

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

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

**FILING NO            /2020**

**CASE No.**

**IN THE MATTER OF:**

Filing of petition on 'Proposals to recover the additional cost incurred during the period July 2020 to September 2020 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, Vidyuthi 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 2020 to September 2020 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 55 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 28<sup>th</sup> day of October 2020 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 28<sup>th</sup> day of October 2020 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



dated 06.08.2019 mentioned under para above. Out of the fifteen CGS four are atomic power stations and remaining eleven are thermal stations. Supply of power from Bhavini atomic power plant has not yet commenced. Atomic power stations do not have a change in the cost of fuel and hence this petition does not cover those stations. This petition covers only the fuel price variation relating to sources of power approved by this Honorable Commission as mentioned above and as under regulation 86 of Regulations 2018.

- VI. KSEBL had filed separate petitions for recovering fuel surcharge for all the four quarters of 2019-20 based on this concept. Out of this, this Honorable Commission has been pleased to issue orders on petitions relating to first and second quarters as per orders dated 14.02.2020 and 27.04.2020. Facts being as submitted under para V above this Honorable Commission has not admitted the fuel price variation in respect of three IPP stations viz Jindal India Thermal Power station 100 MW, Jhabua Power station 100 MW and Jindal Power station 150 MW, which were contracted by KSEBL based on tenders invited under DBFOO basis in 2014. Honorable Commission has considered drawal of power from these stations at a cost equivalent to that being paid to M/s. BALCO, for the provisional estimation of cost of power while approving the ARR & ERC for the control period 2018-2020.
- VII. This Honorable Commission has further ordered that approval for power purchase from the stations mentioned above shall be given only after getting approval from Government of India as well as from Government of Kerala on the entire power purchase under DBFOO. It was also mentioned in the order that actual tariff paid by KSEBL for procuring power from these three stations were much higher and reiterated that, during truing up of accounts for the respective financial years, the excess amount incurred for procuring power from these three generators shall not be considered, unless KSEBL gets the approval for power purchase from Government of India for deviations from the guidelines and on getting the approval of Government of Kerala on the entire power purchase under DBFOO.
- VIII. It is submitted that as KSEBL is aggrieved with the above orders KSEBL filed separate review petitions on the two orders dated 14.02.2020 and 27.04.2020 before this Honorable Commission on 30.03.2020 and 04.06.2020 respectively for allowing passing on the additional fuel cost incurred thereunder.
- IX. This Honorable Commission rejected the prayers of KSEBL on both the petitions together as per order dated 14.08.2020 directing KSEBL to file separate petition, rather than filing review petitions.
- X. It is submitted that as the matter was still under review during July 2020, KSEBL has released payments in respect of the above three stations as per the conditions in the PSA. With due respect to the orders of this Honorable Commission from August 2020 onwards, KSEBL has limited payment towards power purchase from the above

mentioned three stations limiting to the rate of M/s BALCO at Kerala. It is further submitted that KSEBL is in the process of filing separate petition before this Honorable Commission seeking appropriate directions on the drawal of power contracted against the PSAs of the three generating stations

- XI. It is submitted that this Honorable Commission has already adopted the lowest tariff of Rs.4.29 per kWh obtained under the tender mentioned above as per order dated 30.08.2016. It is also submitted that scheduling of contracted power from the three stations under consideration has also been approved by this Honorable Commission as per letter dated 22.12.2017. This Honorable Commission has considered the cost of scheduling of power from these three stations, even though ceiling the price to that of M/s. BALCO, in the ARR & ERC of KSEBL as per order dated 08.07.2019. In consideration of these facts and since this Honorable Commission has not indicated any variable charges for the power purchased from the three stations under consideration anywhere, KSEBL is considering the fuel price variation of these three stations based on the variable charges adopted by it, for estimation in the MYT petition for the control period 2018-2022 and the actual variable charge being incurred.
- XII. It is submitted that there has been variation in energy availability than approval, from various approved generating stations. Reasons for the same are submitted below:
- i. Change in annual maintenance schedule
  - ii. Unscheduled outages in generating stations as well as transmission lines
  - iii. Variation in normative auxiliary consumption and plant load factor of various CGS in the Tariff Regulations 2019-2024 issued by CERC in March 2019, from those considered while issuing tariff order dated 08.07.2019.
- XIII. Estimated energy availabilities of the Central Generating Stations submitted in the MYT petition (2018-2022) were based on the maintenance schedules of previous years. Annual maintenance schedule of the CGS for the control period including 2020-21 were not published at the time of submission of MYT petition. There is variation in energy availability from the approval while considering the actual status. Unscheduled outages has also occurred at CGS due to coal shortage and other reasons. The CERC Tariff regulations for the control period from 2019-2024 came into force subsequently and hence there is difference in normative PLF, PAF and auxiliary consumption of certain stations.
- XIV. KSEBL has constituted a “market monitoring committee” for monitoring the power market on a daily basis. Scheduling of CGS and IPPs are being strictly monitored on a day today basis by this committee in order to ensure that the generators are not diverting power to other utilities by backing off supply to KSEBL. Websites of respective RLDCs, are made use of to ensure that the generators are abiding by the provisions of PPA/PSA. Details of station wise availability and reasons for reduction

