

**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 October 2017 to December 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  
Sd/-

**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 October 2017 to December 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, Vydyuthi 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 4<sup>th</sup> day of April 2018 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

Sd/-

**Deputy Chief Engineer (Commercial & Planning)**

**with full powers of Chief Engineer**

Kerala State Electricity Board  
Limited,

Vydyuthi Bhavanam,  
Pattom

Thiruvananthapuram -  
695 004

**VERIFICATION**

I, the above named deponent, solemnly affirm at Thiruvananthapuram on this, the 4<sup>th</sup> day of April, 2018 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

Sd/-

**Deputy Chief Engineer  
(Commercial Planning)**

**with full powers of Chief Engineer**

Kerala State Electricity Board  
Limited

Vydyuthi 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 October 2017 to December 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 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. Honourable Commission vide order dated 24.01.2018 on petition OA 16/2017 has approved the monthly schedule submitted by KSEBL vide

additional submission dated 29.11.2017. Hence KSEBL has prepared this petition based on the variation in fuel cost from the approved quantum & cost from approved sources for the third quarter.

- IV.** There has been considerable change in the actual per unit variable cost of power purchase from various sources over the approved level on account of changes in the price of primary fuel, secondary fuel and changes in calorific value of fuel.
  
- V.** As per Regulation 88 (2) of Tariff regulation 2014, (Fuel surcharge formula ), fuel surcharge is the amount approved by the Commission to enable the distribution licensee to pass through to the consumer the additional expenditure/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.
  
- VI.** As the fuel surcharge Regulation allows only the additional liability/savings due to variation in cost of fuel in the power purchase cost to pass through to the consumers, KSEBL has been preparing the fuel surcharge petitions based on the additional expenditure/savings due to variation in fuel cost from approved sources. Fuel surcharge petition is mainly for the thermal power stations having two part tariff structure in which the fuel cost component is met through the variable cost of two part tariff. Further Honourable Commission in the order dated 24.01.2017 on Petition No. OA 16/2017 has clearly specified that 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. Thus Regulation-88 of Tariff Regulations 2014 does not provide to factor the additional liability on short term power purchase on account of increased rates over approved level. Hence KSEBL has not included short term power purchase from exchanges, power transfer through deviation settlement mechanism and swap while calculating additional liability as per Fuel Surcharge Regulations.

- VII.** An abstract of comparison of approved variable cost and actual from approved sources and the additional liability due to the variation as per fuel surcharge regulations is given in the **Table 1** below.

<b>Table - 1 - Comparison of approved and actual variable cost at exbus of various sources</b>					
SI No	Source	Approved	Actuals (Rs/ kWh)		
		(Rs/ kWh)	Oct-17	Nov-17	Dec-17
<b>Central Generating Stations</b>					
1	NTPC-RSTPS Stage I & II	2.63	2.36	2.40	2.33
2	NTPC-RSTPS Stage III	2.69	2.31	2.35	2.27
3	Talcher	1.48	1.34	1.40	1.42
4	Simhadri TPS Stage II	2.73	2.84	2.76	2.45
5	NLC-Stage-1	2.42	2.75	2.98	2.98
6	NLC-Stage-II	2.42	2.75	2.98	2.98
7	NLC I Expansion	2.28	2.55	2.74	2.74
8	NLC II Expansion	2.3	2.53	2.70	2.70
9	Vallur STPS	2.07	2.94	3.03	3.06
10	NTPL	2.09	3.24	3.23	3.17
11	NTPCKudgi	2.69	3.57	3.69	3.73
<b>Independent Power Producers</b>					
12	RTPS	2.30	2.69	2.69	2.14
13	Mejia	2.3	2.23	2.23	2.23
14	Maithon I	2.00	2.02	1.95	1.98
15	Maithon II	2.00	2.02	1.95	1.98
16	Jindal	0.81	1.16	1.16	1.17
17	Jhabua	1.66	1.72	1.75	1.75
18	BALCO	1.00	1.04	1.04	1.04

- VIII.** The summary of additional liability for third quarter as per fuel surcharge regulations is given in table below.

<b>Table 2 Additional liability for the third quarter</b>				
Source	Approved Quantum in MU	Actual Quantum in MU	Actual Additional liability(Rs in crores)	Admissible additional liability (Rs in crores)
CGS	2175.42	2163.18	17.32	17.54
IPPs I	<b>1494.74</b>	1222.98	15.33	13.39
Total	3670.16	3386.16	32.65	30.93

- IX.** Honorable Commission may please note that KSEBL has incurred an additional liability of Rs 30.93 crores for purchasing 3386.16 MU of energy from various approved sources during the third 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/savings during the period from October 2017 to December 2017 is furnished in **Annexure II**.

- X.** But during the processing of fuel surcharge petitions of last two quarters, the Commission has sought various details such as actual monthly power purchase cost of the corresponding quarters, additional liability incurred after accounting short term purchase, invoices of corresponding quarter etc. Hence KSEBL is furnishing below the details of the third quarter based on details sought by Honorable Commission during the proceedings of petitions of previous quarters.
- XI.** Honourable Commission vide tariff order dated 17.04.2017 has approved power purchase of 1946.98 MU annually through short term markets at an average rate of Rs 4.00 per unit and transmission charges 0.33 per unit at Kerala periphery. As the rate in exchanges and other short term procurements is all inclusive of transmission charges, the rate approved by Honourable Commission is taken as Rs 4.33 per unit for short term purchases.
- XII.** Honourable Commission may please note that KSEBL had entered into long term contracts with various IPPs under DBFOO mechanism for buying 865 MW of power. Out of this, Honourable Commission approved 415 MW of Power from M/s Jindal India Pvt Ltd (200 MW), M/s Jhabua Power Ltd (115 MW) and M/s BALCO (100 MW). Hon'ble Commission is yet to adopt the rate for 450 MW of power contracted through DBFOO basis given in Table 3 below for the year 2017-18, and sought certain clarification from Government of India and Government of Kerala on some issues. However, since the purchase of power was indispensable, out of the above 450 MW KSEBL availed 350 MW of power from October 2017 onwards, after properly intimating the compelling circumstances to Hon'ble Commission and Government of Kerala. Government of Kerala vide order 21.10.2017 has given permission to draw the contracted power with effect from 01.10.2017 and further ordered that final orders in the matter shall be issued in due course. Honourable Commission vide letter dated 22.12.2017 has accorded sanction to draw contracted power through DBFOO from 01.10.2017 onwards in view of State Government order.

<b>Name of generator</b>	<b>Quantum contracted</b>
Jindal Power Ltd Bid-2,	150 MW
Jhabua Power Ltd-Bid 2	100 MW

Jindal India thermal power Limited	100 MW
East cost energy Pvt Ltd	100 MW
Total	450 MW

**XIII.** While issuing tariff order for 2017-18, Hon'ble Commission has not considered the quantum of power from the above sources and instead has approved purchase of power from short term market. Thus, the quantum purchased from the above contracts of 350 MW on DBFOO basis is compared with the energy approved through short term contracts. The rate of purchase at Kerala periphery inclusive of transmission charges and losses is taken for arriving the additional liability fromm the above generators as given below. The summary of additional liability on account of power purchase from Jindal India Power Limited-PSA II, Jhabua Power Ltd-PSA II, Jindal India Thermal Power Ltd amounts to Rs 3.45 crores.

