talcher II-Unit VI, Kudamkulam Unit II, NLC Exp Unit I&II, NTECL Unit I& III, RSTPS Unit VII.
3. Acute shortage of CGS power to the tune of 854 MW in SR region resulted due to non availability of URS power following outage of CGS stations.
4. High cost of power during peak hours in Power Exchanges due to acute shortage of power in SR region.
5. Reduction of ER – SR corridor to zero on 12.08.2017 and 13.08.2017 as a result of Talcher – Kolar pole shut down, resulting in constraint in availing LTOA power from Jhabua.
6. Forced outage at DVC reducing the power availability from LTOA. Only 454 MW was available out of 687 MW.
7. Non availability of 2 machines of Idukki and one machine at Sabarigiri due to annual maintenance.
8. Increase in demand during these days, as there was no rain.

All the above reasons resulted in shortage of power and hence KSEBL was forced to schedule 150 MW from RGCCPP, 22 MW from KDPP and 52 MW from BDPP. The details of power purchase from liquid fuel stations for the month of August 2017 is given in table below

Details of power purchase /generation from liquid fuel stations for the month of August 2017			
	RGCCPP	KDPP	BDPP
Quantum in MU	4.05	0.09	0.31
Variable cost (Rs in crores)	3.00	0.06	0.27

KSEBL requests before this Hon'ble Commission to approve the power purchase from RGCCPP and generation from BDPP and KDPP at the time of truing up.

ii. Procurement from Short-term market and traders

Source	July				August				September			
	Approved		Actual		Approved		Actual		Approved		Actual	
	Quantum	Rate	Quantum	Rate	Quantum	Rate	Quantum	Rate	Quantum	Rate	Quantum	Rate
Short term Traders	MU	Rs/unit	MU	Rs/unit	MU	Rs/unit	MU	Rs/unit	MU	Rs/unit	MU	Rs/unit
IEX	1946.98*	4.00	88.43	3.10	1946.98*	4.00	143.46	3.92	1946.98*	4.00	48.91	5.58
PXIL			7.79	3.88			46.32	3.85			1.69	6.72
DSM			56.89	1.97			58.32	1.98			51.47	2.41
Total			153.11	2.72			248.10	3.45			102.07	4.00
* Approved power purchase through short term for whole year												

Rates of purchase through short term contracts are within the approved limits.

ANNEXURE II

**SUMMARY OF ADDITIONAL FINANCIAL LIABILITY INCURRED ON ACCOUNT OF CHANGE
IN FUEL COST OF APPROVED SOURCES DURING THE PERIOD JULY TO SEPTEMBER 2017**

Source	Actual Energy procurement (MU)	Per unit cost		Add liability due to variation in fuel cost (Rs. Cr)
		Approved quantity (Rs/kWh)	Actual Weighted average cost for 2 nd quarter (Rs/kWh)	
<u>CGS</u>				
NTPC-RSTPS Stage I & II	489.88	2.63	2.34	-14.17
NTPC-RSTPS Stage III	118.40	2.69	2.28	-4.87
NTPC-Talcher II STPS	708.33	1.48	1.38	-7.01
NTPC Simhadri TPS Stage II	140.96	2.73	2.75	0.27
NLC-TPS-II Stage-1	114.21	2.42	2.73	3.63
NLC-TPS-II Stage-2	168.26	2.42	2.74	5.47
NLC –TPS-I Expansion	130.65	2.28	2.54	3.41
NLC –TPS-II Expansion	67.93	2.30	2.53	1.58
Vallur STPS	66.52	2.07	2.66	3.94
NTPL	118.83	2.09	3.13	12.34
NTPC Kudgi	49.91	2.69	3.46	3.85
Private IPPs outside the State				
Maithon Power Ltd-I	303.42	2.00	1.97	-1.03
Maithon Power Ltd-II	303.42	2.00	1.97	-1.03
Jindal Power Ltd	378.17	0.81	1.10	10.85
Jhabua Power Ltd	158.21	1.66	1.76	1.62
DVC RTPS	31.02	2.30	2.62	0.99
DVC Mejia	111.98	2.30	2.29	-0.11
Total	3460.10			19.74

ANNEXURE III

<u>Rate of Fuel Surcharge in Paise per unit</u>	
Particulars	Quantum
Amount of Fuel Surcharge (F)(Rs in crore)	19.74
Energy billed for Retail sale to whole consumers for the second quarter of FY 2017-18 (E) in MU	4963.08
Energy billed for domestic consumers having monthly consumption less than 20 units and connected load less than 500 W during the second quarter of FY 2017-18 in MU	0.19
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 second quarter of FY 2017-18 (E) in MU	4962.89
Rate of fuel surcharge in Paise per unit $\{(F/E)*100\}$	3.98
Say (4 Paise per Unit)	