are enclosed as **Annexure-III**. Actual availability for the period July to September 2020 are indicated in the REA statements of SRPC enclosed as **Annexure VIII**.

- XV. Invoices for the power supplied are prepared based on the REA statements published by SRPC. Final REA statements for the month of July and August 2020 and the provisional one for September 2020 are relied up on in this petition. Tariff of the sources of purchase of power mentioned above being determined by the CERC, the charges are calculated applying the formula specified in the tariff regulations issued by CERC. Regarding variable charges, the landed cost of fuel for the month is verified with the details in Form 15. The price of fuel corresponding to the grade and quality is taken from the latest price notification of Coal India Ltd/Singareni Collieries Ltd inclusive of royalty, taxes and duties as applicable. Transportation cost by rail or any other means is taken from the latest freight charges of railways or otherwise. RLDC charges, incentive claims and the various supplementary claims are verified in line with the corresponding regulations/CERC orders. In the case of IPPs the invoices are processed as per the provisions in PPA.
- XVI. In addition to the variation in availability as mentioned under para XII, there is variation in the per unit variable cost also, over the approved level on account of variation in normative SHR and auxiliary consumption (consequent to the notification of CERC Tariff Regulation for control period 2019-24), variation in the price of primary fuel as well as secondary fuel, variation in calorific value and cost of transportation of fuel. Following points are submitted in this regard.
- i. In the order dated 08.07.2019, the variable charges of various stations for the control period including 2020-21 was calculated by this Honorable Commission by giving an escalation of 2% on annual basis, on the actual variable charges for the year 2018-19. The CERC notified Tariff Regulations 2019 on 07.03.2019, with effective date as 01.04.2019. As per this there has been revision in normative station heat rate and auxiliary consumption for various stations. Accordingly, energy charges increased considerably compared to the estimation. This aspect has not been taken care of in the order dated 08.07.2019.
  - ii. Variation of energy charges depends on the price notified for each mine which are different from mine to mine, grade of coal, blending ratio of imported coal and domestic coal, receipt of coal from different sources, distance from the mine, mode of transport etc.
  - iii. In the case of coal-based stations the linkage of fuel is mainly from Coal India Ltd (CIL) and Singareni Collieries Ltd (SCCL). Due to shortage from linkage sources, the generating stations has to augment coal from other domestic sources and imported coal as well. Coal from Eastern Coal Fields (ECL) and SECL is expensive as compared to coal from Mahanadi coal fields (MCL) under Coal India Ltd due to the variations in grade of coal and other reasons. Price of coal from Singareni Collieries (SCCL) is based on the price notifications of Singareni Collieries whereas price of Coal India Ltd (CIL) is based on the notification dated

08.01.2018. Fuel price is based on the coal price and the transportation cost. There are frequent revisions in SCCL price notification compared to CIL.

iv. Following price revisions have been notified by SCCL subsequent to MYT petition which has contributed to increase in energy charges.

1. SCCL price notification no.107/2018-19 dt 11.10.18 wef 01.10.18
2. SCCL price notification no.109/2018-19 dt 28.11.18 wef 01.12.18
3. SCCL price notification no.111/2018-19 dt 31.12.18 wef 01.01.19
4. SCCL price notification no.113/2018-19 dt 9/3/2019 wef 09.03.19
5. SCCL price notification no.114/2019-20 dt 04/05/19 wef 04.05.19
6. SCCL price notification no.117/2019-20 dt 31/08/19 wef 01.09.19
7. SCCL price notification no.118/2019-20 dt 30/11/19 wef 01.12.19
8. SCCL price notification no.119/2019-20 dtd 10/2/20 wef 11/2/2020
9. SCCL price notification no,121/2019-20 dtd 1.03.2020 wef 01/.03.2020
10. Corrigendum 4 to price notification no,121/2019-20 dtd 30.05.2020 wef 01/6/2020
11. Corrigendum 5 to price notification no,121/2019-20 dtd 06.06.2020 wef 01/6/2020