<b>Table 4 Summary of additional liability on account of power purchase from Jindal Jhabua and JITPL contracted under Bid 2 through DBFOO basis</b>							
Month	Energy purchased at Kerala periphery			Rate of power purchase at Kerala periphery		Addl Liability	
	Approved	Actuals	Admissible for FPA	Approved	Actuals	Actual	Admissible
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
Oct-17		181.43	181.43	4.33	4.25	-1.47	-1.47
Nov-17		208.67	208.67	4.33	4.53	4.17	4.17
Dec-17		206.65	206.65	4.33	4.37	0.76	0.76
Total	596.75	596.75	596.75	4.33	4.39	3.45	3.45

The station wise details are given in para 4 of **Annexure I**.

**XIV.** KSEBL has purchased 136.03 MU from short tem market through exchanges and by means of power transfer through deviation settlement mechanism. The month wise details are given in the table below.

**Table 5 Details of procurement from Short-term market and traders**

Source	October			November			December		
	Quantum	Rate	Amount	Quantum	Rate	Amount	Quantum	Rate	Amount
	MU	Rs/ unit	Rs in crores	MU	Rs/	Rs in crores	MU	Rs/ unit	Rs in crores
IEX	13.6643	5.57	7.61	1.02	3.95	0.40	1.62	4.11	0.67
PXIL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DSM	42.72	2.44	10.44	40.90	2.43	9.93	36.11	2.17	7.84
Total	56.39	3.20	18.05	41.92	2.46	10.33	37.73	2.26	8.51

\*Quantum and rate at Kerala periphery

**XV.** The quantum and rate of short term purchases from power exchanges and power transfer through deviation settlement mechanism at Kerala periphery is taken and the same is compared with rate of power purchase @ Rs 4.33 per unit approved by the Commission for purchase through short term contracts at Kerala periphery. This rate is inclusive of transmission

charges as the rate of purchase through exchanges and short term market is inclusive of transmission charges. The additional liability due to variation in power purchase rate on account of short term purchase from exchanges/dsm is given in table below.

<b>Table 5.2 - Additional liability on account of variation in short term power purchase rate</b>				
	<b>Actual Quantum</b>	<b>Approved rate</b>	<b>Actual rate</b>	<b>Additional liability</b>
<b>Month</b>	<b>MU</b>	<b>Rs/kWh</b>	<b>Rs/kWh</b>	<b>Rs in crores</b>
Oct-17	56.39	4.33	3.20	-6.36
Nov-17	41.92	4.33	2.46	-7.82
Dec-17	37.73	4.33	2.26	-7.83
<b>Total</b>	<b>136.03</b>	<b>4.33</b>	<b>2.71</b>	<b>-22.01</b>

**XVI.** Thus the total additional liability from approved sources after considering short term purchase (on account of change in variable cost for CGS and IPPs and variation in power purchase cost in case of short term purchase) is given in table below.

<b>Table 7</b>				
<b>Source</b>	<b>Approved Quantum in MU*</b>	<b>Actual Quantum in MU*</b>	<b>Actual Additional liability (Rs in crores)</b>	<b>Admissible additional liability (Rs in crores)</b>
CGS	2175.42	2163.18	17.32	17.54
IPPs I**	1494.74	1222.98	15.33	13.38
IPPs II***	596.75	596.75	3.45	3.45
Short term market (exchanges, DSM)	<b>136.03</b>	136.03	-22.01	-22.01
<b>Total</b>	<b>4402.95</b>	<b>4118.95</b>	<b>14.09</b>	<b>12.36</b>

\* Quantum at exbus for CGS and IPPs I, Quantum at Kerala periphery for IPPs II

and short term market

\*\*IPPs approved by suomotu order dated 17.04.2017

\*\*\* IPPs such as Jindal Power Ltd, Jhabua Power Ltd, Jindal India Thermal Power Ltd

**XVII.** In addition to the above, KSEBL had entered into agreement with GMRETL for availing supply of 100MW from 8.00 hrs to 17.00 hrs from November 2017 to March 2018 through swap arrangement and the power returnable at 100 % energy from 16<sup>th</sup> June 2018 to 30<sup>th</sup> September 2018 with time duration from 00.00hrs to 4.00hrs and 22.00 hrs to 24hrs. This matter was already intimated to the

Honourable Commission vide letter dated 01.01.2018. KSEBL has availed 53.80 MU during the month of November and December through this arrangement.

**XVIII.** Further, Hon'ble Commission had not given approval for scheduling power from RGCCPP for the year 2017-18 vide tariff order dated 17.04.2017. But as per power purchase agreement KSEBL is bound to pay fixed charges. KSEBL has incurred Rs 51.78 crores towards fixed charges remitted to RGCCPP for the third quarter. It is humbly submitted that power purchase cost being an uncontrollable cost, Hon'ble Commission may kindly allow this at the time of truing up.

**XIX.** Honourable Commission may please note that the hydro generation for third quarter is greater by 255.71 MU, demand decreased by 283 MU, which in turn decreases the power purchase from various sources including the short term purchase. The comparison of generation and power purchase between actual and approved by Honourable Commission is given in the table below. It may please be noted that the additional liability /savings due to variation in hydro thermal mix is to be considered at the end of financial year and the additional liability due to variation in power purchase due to variation in demand and short term purchase is to be considered at the time of truing up as per prevailing Regulations.

Table 9 Comparison of Approved vs Actual quantum of Generation and Power purchase in MU			
Particulars	Approved	Actual	Deviation
Hydro	1101.54	1357.24	255.71
Small IPP	30.18	37.13	6.95
CGS	2813.77	2554.61	-259.15
IPPs outside State	1434.11	1180.24	-253.87
Short-term	790.22	786.60	-3.61
Power purchase	5068.28	4558.59	-509.69
External sale		29.22	29.22
Demand of State	6169.82	5886.61	-283.21

**XX.** The month wise actual power purchase cost for the third quarter is given in table below.

<b>Table 10 Monthly power purchase cost for third quarter</b>				
	<b>Total quantum at Kerala periphery excluding sale outside State</b>	<b>Total Power Purchase cost</b>	<b>Actual Power purchase cost per unit</b>	<b>Power purchase cost approved by Commission</b>
<b>Month</b>	<b>MU</b>	<b>Rs in crores</b>	<b>Rs/unit</b>	<b>Rs/unit</b>
<b>October</b>	<b>1436.44</b>	<b>554.08</b>	<b>3.86</b>	
<b>November</b>	<b>1530.98</b>	<b>613.34</b>	<b>4.01</b>	
<b>December</b>	<b>1561.93</b>	<b>608.94</b>	<b>3.90</b>	
<b>Total for 3rd quarter</b>	<b>4529.35</b>	<b>1776.36</b>	<b>3.92</b>	<b>3.90</b>

- XXI.** It is prayed that Honourable Commission may approve the additional liability of Rs 30.93 crores for the third 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 @ 6 paise per unit as per the regulations. The details of calculation are furnished in **Annexure III**. The monthly invoices of various sources is enclosed as **Annexure IV**.

