

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

**IN THE MATTER OF:** Proposals to introduce Fuel Price Adjustment Charges on all consumers including Bulk Consumers/ Other Licensees to recover the additional financial liability incurred over approved level on Generation and Power Purchase during the period from January-2015 to March-2015

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

The petitioner named above respectfully submits as under:

1. As per the provisions of the KSERC (Fuel surcharge formula) Regulations, 2009, notified vide No. KSERC/2009/ XVII dated 8<sup>th</sup> January 2010 and also duly complying the directions issued by the Hon'ble Commission vide its order dated 14-08-2014 on ARR&ERC for the year 2014-15, KSEBL had filed the petition on fuel surcharge for the period from October 2014 to December 2014, before the Hon'ble Commission on 17.04.2015.
2. During the fourth quarter of the year too, there was was substantial difference in the actual variable cost of generation and power purchase over the approved level on account of the increase in price of coal/ lignite and liquid fuels LSHS and Naphtha. Hence, in conforming to the KSERC (Fuel surcharge formula) Regulations, 2009, KSEBL may submit herewith the petition on fuel surcharge for the period from January 2015 to March-2015.
3. A comparison of the variable cost approved and the actuals for the period from January 2015 to March-2015 are given below.

Table-1. Comparison of variable cost approved and Actual.

Sl No.	Source	Variable cost			
		Approved	Actuals (Rs/ kWh)		
		(Rs/ kWh)	Jan-15	Feb-15	Mar-15
1	NTPC-RSTPS	2.14	2.65	2.57	2.72
2	IGSTPS(Jhajjar)	3.57	4.31	4.50	4.51
3	Talcher Stage-II	1.54	1.50	1.43	1.51
4	Simhadri TPS Stage II	2.09	2.81	2.86	3.04
5	NLC-Stage-1	2.14	2.28	2.30	2.43
6	NLC-Stage-II	1.99	2.28	2.30	2.43
7	NLC Expansion	2.14	2.18	2.16	2.26
8	Vallur STPS	2.15	2.14	1.94	1.71
9	BDPP	10.84	0.00	0.00	0.00
10	KDPP	11.31	8.13	7.42	7.50

4. As per the provisions of the fuel surcharge formula regulations, KSEB has been filing the details of additional liability incurred for procuring energy from approved sources due to the variations in the prices of fuel during the period from January 2015 to March-2015. However, as per the Regulation 3(7) of the KSERC (Fuel surcharge formulae) Regulations, 2009, KSEBL has to file the petition for the fourth quarter by 15<sup>th</sup> of April-2015. However, there was delay in finalizing the REA accounts and to finalise the final settlement accounts, there was a delay of about '30' days in filing the fuel surcharge petition for the fourth quarter. Hon'ble Commission may kindly condone the delay.
5. The details of additional liability incurred by KSEB for procuring energy from NTPC- Talcher-II, Ramagundam, Simhadri, NLC-II Stage-1, NLC-II Stage-2, NLC-II Expansion, IGSTPS (Jhajjar), Vallur STPS and KDPP are submitted herewith for the approval of the Hon'ble Commission.
- (i) **NTPC- Talcher-II STPS**
6. The month wise details of the energy procured from NTPC's Talcher-II STPS, the actual and approved variable cost and the additional liability incurred during the period from January 2015 to March-2015 is detailed below.

Table-2. Details of additional liability from Talcher-II STPS

Month	Power Purchase			Rate		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
		(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Jan-15	264.45	290.89	264.45	1.54	1.50	-1.04	-0.95
Feb-15	238.86	269.62	238.86	1.54	1.43	-2.94	-2.60
Mar-15	264.45	302.06	264.45	1.54	1.51	-1.04	-0.91
Total	767.77	862.58	767.77	1.54	1.48	-5.02	-4.46

(ii) **NTPC- Ramagundam-STPS**

7. The details of the actual and approved variable cost of generation from Ramagundam STPS and the additional liability incurred etc, during the period from January 2015 to March-2015 is detailed below.

Table-3. Details of additional liability from Ramagundam- STPS

Month	Power Purchase			Rate		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
		(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Jan-15	200.38	259.78	200.38	2.14	2.65	13.20	10.18
Feb-15	180.99	238.48	180.99	2.14	2.57	10.14	7.69
Mar-15	200.38	248.64	200.38	2.14	2.72	14.43	11.63
Total	581.74	746.90	581.74	2.14	2.65	37.77	29.51

**(iii) NLC-TPS-II Stage-1**

8. The additional liability incurred for purchasing power from NLC-II stage-1 station due to the variation in variable cost of generation during the period from January 2015 to March-2015 is detailed below.