v. In the case of lignite-based stations, NLC has issued the Lignite transfer price guidelines 2019-24 on 17.09.2019 having effect from October 2019. As per the revised guidelines, the basic price of pooled lignite is revised from Rs. 1950/ton to Rs. 2050/ton with effect from 01.10.2019. Further, security charges, ground water charges and recovery of lignite price due to surrender of power of the linked power plants etc are billed in addition to basic price from 01.10.2019 onwards. Hence energy charges of NLC stations has increased from the third quarter of FY-19 onwards.

vi. Monthly energy charges vary depending upon the receipt of coal from different sources. The energy charge rate calculated as per Tariff regulations is based on the following formula:

$$\text{Energy charge rate} = \{(\text{GHR}-\text{SFC}*\text{CVSF}) * \text{LPPF}/\text{CVPF}+(\text{SFC}*\text{LPSFi}) +(\text{LC}*\text{LPL}) * 100/(100-\text{Aux})\}$$

Where,

GHR is Gross station heat rate in Kcal per kWh

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Weighted Average Gross calorific value of coal as received, in kCal per kg for coal-based stations less 85 Kcal/Kg on account of variation during storage at generating station;

vii. In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio:

CVSF = Calorific value of secondary fuel, in kCal per ml;

ECR = Energy charge rate, in Rupees per kWh sent out;

SHR = Gross station heat rate, in kCal per kWh;

LPL = Weighted average landed cost of limestone in Rupees per kg;

LPPF = Weighted average landed fuel cost of primary fuel, in Rupees per kg, per

litre or per standard cubic metre, as applicable, during the month.

LPSFi = Weighted Average Landed Fuel Cost of Secondary Fuel in Rs/ml during the month:

- viii. Energy charges depends on gross calorific value of primary and secondary fuel CVSF, and CVPF as well as landed price of primary and secondary fuel (LPPF and LPSFi). The parameters CVPF in the equation of energy charges varies depending upon the grade of fuel which in turn depends on the receipt of coal from different sources and also blending of fuel. Different grades of coal have different prices. Thus, the landed price of fuel again depends on grade of fuel, source of fuel, transportation cost (depends on distance from coal source and mode of transport), price notified for each mine which are different from mine to mine etc. The monthly variation of these parameters leads to variation in monthly energy charges. The details of calorific value and landed price of coal is available in Form 15 attached as **Annexure VII**.

XVII. Approved and actual variable cost of approved sources are shown in **Table 1** below.

Table-1					
SI No	Source	Approved	Actual (Rs/ kWh)		
		(Rs/ kWh)	July-20	August-20	Sept-20
<b>Central Generating Stations</b>					
1	NTPC-RSTPS Stage I & II	2.540	2.498	2.490	2.363
2	NTPC-RSTPS Stage III	2.490	2.464	2.458	2.325
3	Talcher	1.770	2.011	2.064	2.100
4	Simhadri TPS Stage II	2.950	3.059	3.100	3.061
5	NLC-Stage-1	2.690	2.771	2.633	2.767
6	NLC-Stage-II	2.690	2.771	0.000	2.767
7	NLC I Expansion	2.490	2.555	2.552	2.552
8	NLC II Expansion	2.490	2.566	2.570	2.570
9	Vallur STPS	3.200	3.355	3.237	3.144
10	NTPL	3.280	2.856	2.841	2.805
11	NTPCKudgi	3.980	0.000	0.000	3.350
<b>Independent Power Producers</b>					
12	RTPS	2.340	3.077	3.080	2.808
13	Mejia	2.510	2.716	2.765	2.728
14	Maithon Power Ltd- Contract I	2.430	2.775	2.713	2.613
15	Maithon Power Ltd- Contract II	2.430	2.775	2.713	2.613
16	Jindal Power Ltd-Bid I	1.310	1.310	1.310	1.310
17	Jhabua Power Ltd-Bid I	1.950	1.960	1.960	1.960
18	Jindal Power Ltd-Bid II *	1.190	1.310	1.310	1.310
19	Jhabua Power Ltd-Bid II *	1.730	1.880	1.880	1.880
20	JITPL - Bid II *	1.030	1.140	1.140	1.140
21	BALCO	1.220	1.160	1.160	1.160

\* - Variable charges adopted by KSEBL in estimating the power purchase in ARR



XVIII. The summary of additional liability for second quarter of 2020-21 as per fuel surcharge regulations is given in **table 2** below.