### **PRAYER**

KSEBL humbly prays before this Hon'ble Commission that,

- (a) The additional financial liability incurred by KSEBL, amounting to Rs 30.93 crore, due to the variation in power purchase cost resulting from the variation in cost of fuel for the period from October to December 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 onwards @ 6 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 retail sale from Oct-Dec2017 (Provisional)**

<b>1</b>	<b>Energy sales with in the State</b>	<b>Actuals</b>
(a)	Total energy sales to LT, HT and EHT consumers (excl. sales to bulk consumers/ other Licensees) (MU)	4928.97
(b)	Sale to bulk consumers/ other licensees (MU)	147.24
(c)	Total energy sales (MU)	5076.21
<b>2</b>	<b>Energy Input (Excluding External losses) (MU)</b>	<b>5886.59</b>
3	T & D Losses (Internal) (%)	13.77

**Details of energy billed for retail sale for third quarter**

Month	Retail Sales (MU)	T&D loss(%)	Energy Input(MU)
	Actual	Actual	Actual
October	1709.35	13.81	1983.16
November	1677.03	13.74	1944.27
December	1689.82	13.75	1959.16
<b>Total</b>	<b>5076.21</b>	<b>13.77</b>	<b>5886.59</b>

**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)	Caloric 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 (MT)	Lube Oil (Rs/ Litre)
<b>Oct-17</b>											
BDPP	0.00	0.054	-0.054						43.36	27352	0
KDPP	0.00	0.47	-0.47			0.00	0.00	0.00	46.88	25791.66	117.65
<b>Nov-17</b>											
BDPP	0.00	0.054	0.054			15			43.36	27352	0
KDPP	0.09	0.48	-0.40			795.00	0.00	0.00	46.88	25791.66	117.65
<b>Dec-17</b>											
BDPP	0.00	0.056	-0.056			3333	0.00	0.00	43.36	27352	0.00
KDPP	0.00	0.42	-0.42			0.00	0.00	0.00	46.88	25791.66	117.65

Format-III Month Wise Details of Purchase of Energy (claiming for fuel surcharge cost)							
Source	Energy Purchase (MU) at ex bus			Variable Cost at exbus (Rs/kWh)		Total variable cost (Rs.Cr)	
	Actual(A)	Approved('B)	Admissible	Actual (C)	Approved ('D)	Actual E=A*C)	Approved (F=B*D)
Oct-17							
CGS							
RSTPS I & II	159.77	145.37	145.37	2.36	2.63	37.79	38.20
RSTPS III	42.27	36.57	36.57	2.31	2.69	9.77	9.84
Talcher Stage-II	246.86	254.63	246.86	1.34	1.48	33.15	37.63
Simhadri TPS Stage II	35.31	54.41	35.31	2.84	2.73	10.03	14.86
NLC Stage-I	32.72	31.80	31.80	2.75	2.42	9.00	7.69
NLC Stage-II	52.87	45.43	45.43	2.75	2.42	14.54	10.98
NLC 1 Expansion	44.39	37.06	37.06	2.55	2.28	11.30	8.46
NLC II Expansion	21.65	35.15	21.65	2.53	2.30	5.48	8.07
Vallur STPS	17.84	29.89	17.84	2.94	2.07	5.24	6.19
NTPL	29.52	43.44	29.52	3.24	2.09	9.57	9.09
Kudgi	20.01	19.27	19.27	3.57	2.69	7.15	5.19
Sub total CGS	703.21	733.02	666.68	2.18	2.13	153.02	156.19
Long Term contracts with generators o/s the State							
Purchase From DVC Reghunathpur	1.73	28.87	1.73	2.69	2.30	0.47	6.64
Purchase from DVC Mejia	23.19	59.92	23.19	2.23	2.30	5.17	13.78
Purchase from Maithon power-1, ER	84.14	88.69	84.14	2.02	2.00	17.00	17.74
Purchase from Maithon power-2 ,ER	84.14	88.69	84.14	2.02	2.00	17.00	17.74
Purchase from Jindal-Bid-I-DBFOO	123.86	114.35	114.35	1.16	0.81	14.37	9.30
Purchase from jhabhua- Bid I, DBFOO	37.15	66.06	37.15	1.72	1.66	6.39	10.94
Purchase from BALCO-DBFOO	57.09	57.07	57.07	1.04	1.00	5.94	5.69
TOTAL LTA	411.30	503.66	401.78	1.61	1.62	66.34	81.83
<b>Total</b>	<b>1114.51</b>	<b>1236.69</b>	<b>1068.46</b>	<b>1.97</b>	<b>1.92</b>	<b>219.36</b>	<b>238.02</b>
Nov-17							
RSTPS I & II	147.76	140.68	140.68	2.40	2.63	35.51	36.96
RSTPS III	40.06	35.39	35.39	2.35	2.69	9.40	9.53
Talcher Stage-II	273.51	246.41	246.41	1.40	1.48	38.40	36.41
Simhadri TPS Stage II	49.16	52.65	49.16	2.76	2.73	13.58	14.38
NLC Stage-I	23.49	30.77	23.49	2.98	2.42	6.99	7.44
NLC Stage-II	49.67	43.97	43.97	2.98	2.42	14.79	10.62
NLC 1 Expansion	39.11	35.86	35.86	2.74	2.28	10.71	8.18
NLC II Expansion	31.94	34.02	31.94	2.70	2.30	8.62	7.81
Vallur STPS	20.94	28.93	20.94	3.03	2.07	6.34	5.99
NTPL	39.23	42.04	39.23	3.23	2.09	12.66	8.80

<b>Kudgi</b>	18.44	18.65	18.44	3.69	2.69	6.81	5.02
<b>Total</b>	733.32	709.38	685.53	2.23	2.13	163.82	151.15
Long Term contracts with generators o/s the State							
<b>Purchase From DVC Reghunathpur</b>	9.68	27.94	9.68	2.69	2.30	2.60	6.43
<b>Purchase from DVC Mejia</b>	29.04	57.99	29.04	2.23	2.30	6.48	13.34
<b>Purchase from Maithon-1</b>	46.24	85.83	46.24	1.95	2.00	9.01	17.17
<b>Purchase from Maithon-2</b>	46.24	85.83	46.24	1.95	2.00	9.01	17.17
<b>Purchase from Jindal-Bid-I-DBFOO</b>	132.30	110.66	110.66	1.16	0.81	15.35	9.00
<b>Purchase from jhabhua- Bid I, DBFOO</b>	61.46	63.93	61.46	1.75	1.66	10.76	10.59
<b>Purchase from BALCO-DBFOO</b>	68.28	55.23	55.23	1.04	1.00	7.10	5.51
<b>TOTAL LTA</b>	393.24	487.42	358.56	1.53	1.62	60.31	79.19
<b>Total</b>	<b>1126.56</b>	<b>1196.79</b>	<b>1044.08</b>	<b>1.99</b>	<b>1.92</b>	<b>224.12</b>	<b>230.34</b>
Dec-17							
<b>RSTPS I &amp; II</b>	131.43	145.37	131.43	2.33	2.63	30.57	38.20
<b>RSTPS III</b>	40.17	36.57	36.57	2.27	2.69	9.13	9.84
<b>Talcher Stage-II</b>	294.77	254.63	254.63	1.42	1.48	41.83	37.63
<b>Simhadri TPS Stage II</b>	54.72	54.41	54.41	2.45	2.73	13.39	14.86
<b>NLC Stage-I</b>	24.69	31.80	24.69	2.98	2.42	7.35	7.69
<b>NLC Stage-II</b>	50.56	45.43	45.43	2.98	2.42	15.05	10.98
<b>NLC 1 Expansion</b>	35.99	37.06	35.99	2.74	2.28	9.86	8.46
<b>NLC II Expansion</b>	13.58	35.15	13.58	2.70	2.30	3.67	8.07
<b>Vallur STPS</b>	21.29	29.89	21.29	3.06	2.07	6.52	6.19
<b>NTPL</b>	40.82	43.44	40.82	3.17	2.09	12.93	9.09
<b>Kudgi</b>	18.62	19.27	18.62	3.73	2.69	6.94	5.19
<b>Total</b>	726.65	733.02	677.47	2.16	2.13	157.24	156.19
Long Term contracts with generators o/s the State							
<b>Purchase From DVC Reghunathpur</b>	10.48	28.87	10.48	2.14	2.30	2.24	6.64
<b>Purchase from DVC Mejia</b>	35.34	59.92	35.34	2.23	2.30	7.86	13.78
<b>Purchase from Maithon-1</b>	52.35	88.69	52.35	1.98	2.00	10.38	17.74
<b>Purchase from Maithon-2</b>	52.35	88.69	52.35	1.98	2.00	10.38	17.74
<b>Purchase from Jindal-Bid-I-DBFOO</b>	134.43	114.35	114.35	1.17	0.81	15.73	9.30
<b>Purchase from jhabhua- Bid I, DBFOO</b>	75.97	66.06	66.06	1.75	1.66	13.29	10.94
<b>Purchase from BALCO-DBFOO</b>	57.52	57.07	57.07	1.04	1.00	5.98	5.69
<b>TOTAL LTA</b>	418.44	503.66	388.01	1.57	1.62	65.87	81.83
<b>Total</b>	<b>1145.09</b>	<b>1236.69</b>	<b>1065.48</b>	<b>1.95</b>	<b>1.92</b>	<b>223.12</b>	<b>238.02</b>