Table-4. Details of additional liability - NLC- TPS-II Stage-1 (630 MW)

Month	Power Purchase			Rate		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
		(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Jan-15	33.00	46.53	33.00	2.14	2.28	0.65	0.46
Feb-15	29.81	41.97	29.81	2.14	2.30	0.66	0.47
Mar-15	33.00	43.42	33.00	2.14	2.43	1.24	0.94
Total	95.80	131.92	95.80	2.14	2.33	2.55	1.87

**(iv) NLC-TPS-II Stage-2**

9. The details of the additional liability incurred for procuring power from NLC-TPS-II stage-2 during the period from January 2015 to March-2015 is detailed below.

Table-5. Details of additional liability - NLC- TPS-II Stage-2 (840 MW)

Month	Power Purchase			Rate		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
		(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Jan-15	46.99	62.90	46.99	1.99	2.28	1.83	1.36
Feb-15	42.45	55.48	42.45	1.99	2.30	1.71	1.30
Mar-15	46.99	60.56	46.99	1.99	2.43	2.64	2.05
Total	136.43	178.94	136.43	1.99	2.33	6.17	4.72

**(v) NLC-TPS-1 Expansion**

10. The additional liability incurred for purchasing power from NLC TPS-1 Expansion over the approved level during the period from January 2015 to March-2015 is detailed below..

Table-6. Details of additional liability admissible from NLC-TPS-1 Expansion

Month	Power Purchase			Rate		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
		(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Jan-15	37.06	46.56	37.06	2.14	2.18	0.19	0.15
Feb-15	33.47	42.83	33.47	2.14	2.16	0.11	0.08
Mar-15	37.06	47.41	37.06	2.14	2.26	0.55	0.43
Total	107.59	136.81	107.59	2.14	2.20	0.85	0.66

(vi) **IGSTPS- Jhajjar**

11. The details of the approved and actual generation, approved and actual variable cost and the additional liability incurred for procuring power from Indira Gandhi Super Thermal Power Station- Jhajjar during the period from January 2015 to March-2015 is detailed below.

Table-7. Details of additional liability from IGSTPS- Jhajjar

Month	Power Purchase			Rate		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
		(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Jan-15	52.65	125.99	52.65	3.57	4.31	9.27	3.87
Feb-15	47.55	114.97	47.55	3.57	4.50	10.66	4.41
Mar-15	52.65	124.60	52.65	3.57	4.51	11.72	4.95
Total	152.85	365.55	152.85	3.57	4.44	31.65	13.24

(vii) **Simhadri TPS- Stage-II**

12. The details of the additional liability incurred for procuring power from Simhadri TPS- Stage-II during the period from January 2015 to March-2015 is detailed below.

Table-8. Details of additional liability from Simhadri TPS- Stage-II

Month	Power Purchase			Rate		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
		(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Jan-15	51.80	76.62	51.80	2.09	2.81	5.52	3.73
Feb-15	46.78	69.01	46.78	2.09	2.86	5.31	3.60
Mar-15	51.80	69.45	51.80	2.09	3.04	6.58	4.91
Total	150.38	215.08	150.38	2.09	2.90	17.40	12.23

(viii) **Vallur STPS**

13. The details of the approved and actual variable cost, and the additional liability incurred for the purchase of power from Vallur STPS during the period from January 2015 to March-2015 is detailed below.

Table-9. Details of additional liability from Vallur STPS

Month	Power Purchase			Rate		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
		(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Jan-15	30.78	16.82	16.82	2.15	2.14	-0.02	-0.02
Feb-15	27.80	15.52	15.52	2.15	1.94	-0.33	-0.33
Mar-15	30.78	20.57	20.57	2.15	1.71	-0.91	-0.91
Total	89.35	52.90	52.90	2.15	1.91	-1.26	-1.26

(ix) Energy schedule from KDPP

14. Considering the energy demand in the Northern Part of the State, KSEBL is constrained to schedule power from KDPP. The additional liability incurred for scheduling power from KDPP during the period from January 2015 to March-2015 is detailed below.

Table-10 Details of additional liability incurred by way of scheduling power from KDPP

Month	Power Purchase			Rate		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
		(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Jan-15	31.00	13.41	13.41	11.31	8.13	-4.27	-4.27
Feb-15	28.00	10.89	10.89	11.31	7.42	-4.24	-4.24
Mar-15	31.00	10.88	10.88	11.31	7.50	-4.15	-4.15
Total	90.00	35.18	35.18	11.31	7.71	-12.66	-12.66

15. Summary of the Additional financial liability incurred during the period from January 2015 to March-2015.

- (i) The summary of the additional financial liability incurred for procuring electricity from different sources for the period from January 2015 to March-2015 is given below.

Table-13. Summary of the additional liability incurred during the period from January 2015 to March-2015 on account of variation in fuel cost.