<b>Table 2 Additional liability for the second quarter 2020-21</b>					
<b>Source</b>	<b>Energy procurement</b>			<b>Add liability</b>	
	<b>Approved quantity</b>	<b>Actual</b>	<b>Admissible as per regulation</b>	<b>Actual</b>	<b>Admissible as per regulation</b>
	<b>(MU)</b>	<b>(MU)</b>	<b>(MU)</b>	<b>(Rs. Cr)</b>	<b>(Rs. Cr)</b>
CGS	2202.98	1700.53	1509.90	16.58	14.74
IPPs	2278.27	2045.07	1983.50	28.57	27.05
<b>Total</b>	<b>4481.25</b>	<b>3745.60</b>	<b>3493.39</b>	<b>45.16</b>	<b>41.79</b>

XIX. Accordingly, KSEBL has incurred an additional liability of Rs 45.16 crore for purchasing 3745.60 MU of energy from various approved thermal sources during the second quarter of FY 2020-21. Admissible additional liability as per fuel surcharge regulations is Rs 41.79 Cr. Details in this regard as per the provisions of fuel surcharge formula specified in Tariff Regulations, 2018, are furnished in **Annexure IV**.

XX. **Details regarding other purchases of power, which are not eligible for fuel price variation as per Regulations 2018**

- a. KSEBL purchased 14.62 MU through exchanges and 38.92 MU through deviation settlement mechanism during the second quarter of FY-2020-21.
- b. In order to overcome the anticipated power and energy shortage in summer months, KSEBL had entered into banking arrangement with M/s PTC India Ltd from TPDDL, for the period February 2020 to April 2020 and M/s BYPL for February 2020 to March 2020 with approval of this Honorable Commission, as per order dated 14.01.2020. KSEBL returned 163.50 MU to TPDDL and 72.64 MU to M/s BYPL during the second quarter as part of this banking agreement.
- c. Unit 2 at Idukki HEP tripped on 20.01.2020 due to the flashing of 11 kV bushing of excitation transformer and unit 6 of Idukki power station tripped on 01.02.2020 due to the flashing of lightning arrester- voltage transformer. Due to the above forced outages there was an additional shortage of 260 MW during March 2020. In order to meet shortage due to this KSEBL entered into banking arrangements with BRPL through Manikaran power Ltd for the month of March 2020 for availing 50 MW RTC and 100 MW from 14.00hrs to 24.00 hours and committed to return the same from July to September 2020. KSEBL returned 60.24 MU during July and August 2020 as part of this arrangement. Approval was obtained vide order dated 29.07.2020.

- d. KSEBL sold 32.82 MU during second quarter through exchanges. The details of power procurement/sale through short term transactions is enclosed as **Annexure VI**.
- e. Consequent to the national lock down due to Covid pandemic the actual demand during the quarter was less by 1019 MU. This has led to surrender of power to the extent of 526.28 MU during the quarter. Actual power purchase from CGS at exbus decreased by 627.62 MU, renewable energy purchase by 360.83 MU and exbus energy from private IPPs outside the State by 233.22 MU against the approved quantum. Thus there is a reduction in power purchase of 1151.46 MU at Kerala periphery. As part of banking arrangements mentioned under para 'b' above KSEBL returned 296.38 MU. There was external sale of 32.83 MU during the quarter. KSEBL purchased 53.86 MU through exchanges and through power transfer through deviation settlement mechanism for meeting the demand of the State. As per the MYT order there is a surplus of 817 MU for which Honorable Commission has considered a revenue amounting to Rs 408.51 Cr @ Rs 5 per unit through external sale. The reduction in power purchase has led to reduction in energy sale outside the State by 784.20 MU which in turn resulted in a reduction in revenue of Rs 392.102 Cr. Reduction in demand of 1019.28MU has resulted in a reduction in revenue by Rs 550.97 Cr considering the revenue realisation approved by the Honourable Commission for the FY 2019-20 (Rs 6.144 per unit).
- f. Thus, the reduction in power purchase and reduction in demand has led to a reduction in revenue approved by Honorable Commission by Rs 943.07 Cr. Even though reduction in power purchase has led to reduction in power purchase cost amounting to Rs 348.58 Cr, KSEBL is suffering a reduction in revenue of Rs 943.07 Cr on account of the reduction in demand during the second quarter. As the impact of short-term purchase and impact of reduction in demand and availability cannot be addressed under the purview of fuel surcharge regulations, Honorable Commission may consider the matter at the time of truing up. Moreover, as a result of the relief measures extended by KSEBL to various categories of consumers as per direction of the State Government in order to alleviate the difficulties faced by consumers due to the lockdown imposed by State Government to curb Covid pandemic, KSEBL is also facing financial difficulties owing to the delay in recovery of revenue.