**Format- IV Sourcewise Energy Input from October-2017 to December-2017 in MU**

Sl No	Particulars	Oct-17		Nov-17		Dec-17		Total		
		Actual	KSERC order	Actual	KSERC order	Actual	KSERC order	Actual	KSERC order	Difference
		(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)	(MU)
1	Hydro									
	(a) Gross Gen	548.68		414.63		398.40		1361.71		
	(b) Less Aux consumption	2.74		2.07		1.99		6.81		
	(c) Net Hydro Gen	545.93	316.1546	412.55	313.7364	396.41	471.6448	1354.90	1101.54	253.36
2	KSEB thermal									
	(a) BDPP	0.00		0.00		0.00		0.00		
	(b) KDPP	0.00		0.00		0.00		0.00		
	(c) Subtotal	0.00		0.00		0.00		0.00		
	(d) Less Aux consumption	0.00		0.00		0.00		0.00		
	(e) Net BDPP+KDPP	0.00		0.00		0.00		0.00		
3	Wind Generation(net)	0.14		0.06		0.10		0.29		
4	Solar Generation(net)	0.65		0.67		0.73		2.06		
	Total own generation(net)	546.72		413.28		397.23		1357.24		
3	CGS (Import)	830.45	982.54	895.64	950.85	921.70	982.54	2647.79	2915.93	-268.15
4	IPPs									
	RGCCPP	0.00		0.00		0.00		0.00		
	BSES	0.00		0.00		0.00		0.00		
	KPCL	0.00		0.00		0.00		0.00		
	Wind	5.95		2.39		3.52		11.87		
	Ullunkal(EDCL)	1.69		1.43		1.14		4.26		
	Iruttukanam Stage-I (VIYYAT)	2.47		1.66		0.91		5.03		
	Iruttukanam Stage-II	1.32		1.12		0.37		2.81		
	Karikkayam HEP(AHPL)	3.63		2.90		2.09		8.61		
	Meenvallom (PSHCL)	1.35		0.53		0.33		2.21		
	Pathamkayam	1.78		0.44		0.11		2.33		
	Subtotal	18.18	10.98	10.47	10.13	8.48	9.07	37.13	30.18	6.95
6	Purchase through Longterm contract									
	<b>Purchase From DVC Reghunathpur</b>	1.73	28.87	9.68	27.94	10.48	28.87	21.89	85.68	-63.79
	<b>Purchase from DVC Mejia</b>	23.19	59.92	29.04	57.99	35.34	59.92	87.57	177.83	-90.26
	<b>Purchase from Maithon power-1, ER</b>	84.14	88.69	46.24	85.83	52.35	88.69	182.73	263.22	-80.49
	<b>Purchase from Maithon power-2, ER</b>	84.14	88.69	46.24	85.83	52.35	88.69	182.74	263.22	-80.49

	<b>Purchase from (JPL STAGE2) -DBFOO</b>	123.86	114.35	132.30	110.66	134.43	114.35	390.59	339.37	51.22
	<b>Purchase from jhabhua-SGPLNLR,TPCL DBFOO</b>	37.15	66.06	61.46	63.93	75.97	66.06	174.58	196.05	-21.47
	Purchase from jhabhua- (PSA-2 ) SGPLNLR,TPCL DBFOO	24.45		52.34		46.31		123.10		123.10
	Purchase from (JPL STAGE2) - (PSA-2)DBFOO	92.92		99.23		98.26		290.40		290.40
	Purchase from JITPL	70.68		65.19		70.37		206.24		206.24
	Purchase from BALCO	57.09	57.07	68.28	55.23	57.52	57.07	182.89	169.38	13.51
	Sub Total	599.35	503.66	610.00	487.42	633.38	503.66	1842.73	1494.74	347.98
	Purchase through short term contracts									
	Purchase through exchanges(net)	13.92		1.04		1.65		16.62		
	Deviation settlement mechanism	42.72		40.90		36.11		119.73		
	Swap return	0.00	284.63	26.50	211.47	27.30	211.47	53.80	707.57	-517.43
	Total Generation & Power Purchase	2051.34	1770.84	1998.33	1649.73	2026.46	1697.68	6076.13	5118.25	957.89
	PGCIL losses	48.33		53.09		58.90		160.32		
	Net Power Purchase	2003.02		1945.24		1967.56		5915.81		
	Sale outside the State/Swap	19.85		0.97		8.40		29.22		
	Net Energy demand within the State	1983.16		1944.27		1959.16		5886.59		

**ANNEXURE I**  
**DETAILS OF ADDITIONAL LIABILITY**

**1. Details of Power Purchases - Energy procurement from Central Generating Stations during the period October to December 2017**