Source	Energy procurement			Per unit cost		Add liability	
	Approved quantity	Actual	Admissible as per regulation	Approved	Actual	Actual	Admissible as per regulation
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Talcher-II	767.77	862.58	767.77	1.54	1.48	-5.02	-4.46
Ramagundam- II&III	581.74	746.90	581.74	2.14	2.65	37.77	29.51
NLC-II Stage-1	95.80	131.92	95.80	2.14	2.33	2.55	1.87
NLC-II Stage-2	136.43	178.94	136.43	1.99	2.33	6.17	4.72
NLC- Exp- Stage-1	107.59	136.81	107.59	2.14	2.20	0.85	0.66
Jhajjar	152.85	365.55	152.85	3.57	4.44	31.65	13.24
Simhadri	150.38	215.08	150.38	2.09	2.90	17.40	12.23
Vallur STPS	89.35	52.90	52.90	2.15	1.91	-1.26	-1.26
KDPP	90.00	35.18	35.18	11.31	7.71	-12.66	-12.66
Total	2171.91	2725.86	2080.65			77.45	43.85

16. KSEBL kindly request before the Hon'ble Commission to approve the additional liability admissible as per the KSERC (Fuel Surcharge Formula) Regulations, 2009 as detailed above for the period from

January 2015 to March-2015 and allow to recover the same from all consumers including bulk consumers as fuel surcharge.

**Prayer**

KSEB humbly prayed before the Hon'ble Commission that,

- (a) The additional liability incurred for 'Generation and Power Purchase' due to the variation in fuel prices for the period from January 2015 to March-2015 as detailed in the petition may kindly be approved as 'fuel surcharge' as per the KSERC(Fuel Surcharge Formula) Regulations, 2009.
- (b) The fuel surcharge approved may be allowed to recover from consumers including bulk consumers as per the KSERC(Fuel Surcharge Formula) Regulations, 2009 with immediate effect.

Chief Engineer (Commercial & Tariff)

Format-1

**Details of Energy Billed for retail sale from January-2015 to March-2015 (Provisional)**

<b>1</b>	<b>Energy sales with in the State</b>	<b>Actuals</b>
	Total energy sales to LT, HT and EHT consumers (excl. sales to bulk consumers/ other Licensees) (MU)	4596.02
(a)		
(b)	Sale to bulk consumers/ other licensees (MU)	139.76
(c)	Total energy sales (MU)	4735.78
<b>2</b>	<b>Energy Input (Excluding External losses) (MU)</b>	<b>5565.05</b>
<b>3</b>	<b>T &amp; D Losses (Internal) (%)</b>	<b>14.90</b>

**Format- 2 (a)**  
**Monthwise Details of Generation from BDPP & KDPP**

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)
<b>Jan-15</b>											
BDPP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KDPP	13.41	0.40	13.01	2116.44	10204.00	2954.00	2781.71	10906.00	50.74	38533.79	151.77
<b>Feb-15</b>											
BDPP	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
KDPP	10.89	0.32	10.57	2149.00	10204.00	5034.00	2293.12	9702.45	46.91	34489.70	147.28
<b>Mar-15</b>											
BDPP	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
KDPP	10.88	0.33	10.55	2131.38	10204.00	16490.00	2273.44	9981.92	42.54	34942.27	145.30



Format-3						
Month Wise Details of Purchase of Energy						
Source	Energy Purchase (MU)		Variable Cost (Rs/kWh)		Total variable cost (Rs.Cr)	
	Actual	Approved	Actual	Approved	Actual	Approved
<b>Jan-15</b>						
(i) Talcher-II STPS	290.89	264.45	1.50	1.54	43.75	40.73
(ii) NTPC-RSTPS	259.78	200.38	2.65	2.14	68.79	42.88
(iii) NLC-TPS-II Stage-1	46.53	33.00	2.28	2.14	10.61	7.06
(iv) NLC-TPS-II Stage-2	62.90	46.99	2.28	1.99	14.34	9.35
(v) NLC-TPS-1 Expansion	46.56	37.06	2.18	2.14	10.16	7.93
(vi) Jhajjar	125.99	52.65	4.31	3.57	54.25	18.80
(vii) NTPC -Simhadri	76.62	51.80	2.81	2.09	21.53	10.83
(viii)Vallur STPS	16.82	30.78	2.14	2.15	3.59	6.62
<b>Feb-15</b>						
(i) Talcher-II STPS	269.62	238.86	1.43	1.54	38.58	36.78
(ii) NTPC-RSTPS	238.48	180.99	2.57	2.14	61.17	38.73
(iii) NLC-TPS-II Stage-1	41.97	29.81	2.30	2.14	9.64	6.38
(iv) NLC-TPS-II Stage-2	55.48	42.45	2.30	1.99	12.75	8.45
(v) NLC-TPS-1 Expansion	42.83	33.47	2.16	2.14	9.27	7.16
(vi) Jhajjar	114.97	47.55	4.50	3.57	51.70	16.98
(vii) NTPC -Simhadri	69.01	46.78	2.86	2.09	19.73	9.78
(viii)Vallur STPS	15.52	27.80	1.94	2.15	3.01	5.98
<b>Mar-15</b>						
(i) Talcher-II STPS	302.06	264.45	1.51	1.54	45.48	40.73
(ii) NTPC-RSTPS	248.64	200.38	2.72	2.14	67.64	42.88
(iii) NLC-TPS-II Stage-1	43.42	33.00	2.43	2.14	10.53	7.06
(iv) NLC-TPS-II Stage-2	60.56	46.99	2.43	1.99	14.69	9.35
(v) NLC-TPS-1 Expansion	47.41	37.06	2.26	2.14	10.69	7.93
(vi) Jhajjar	124.60	52.65	4.51	3.57	56.20	18.80
(vii) NTPC -Simhadri	69.45	51.80	3.04	2.09	21.09	10.83
(viii)Vallur STPS	20.57	30.78	1.71	2.15	3.51	6.62