XXI. It is submitted that as per the regulation 86(8) of the Tariff regulations , *“the adjustment of fuel surcharge as approved by the Commission shall be effected from the third month of subsequent quarter onwards as directed by the Honorable Commission”* ie; the fuel surcharge for the second quarter of FY-20 is to be adjusted from December 2020 onwards as per regulation. It is further submitted that recovery

of fuel surcharge of second quarter, third quarter and fourth quarter of FY-20 and first quarter of FY-21 is pending. Accordingly, KSEBL feels that it may not be possible to recover the fuel surcharge for the second quarter of FY 20-21 from December 2020 onwards. Hence, for calculation purpose, KSEBL is considering the energy sales for the period of three months from March 2021 for calculating the rate of fuel surcharge recovery. Calculating on these lines the rate comes to 6 paise per unit. Details of calculation are furnished in **Annexure V**.

### **PRAYER**

KSEBL humbly prays before this Hon'ble Commission that,

- (a) Additional financial liability incurred by KSEBL, amounting to Rs 41.79 Cr, resulting from the variation in variable charges of power purchase from approved sources for the period from July to September 2020 as per regulation 86 of KSERC Tariff Regulations 2018 as detailed in **Annexure IV & V** 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 86 of KSERC Tariff Regulations 2018, @ 6 paise per unit from 1<sup>st</sup> March 2021 onwards.

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

**Acc: 1. Formats I, III & IV**  
**2. Annexure I-VIII**  
**3. Copies of invoices**

## Formats

**Format-1**

<b>Details of energy billed for retail sale for second quarter 2020-21</b>						
<b>Month</b>	<b>Energy billed (MU)*</b>		<b>T&amp;D loss(%)</b>		<b>Energy Input(MU)</b>	
	<b>Actual</b>	<b>Approved</b>	<b>Actual</b>	<b>Approved</b>	<b>Actual</b>	<b>Approved</b>
July-2020	1757.22			12.02% at the end of FY-20	1885.57	
Aug-20	1693.30				1875.74	
Sept-20	1702.87				1844.15	
Total	5153.39				5605.46	

\*The energy billed for the month of July, August and September is shown in table and are not the energy sales corresponding to energy input during the quarter. As the corresponding energy sales against energy input will be available from billing of subsequent months, the monthly actual loss details is not furnished. The energy input shown is exclusive of energy wheeled by embedded open access consumers and captive generation.