<b>Table 1 - Central Generating Stations</b>							
<b>Month</b>	<b>Energy purchased at ex bus</b>			<b>Variable cost of power Purchase at ex bus</b>		<b>Additional Liability</b>	
	<b>Approved</b>	<b>Actual</b>	<b>Admissi ble for FPA</b>	<b>Approv ed</b>	<b>Actual</b>	<b>Actual</b>	<b>Admissible</b>
	<b>(MU)</b>	<b>(MU)</b>	<b>(MU)</b>	<b>(Rs/kW h)</b>	<b>(Rs/kW h)</b>	<b>(Rs. Cr)</b>	<b>(Rs. Cr)</b>
<b>1.1 NTPC-RSTPS Stage I &amp; II</b>							
Oct-17	145.37	159.77	145.37	2.63	2.36	-4.19	-3.82
Nov-17	140.68	147.76	140.68	2.63	2.40	-3.32	-3.16
Dec-17	145.37	131.43	131.43	2.63	2.33	-3.96	-3.96
<b>Total</b>	<b>431.43</b>	<b>438.96</b>	<b>417.49</b>	<b>2.63</b>	<b>2.37</b>	<b>-11.47</b>	<b>-10.94</b>
<b>1.2 NTPC-RSTPS Stage III</b>							
Oct-17	36.57	42.27	36.57	2.69	2.31	-1.61	-1.39
Nov-17	35.39	40.06	35.39	2.69	2.35	-1.38	-1.22
Dec-17	36.57	40.17	36.57	2.69	2.27	-1.68	-1.53
<b>Total</b>	<b>108.52</b>	<b>122.51</b>	<b>108.52</b>	<b>2.69</b>	<b>2.31</b>	<b>-4.67</b>	<b>-4.14</b>
<b>1.3 NTPC Talcher-II STPS</b>							
Oct-17	254.63	246.86	246.86	1.48	1.34	-3.33	-3.33
Nov-17	246.41	273.51	246.41	1.48	1.40	-2.02	-1.82
Dec-17	254.63	294.77	254.63	1.48	1.42	-1.73	-1.50
<b>Total</b>	<b>755.67</b>	<b>815.13</b>	<b>747.90</b>	<b>1.48</b>	<b>1.39</b>	<b>-7.08</b>	<b>-6.64</b>
<b>1.4 NLC - TPS - II Stage 1</b>							
Oct-17	31.80	32.72	31.80	2.42	2.75	1.09	1.06
Nov-17	30.77	23.49	23.49	2.42	2.98	1.32	1.32
Dec-17	31.80	24.69	24.69	2.42	2.98	1.38	1.38
<b>Total</b>	<b>94.37</b>	<b>80.90</b>	<b>79.98</b>	<b>2.42</b>	<b>2.89</b>	<b>3.79</b>	<b>3.76</b>
<b>1.5 NLC-TPS-II Stage-2</b>							
Oct-17	45.43	52.87	45.43	2.42	2.75	1.76	1.52
Nov-17	43.97	49.67	43.97	2.42	2.98	2.79	2.47
Dec-17	45.43	50.56	45.43	2.42	2.98	2.84	2.55
<b>Total</b>	<b>134.84</b>	<b>153.09</b>	<b>134.84</b>	<b>2.42</b>	<b>2.90</b>	<b>7.39</b>	<b>6.53</b>
<b>Month</b>	<b>Energy purchased at ex bus</b>			<b>Variable cost of power purchase at ex bus</b>		<b>Additional Liability</b>	
	<b>Approved</b>	<b>Actual</b>	<b>Admis sible</b>	<b>Approv ed</b>	<b>Actual</b>	<b>Actual</b>	<b>Admissible</b>

			for FPA				
	(MU)	(MU)	(MU)	(Rs/kW h)	(Rs/k Wh)	(Rs. Cr)	(Rs. Cr)
<b>1.6 NLC-TPS-I Expansion</b>							
Oct-17	37.06	44.39	37.06	2.28	2.55	1.17	0.98
Nov-17	35.86	39.11	35.86	2.28	2.74	1.79	1.64
Dec-17	37.06	35.99	35.99	2.28	2.74	1.64	1.64
<b>Total</b>	<b>109.98</b>	<b>119.49</b>	<b>108.91</b>	<b>2.28</b>	<b>2.67</b>	<b>4.60</b>	<b>4.26</b>
<b>1.7 NLC-TPS-II Expansion</b>							
Oct-17	35.15	21.65	21.65	2.30	2.53	0.51	0.51
Nov-17	34.02	31.94	31.94	2.30	2.70	1.29	1.29
Dec-17	35.15	13.58	13.58	2.30	2.70	0.55	0.55
<b>Total</b>	<b>104.33</b>	<b>67.18</b>	<b>67.18</b>	<b>2.30</b>	<b>2.65</b>	<b>2.35</b>	<b>2.35</b>
<b>1.8 NTPC Simhadri TPS - Stage II</b>							
Oct-17	54.41	35.31	35.31	2.73	2.84	0.38	0.38
Nov-17	52.65	49.16	49.16	2.73	2.76	0.16	0.16
Dec-17	54.41	54.72	54.41	2.73	2.45	-1.55	-1.55
<b>Total</b>	<b>161.47</b>	<b>139.20</b>	<b>138.88</b>	<b>2.73</b>	<b>2.66</b>	<b>-1.01</b>	<b>-1.00</b>
<b>1.9 Vallur STPS</b>							
Oct-17	29.89	17.84	17.84	2.07	2.94	1.55	1.55
Nov-17	28.93	20.94	20.94	2.07	3.03	2.00	2.00
Dec-17	29.89	21.29	21.29	2.07	3.06	2.11	2.11
<b>Total</b>	<b>88.71</b>	<b>60.07</b>	<b>60.07</b>	<b>2.07</b>	<b>3.01</b>	<b>5.66</b>	<b>5.66</b>
<b>1.10 NTPL</b>							
Oct-17	43.44	29.52	29.52	2.09	3.24	3.39	3.39
Nov-17	42.04	39.23	39.23	2.09	3.23	4.44	4.44
Dec-17	43.44	40.82	40.82	2.09	3.17	4.39	4.39
<b>Total</b>	<b>128.92</b>	<b>109.57</b>	<b>109.57</b>	<b>2.09</b>	<b>3.21</b>	<b>12.22</b>	<b>12.22</b>
<b>1.11 NTPL KUDGI</b>							
Oct-17	19.27	20.01	19.27	2.69	3.57	1.77	1.70
Nov-17	18.65	18.44	18.44	2.69	3.69	1.85	1.85
Dec-17	19.27	18.62	18.62	2.69	3.73	1.93	1.93
<b>Total</b>	<b>57.19</b>	<b>57.08</b>	<b>56.33</b>	<b>2.69</b>	<b>3.66</b>	<b>5.54</b>	<b>5.48</b>

**2. Details of Power Purchases - Energy procurement from Private Generators Outside the State during the period October to December 2017**

<b>Table 2 - Private Generators Outside the State</b>							
Month	Energy purchased at ex bus			Variable cost of power Purchase at ex bus		Additional Liability	
	Approved	Actual	Admissi ble for FPA	Approv ed	Actual	Actual	Admissible