**Format-4**

<b>Sourcewise Energy Input from Jan-2015 to Mar-2015</b>										
Sl No	Particulars	Jan-15		Feb-15		Mar-15		Total		Difference (MU)
		Actual	KSERC order	Actual	KSERC order	Actual	KSERC order	Actual	KSERC order	
		(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	
1	Hydro									
	(a) Gross Gen	395.45	608.01	453.50	597.18	665.81	719.20	1514.77	1924.39	-409.62
	(b) Less Aux consumption	1.98	3.04	2.27	2.99	3.33	3.60	7.57	9.63	-2.05
	(c) Net Hydro Gen	393.48	604.97	451.23	594.20	662.48	715.60	1507.19	1914.76	-407.57
	Wind		0.10		0.10		0.10	0.00	0.30	-0.30
2	KSEB thermal							0.00	0.00	0.00
	(a) BDPP	0.10	0.00	0.03		1.16	9.30	1.29	9.30	-8.01
	(b) KDPP	13.41	31.00	10.89	28.00	10.88	31.00	35.18	90.00	-54.82
	(c) Subtotal	13.51	31.00	10.91	28.00	12.05	40.30	36.47	99.30	-62.83
	(d) Less Aux consumption	0.34	0.78	0.27	0.70	0.30	1.01	0.91	2.49	-1.57
	(e) Net BDPP+KDPP	13.17	30.23	10.64	27.30	11.74	39.29	35.56	96.82	-61.26
3	CGS (Import)	1063.00	955.46	988.54	862.68	1064.10	955.08	3115.65	2773.22	342.43
4	IPPs									
	(a) RGCCPP	0.00	55.80	0.00	50.40	0.00	111.60	0.00	217.80	-217.80
	(b) BSES	0.00	0.00	0.00		0.00		0.00	0.00	0.00
	(c) KPCL	0.00	0.00	0.00		0.00		0.00	0.00	0.00
	(d) Wind	1.51	2.43	1.38	1.27	1.03	2.17	3.93	5.86	-1.93
	(e) Ullumkal	0.54	2.51	0.90	1.88	1.70	2.63	3.15	7.02	-3.88
	(f)MP Steel	1.42	3.40	0.00	3.40	0.00	3.40	1.42	10.20	-8.78
	(g)Irttukkanam	0.62	0.20	0.29	0.08	0.31	0.14	1.22	0.42	0.80
	(h) Irttukkanam-II	0.00	0.06	0.03	0.03	0.04	0.04	0.06	0.13	-0.06
	(i) Philips Carbon	0.00		0.00		0.00		0.00	0.00	0.00
	(j) Karikkayam	0.56	4.96	0.87	3.71	2.09	5.18	3.52	13.84	-10.32
	(k) Meenvallom	0.15		0.11		0.08		0.35	0.00	0.35
	(i) Subtotal	4.79	69.36	3.59	60.77	5.26	125.15	13.64	255.27	-241.63
6	Purchase through traders/ excahnge (net)	375.23	311.50	319.37	324.13	301.24	409.27	995.84	1044.90	-49.06
7	Energy sale	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	SWAP sale	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Total	1849.67	1971.61	1773.37	1869.17	2044.83	2244.49	5667.88	6085.27	-417.39
10	PGCIL losses	27.65	30.57	35.91	27.61	39.28	30.56	102.83	88.74	14.09
11	Net Energy demand within the State	1822.02	1941.03	1737.47	1841.57	2005.56	2213.93	5565.05	5996.53	-431.48