	(MU)	(MU)	(MU)	(Rs/kW h)	(Rs/kW h)	(Rs. Cr)	(Rs. Cr)
<b>2.1 Maithon Power Ltd (150 MW) -</b>							
<b>Contract I</b>							
Oct-17	88.69	84.14	<b>84.14</b>	2.00	2.02	0.18	0.18
Nov-17	85.83	46.24	<b>46.24</b>	2.00	1.95	-0.24	-0.24
Dec-17	88.69	52.35	<b>52.35</b>	2.00	1.98	-0.09	-0.09
<b>Total</b>	<b>263.22</b>	<b>182.73</b>	<b>182.73</b>	<b>2.00</b>	<b>1.99</b>	<b>-0.15</b>	<b>-0.15</b>
<b>2.2 Maithon Power Ltd (150 MW) -</b>							
<b>Contract II</b>							
Oct-17	88.69	84.14	<b>84.14</b>	2.00	2.02	0.18	0.18
Nov-17	85.83	46.24	<b>46.24</b>	2.00	1.95	-0.24	-0.24
Dec-17	88.69	52.35	<b>52.35</b>	2.00	1.98	-0.09	-0.09
<b>Total</b>	<b>263.22</b>	<b>182.74</b>	<b>182.74</b>	<b>2.00</b>	<b>1.99</b>	<b>-0.15</b>	<b>-0.15</b>
<b>2.3 Jindal Power Limited (200 MW)</b>							
Oct-17	114.35	123.86	114.35	0.81	1.16	4.29	3.96
Nov-17	110.66	132.30	110.66	0.81	1.16	4.58	3.83
Dec-17	114.35	134.43	114.35	0.81	1.17	4.79	4.07
<b>Total</b>	<b>339.37</b>	<b>390.59</b>	<b>339.37</b>	<b>0.81</b>	<b>1.16</b>	<b>13.66</b>	<b>11.87</b>
<b>2.4 Jhabua Power Limited (115 MW)</b>							
Oct-17	66.06	37.15	37.15	1.66	1.72	0.24	0.24
Nov-17	63.93	61.46	61.46	1.66	1.75	0.58	0.58
Dec-17	66.06	75.97	66.06	1.66	1.75	0.71	0.62
<b>Total</b>	<b>196.05</b>	<b>174.58</b>	<b>164.68</b>	<b>1.66</b>	<b>1.74</b>	<b>1.53</b>	<b>1.43</b>
<b>Month</b>	<b>Energy purchased at ex bus</b>			<b>Variable cost of power Purchase at ex bus</b>		<b>Additional Liability</b>	
	<b>Approved</b>	<b>Actual</b>	<b>Admissible for FPA</b>	<b>Approved</b>	<b>Actual</b>	<b>Actual</b>	<b>Admissible</b>
	<b>(MU)</b>	<b>(MU)</b>	<b>(MU)</b>	<b>(Rs/kW h)</b>	<b>(Rs/kWh)</b>	<b>(Rs. Cr)</b>	<b>(Rs. Cr)</b>
<b>2.5 BALCO - (DBFOO)</b>							
Oct-17	57.07	57.09	57.07	1.00	1.04	0.25	0.25

Nov-17	55.23	68.28	55.23	1.00	1.04	0.29	0.24
Dec-17	57.07	57.52	57.07	1.00	1.04	0.25	0.25
<b>Total</b>	<b>169.38</b>	<b>182.89</b>	<b>169.38</b>	<b>1.00</b>	<b>1.04</b>	<b>0.79</b>	<b>0.73</b>
<b>2.6 DVC Mejia (100 MW)</b>							
Oct-17	59.92	23.19	23.19	2.30	2.23	-0.16	-0.16
Nov-17	57.99	29.04	29.04	2.30	2.23	-0.20	-0.20
Dec-17	59.92	35.34	35.34	2.30	2.23	-0.27	-0.27
<b>Total</b>	<b>177.83</b>	<b>87.57</b>	<b>87.57</b>	<b>2.30</b>	<b>2.23</b>	<b>-0.63</b>	<b>-0.63</b>
<b>2.7 DVC RTPS (50 MW)</b>							
Oct-17	28.87	1.73	1.73	2.30	2.69	0.07	0.07
Nov-17	27.94	9.68	9.68	2.30	2.69	0.37	0.37
Dec-17	28.87	10.48	10.48	2.30	2.14	-0.17	-0.17
<b>Total</b>	<b>85.68</b>	<b>21.89</b>	<b>21.89</b>	<b>2.30</b>	<b>2.43</b>	<b>0.27</b>	<b>0.27</b>

### **3 Summary of total additional liability for the third quarter**

The summary of additional liability as per fuel surcharge regulations is given below.

<b>Table 3 Summary of additional liability as per fuel surcharge regulations</b>					
<b>Source</b>	<b>Approved energy procurement (MU)</b>	<b>Actual Energy procurement (MU)</b>	<b>Per unit cost</b>		<b>Admissible Additional liability on account of variation in power purchase cost (Rs. Cr)</b>
			<b>Approved Rate (Rs/kWh)</b>	<b>Actual rate (Rs/kWh)</b>	
CGS					
<b>RSTPS I &amp; II</b>	<b>431.43</b>	<b>438.96</b>	<b>2.63</b>	<b>2.37</b>	<b>-10.94</b>
<b>RSTPS III</b>	<b>108.52</b>	<b>122.51</b>	<b>2.69</b>	<b>2.31</b>	<b>-4.14</b>
<b>Talcher Stage-II</b>	<b>755.67</b>	<b>815.13</b>	<b>1.48</b>	<b>1.39</b>	<b>-6.64</b>
<b>Simhadri TPS Stage II</b>	<b>161.47</b>	<b>139.20</b>	<b>2.73</b>	<b>2.66</b>	<b>-1.00</b>
<b>NLC Stage-I</b>	<b>94.37</b>	<b>80.90</b>	<b>2.42</b>	<b>2.89</b>	<b>3.76</b>
<b>NLC Stage-II</b>	<b>134.84</b>	<b>153.09</b>	<b>2.42</b>	<b>2.90</b>	<b>6.53</b>
<b>NLC 1 Expansion</b>	<b>109.98</b>	<b>119.49</b>	<b>2.28</b>	<b>2.67</b>	<b>4.26</b>
<b>NLC II Expansion</b>	<b>104.33</b>	<b>67.18</b>	<b>2.3</b>	<b>2.65</b>	<b>2.35</b>
<b>Vallur STPS</b>	<b>88.71</b>	<b>60.07</b>	<b>2.07</b>	<b>3.01</b>	<b>5.66</b>
<b>NTPL</b>	<b>128.92</b>	<b>109.57</b>	<b>2.09</b>	<b>3.21</b>	<b>12.22</b>
<b>NTPC Kudgi</b>	<b>57.19</b>	<b>57.08</b>	<b>2.69</b>	<b>3.66</b>	<b>5.48</b>
<b>Sub Total</b>	<b>2175.42</b>	<b>2163.18</b>	<b>2.13</b>	<b>2.19</b>	<b>17.54</b>
<b>Private IPPs outside the State</b>					
<b>DVC RTPS</b>	<b>85.68</b>	<b>21.89</b>	<b>2.3</b>	<b>2.43</b>	<b>0.27</b>
<b>DVC Mejia</b>	<b>177.83</b>	<b>87.57</b>	<b>2.3</b>	<b>2.23</b>	<b>-0.63</b>
<b>Maithon Power Ltd-I, ER</b>	<b>263.22</b>	<b>182.73</b>	<b>2</b>	<b>1.99</b>	<b>-0.15</b>
<b>Maithon Power Ltd-II, ER</b>	<b>263.22</b>	<b>182.74</b>	<b>2</b>	<b>1.99</b>	<b>-0.15</b>
<b>Jindal Power Ltd(DBFOO)-PSA I</b>	<b>339.37</b>	<b>390.59</b>	<b>0.81</b>	<b>1.16</b>	<b>11.87</b>
<b>Jhabua Power Ltd(DBFOO)-PSA I</b>	<b>196.05</b>	<b>174.58</b>	<b>1.66</b>	<b>1.74</b>	<b>1.43</b>
<b>BALCO</b>	<b>169.38</b>	<b>182.89</b>	<b>1.00</b>	<b>1.04</b>	<b>0.73</b>
<b>Total</b>	<b>3670.16</b>	<b>3386.16</b>	<b>1.93</b>	<b>1.97</b>	<b>30.93</b>

### **4 Details of other power purchases :- Energy procurement through DBFOO contracts under Bid 2**

4.1 As stated in the petition, KSEBL had entered into long term contracts with various IPPs under DBFOO mechanism for buying

865 MW of power. Out of this, Honorable Commission approved 415 MW of Power from M/s Jindal India Pvt Ltd (200 MW), M/s Jhabua Power Ltd (115 MW) and M/s BALCO (100 MW). Hon'ble Commission is yet to adopt the rate for 450 MW of power contracted through DBFOO basis for the year 2017-18, and sought certain clarification from Government of India and Government of Kerala on some issues. However, since the purchase of power was indispensable, out of the above 450 MW KSEBL availed 350 MW of power from October 2017 onwards, after properly intimating to Hon'ble Commission and Government of Kerala the compelling circumstances to schedule power. Government of Kerala vide order 21.10.2017 has given permission to draw the contracted power with effect from 01.10.2017 and further ordered that final orders in the matter shall be issued in due course. Honourable Commission vide letter dated 22.12.2017 has accorded sanction to draw contracted power through DBFOO from 01.10.2017 onwards in view of State Government order. The details of power purchase from these stations are given below.

**Table 4.1 Power procurement details for power contracted through DBFOO basis under Bid 2 not approved by the Commission vide suomotu order**

Month	Jindal Power Ltd (150 MW)			Jhabua Power Ltd (100 MW)			JITPL (100 MW)		
	Energy purchased at Kerala periphery	Rate of power purchase *	Total Power purchase cost	Energy purchased at Kerala periphery	Rate of power purchase *	Total Power purchase cost	Energy purchased at Kerala periphery	Rate of power purchase *	Total Power purchase cost
	MU	Rs/unit	Rs in crores	MU	Rs/unit	Rs in crores	MU	Rs/unit	Rs in crores
Oct-17	89.18	4.49	40.05	23.43	3.47	8.12	68.82	4.20	28.92
Nov-17	95.18	4.37	41.62	50.18	5.16	25.90	63.31	4.27	27.01
Dec-17	94.10	4.42	41.57	44.35	4.50	19.97	68.20	4.21	28.70
Total	278.46	4.43	123.24	117.96	4.58	53.98	200.33	4.22	84.63

**\*Rate of power purchase at Kerala periphery**

The wide variation in rates of Jhabua is due to following reasons

- For the month of October ,the availability is less than 85 and hence as per the power supply agreement clause a damage of Rs 2.67 is deducted from fixed charges and hence the lower value.
- For the month of November ,there was a reduction in availability due to fuel shortage and was only 76 %. As per power supply agreement the non availability due to shortage of fuel is to be treated as deemed availability and full fixed charges has to be paid and hence the higher rate .

4.2 While issuing tariff order for 2017-18, Hon'ble Commission has not considered the quantum of power from the above sources and instead has approved purchase of power from short term market. Thus, the quantum purchased from the above contracts of 350 MW on DBFOO basis is compared with the energy approved through short term contracts. The rate of purchase at Kerala periphery inclusive of transmission charges and losses is taken for arriving the additional liability form the above generators contracted through DBFOO basis.

4.3 The additional liability on account of the purchase from above generators is detailed in the table below.

<b>Table 4.2 - Additional liability on account of the purchase from above generators</b>							
Month	Energy purchased at generator bus			Rate at Kerala periphery		Additional Liability	
	Approved	Actual	Admissible for FPA	Approved	Actual	Actual	Admissible
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
<b>4.2.1 Jindal Power Ltd-PSA-II-150</b>							
<b>MW</b>							
Oct-17	89.18	89.18	89.18	4.33	4.49	1.43	1.43
Nov-17	95.18	95.18	95.18	4.33	4.37	0.41	0.41
Dec-17	94.10	94.10	94.10	4.33	4.42	0.83	0.83
<b>Total</b>	<b>278.46</b>	<b>278.46</b>	<b>278.46</b>	<b>4.33</b>	<b>4.43</b>	<b>2.66</b>	<b>2.66</b>
<b>4.2.2 Jhabua Power Ltd-100</b>							
<b>MW</b>							
Oct-17		23.43	23.43	4.33	3.47	-2.03	-2.03
Nov-17		50.18	50.18	4.33	5.16	4.17	4.17
Dec-17		44.35	44.35	4.33	4.50	0.76	0.76
<b>Total</b>	<b>117.96</b>	<b>117.96</b>	<b>117.96</b>	<b>4.33</b>	<b>4.58</b>	<b>2.91</b>	<b>2.91</b>
<b>4.2.3 Jindal India Thermal Power Ltd-100 MW</b>							
Oct-17		68.82	68.82	4.33	4.20	-0.88	-0.88
Nov-17		63.31	63.31	4.33	4.27	-0.40	-0.40
Dec-17		68.20	68.20	4.33	4.21	-0.83	-0.83
<b>Total</b>	<b>1946.98*</b>	<b>200.33</b>	<b>200.33</b>	<b>4.33</b>	<b>4.22</b>	<b>-2.12</b>	<b>-2.12</b>
<b>*Quantum of power purchase through short term markets approved by Honourable Commission</b>							

4.4 Additional liability on account of power purchase from above stations, amounts to Rs 3.45 crores, as detailed in table 4.3 below.

<b>4.3 Total additional liability on account of power purchase from Jindal, Jhabua and JITPL contracted under Bid 2</b>							
Month	Energy purchased at Kerala periphery			Rate of power purchase at Kerala periphery		Additional Liability	
	Approved	Actual	Admis	Approved	Actual	Actual	Admissible

			<b>sible for FPA</b>				
	<b>(MU)</b>	<b>(MU)</b>	<b>(MU)</b>	<b>(Rs/kWh)</b>	<b>(Rs/kWh)</b>	<b>(Rs. Cr)</b>	<b>(Rs. Cr)</b>
Oct-17		181.43	181.43	4.33	4.25	-1.47	-1.47
Nov-17		208.67	208.67	4.33	4.53	4.17	4.17
Dec-17		206.65	206.65	4.33	4.37	0.76	0.76
<b>Total</b>	<b>596.75</b>	<b>596.75</b>	<b>596.75</b>	<b>4.33</b>	<b>4.39</b>	<b>3.45</b>	<b>3.45</b>

## 5 Details of procurement from Short-term market

5.1 KSEBL has purchased 136.03 MU from short term market through exchanges and by means of power transfer through deviation settlement mechanism. The month wise details are given in the table below.

**Table 5 Details of procurement from Short-term market and traders**

Source	October			November			December		
	Quantum	Rate	Amount	Quantum	Rate	Amount	Quantum	Rate	Amount
	MU	Rs/unit	Rs in crores	MU	Rs/	Rs in crores	MU	Rs/unit	Rs in crores
IEX	13.66	5.57	7.61	1.02	3.95	0.40	1.62	4.11	0.67
PXIL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DSM	42.72	2.44	10.44	40.90	2.43	9.93	36.11	2.17	7.84
Total	56.39	3.20	18.05	41.92	2.46	10.33	37.73	2.26	8.51

\*Quantum and rate at Kerala periphery

5.2 The quantum and rate of short term purchases from power exchanges, power transfer through deviation settlement mechanism and swap at Kerala periphery is taken and the same is compared with rate of power purchase @ Rs 4.33 per unit approved by the Commission for purchase through short term contracts at Kerala periphery. This rate is inclusive of transmission charges as the rate of purchase through exchanges and short term market is inclusive of transmission charges. The additional liability due to variation in power purchase rate on account of short term purchase from exchanges/dsm is given in table below.

<b>Table 5.2 - Additional liability on account of variation in short term power purchase rate</b>				
	<b>Actual Quantum</b>	<b>Approved rate</b>	<b>Actual rate</b>	<b>Additional liability</b>
<b>Month</b>	<b>MU</b>	<b>Rs/kWh</b>	<b>Rs/kWh</b>	<b>Rs in crores</b>
Oct-17	56.39	4.33	3.20	-6.36
Nov-17	41.92	4.33	2.46	-7.82
Dec-17	37.73	4.33	2.26	-7.83
<b>Total</b>	<b>136.03</b>	<b>4.33</b>	<b>2.71</b>	<b>-22.01</b>

5.3 Thus the total additional liability from approved sources after considering short term purchase (on account of change in variable cost for CGS and IPPs and variation in power purchase cost in case of short term purchase) is given in table below.

<b>Table 7</b>				
<b>Source</b>	<b>Approved Quantum in MU*</b>	<b>Actual Quantum in MU*</b>	<b>Actual Additional liability (Rs in crores)</b>	<b>Admissible additional liability (Rs in crores)</b>
CGS	2175.42	2163.18	17.32	17.54
IPPs I**	1494.74	1222.98	15.33	13.38
IPPs II***	596.75	596.75	3.45	3.45
Short term market (exchanges, DSM)	<b>136.03</b>	136.03	-22.01	-22.01
<b>Total</b>	<b>4402.95</b>	<b>4118.95</b>	<b>14.09</b>	<b>12.36</b>

\* Quantum at exbus for CGS and IPPs I, Quantum at Kerala periphery for IPPs II

and short term market

\*\*IPPs approved by suomotu order dated 17.04.2017

\*\*\* IPPs such as Jindal Power Ltd, Jhabua Power Ltd, Jindal India Thermal Power Ltd

5.4 In addition to the above, KSEBL had entered into agreement with GMRETL for availing supply of 100MW from 8.00 hrs to 17.00 hrs from November 2017 to March 2018 through swap arrangement and the power returnable is 100 % energy from 16<sup>th</sup> June 2018 to 30<sup>th</sup> September 2018 with time duration from 00.00hrs to 4.00hrs and 22.00 hrs to 24hrs. This matter was already intimated to the Honourable Commission vide letter dated 01.01.2018. KSEBL has availed 53.80 MU during the month of November and December through this arrangement.

**ANNEXURE II**

<b>Additional liability on account of variation in power purchase cost for third quarter</b>					
<b>Source</b>	<b>Approved energy procurement (MU)</b>	<b>Actual Energy procurement (MU)</b>	<b>Per unit cost</b>		<b>Admissible Additional liability on account of variation in power purchase cost (Rs. Cr)</b>
			<b>Approved Rate</b>	<b>Actual rate</b>	
			<b>(Rs/kWh)</b>	<b>(Rs/kWh)</b>	
CGS					
<b>RSTPS I &amp; II</b>	<b>431.43</b>	<b>438.96</b>	<b>2.63</b>	<b>2.37</b>	<b>-10.94</b>
<b>RSTPS III</b>	<b>108.52</b>	<b>122.51</b>	<b>2.69</b>	<b>2.31</b>	<b>-4.14</b>
<b>Talcher Stage-II</b>	<b>755.67</b>	<b>815.13</b>	<b>1.48</b>	<b>1.39</b>	<b>-6.64</b>
<b>Simhadri TPS Stage II</b>	<b>161.47</b>	<b>139.20</b>	<b>2.73</b>	<b>2.66</b>	<b>-1.00</b>
<b>NLC Stage-I</b>	<b>94.37</b>	<b>80.90</b>	<b>2.42</b>	<b>2.89</b>	<b>3.76</b>
<b>NLC Stage-II</b>	<b>134.84</b>	<b>153.09</b>	<b>2.42</b>	<b>2.90</b>	<b>6.53</b>
<b>NLC 1 Expansion</b>	<b>109.98</b>	<b>119.49</b>	<b>2.28</b>	<b>2.67</b>	<b>4.26</b>
<b>NLC II Expansion</b>	<b>104.33</b>	<b>67.18</b>	<b>2.3</b>	<b>2.65</b>	<b>2.35</b>
<b>Vallur STPS</b>	<b>88.71</b>	<b>60.07</b>	<b>2.07</b>	<b>3.01</b>	<b>5.66</b>
<b>NTPL</b>	<b>128.92</b>	<b>109.57</b>	<b>2.09</b>	<b>3.21</b>	<b>12.22</b>
<b>NTPC Kudgi</b>	<b>57.19</b>	<b>57.08</b>	<b>2.69</b>	<b>3.66</b>	<b>5.48</b>
<b>Sub Total</b>	<b>2175.42</b>	<b>2163.18</b>	<b>2.13</b>	<b>2.19</b>	<b>17.54</b>
<b>Private IPPs outside the State</b>					
<b>DVC RTPS</b>	<b>85.68</b>	<b>21.89</b>	<b>2.3</b>	<b>2.43</b>	<b>0.27</b>
<b>DVC Mejia</b>	<b>177.83</b>	<b>87.57</b>	<b>2.3</b>	<b>2.23</b>	<b>-0.63</b>
<b>Maithon Power Ltd-I, ER</b>	<b>263.22</b>	<b>182.73</b>	<b>2</b>	<b>1.99</b>	<b>-0.15</b>
<b>Maithon Power Ltd-II, ER</b>	<b>263.22</b>	<b>182.74</b>	<b>2</b>	<b>1.99</b>	<b>-0.15</b>
<b>Jindal Power ltd(DBFOO)-PSA I</b>	<b>339.37</b>	<b>390.59</b>	<b>0.81</b>	<b>1.16</b>	<b>11.87</b>
<b>Jhabua Power Ltd(DBFOO)- PSA I</b>	<b>196.05</b>	<b>174.58</b>	<b>1.66</b>	<b>1.74</b>	<b>1.43</b>
<b>BALCO</b>	<b>169.38</b>	<b>182.89</b>	<b>1.00</b>	<b>1.04</b>	<b>0.73</b>
<b>Total</b>	<b>3670.16</b>	<b>3386.16</b>	<b>1.93</b>	<b>1.97</b>	<b>30.93</b>

**Annexure-III**

<b>Rate of Fuel Surcharge in Paise per unit</b>	
<b>Particulars</b>	<b>Quantum</b>
Amount of Fuel Surcharge (F) in crores	30.93
Energy billed for Retail sale to whole consumers for the first quarter (E) in MU	5076.21
Energy billed for domestic consumers having monthly consumption less than 20 units and connected load below 20W during the third quarter 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 consumers for third quarter (E) in MU	5076.02
Rate of fuel surcharge in Paise per unit	6.09
<b>Rounded to 6 Paise per unit</b>	