Format-3						
Month Wise Details of Purchase of Energy (claiming for fuel surcharge)						
Source	Energy Purchase (MU) at exbus		Variable Cost (Rs/kWh)		Total variable cost (Rs.Cr)	
	Actual(A)	Approved ('B)	Actual (C)	Approved ('D)	Actual E=A*C)	Approved (F=B*D)
<b>July-2020</b>						
<b>Central Generating Stations</b>						
RSTPS I & II	168.07	153.95	2.50	2.54	41.98	39.10
RSTPS III	42.41	0.00	2.46	2.49	10.45	0.00
Talcher Stage-II	296.35	224.57	2.01	1.77	59.60	39.75
Simhadri TPS Stage II	48.06	53.18	3.06	2.95	14.70	15.69
NLC Stage-I	13.84	35.86	2.77	2.69	3.84	9.65
NLC Stage-II	0.36	52.41	2.77	2.69	0.10	14.10
NLC 1 Expansion	46.53	20.50	2.55	2.49	11.89	5.10
NLC II Expansion	9.22	25.60	2.57	2.49	2.37	6.37
Vallur STPS	0.03	31.90	3.35	3.20	0.01	10.21
NTPL	43.24	46.30	2.86	3.28	12.35	15.19
Kudgi	0.00	57.04	0.00	3.98	0.57	22.70
<b>Sub total CGS</b>	<b>668.12</b>	<b>701.31</b>			<b>157.86</b>	<b>177.86</b>
<b>Long Term contracts with generators outside the State</b>						
DVC Reghunathpur TPS	21.30	32.35	3.08	2.34	6.55	7.57
DVC Mejia TPS	63.23	65.56	2.72	2.51	17.17	16.46
Maithon Power Ltd- Contract 1	96.81	102.62	2.77	2.43	26.86	24.94
Maithon Power Ltd- Contract II	96.81	102.62	2.77	2.43	26.86	24.94
Jindal Power Ltd-Bid I	127.66	127.22	1.31	1.31	16.72	16.67
Jhabhua Power Ltd -Bid I	74.29	73.15	1.96	1.95	14.56	14.26
Jindal Power Ltd-Bid II	95.71	95.42	1.31	1.19	12.54	11.35
Jhabhua Power Ltd -Bid II	64.32	63.61	1.88	1.73	12.09	11.00
Jindal India thermal Power Ltd	58.56	63.61	1.14	1.03	6.68	6.55
BALCO	62.90	63.61	1.16	1.22	7.30	7.76
<b>TOTAL LTA</b>	<b>761.59</b>	<b>789.77</b>			<b>147.34</b>	<b>141.50</b>
<b>Total</b>	<b>1429.70</b>	<b>1491.08</b>			<b>305.20</b>	<b>319.36</b>
<b>August-2020</b>						
<b>Central Generating Stations</b>						
RSTPS I & II	142.93	129.64	2.49	2.54	35.59	32.93
RSTPS III	41.05	42.77	2.46	2.49	10.09	10.65
Talcher Stage-II	263.11	299.42	2.06	1.77	54.31	53.00
Simhadri TPS Stage II	27.62	29.22	3.10	2.95	8.56	8.62
NLC Stage-I	15.97	35.86	2.63	2.69	4.21	9.65
NLC Stage-II	0.00	39.31	0.00	2.69	0.00	10.57
NLC 1 Expansion	40.66	39.63	2.55	2.49	10.38	9.87
NLC II Expansion	27.09	15.71	2.57	2.49	6.96	3.91

Vallur STPS	0.01	31.90	3.24	3.20	0.00	10.21
NTPL	32.10	46.30	2.84	3.28	9.12	15.19
Kudgi	0.00	57.04	0.00	3.98	0.02	22.70
<b>Total</b>	<b>590.54</b>	<b>766.80</b>			<b>139.24</b>	<b>187.29</b>
<b>Long Term contracts with generators outside the State</b>						
DVC Reghunathpur TPS	16.47	32.35	3.08	2.34	5.07	7.57
DVC Mejia TPS	58.99	0.00	2.77	2.51	16.31	0.00
Maithon Power Ltd- Contract 1	91.58	102.62	2.71	2.43	24.85	24.94
Maithon Power Ltd- Contract II	91.58	102.62	2.71	2.43	24.85	24.94
Jindal Power Ltd-Bid I	96.20	127.22	1.31	1.31	12.60	16.67
Jhabhua Power Ltd -Bid I	63.20	73.15	1.96	1.95	12.39	14.26
Jindal Power Ltd-Bid II	72.27	95.42	1.31	1.19	9.47	11.35
Jhabhua Power Ltd -Bid II	54.98	63.61	1.88	1.73	10.34	11.00
Jindal India thermal Power Ltd	50.47	63.61	1.14	1.03	5.75	6.55
BALCO	56.38	63.61	1.16	1.22	6.54	7.76
TOTAL LTA	652.12	724.21			128.16	125.05
<b>Total</b>	<b>1242.66</b>	<b>1491.01</b>			<b>267.40</b>	<b>312.34</b>
<b>September-2020</b>						
<b>Central Generating Stations</b>						
RSTPS I & II	77.78	164.66	2.36	2.54	18.38	41.82
RSTPS III	33.46	41.39	2.33	2.49	7.78	10.31
Talcher Stage-II	217.15	217.32	2.10	1.77	45.60	38.47
Simhadri TPS Stage II	20.75	51.46	3.06	2.95	6.35	15.18
NLC Stage-I	16.45	34.70	2.77	2.69	4.55	9.33
NLC Stage-II	9.41	50.72	2.77	2.69	2.60	13.64
NLC 1 Expansion	16.69	38.35	2.55	2.49	4.26	9.55
NLC II Expansion	25.79	15.20	2.57	2.49	6.63	3.78
Vallur STPS	0.11	21.07	3.14	3.20	0.03	6.74
NTPL	23.43	44.80	2.81	3.28	6.57	14.69
Kudgi	0.87	55.20	3.35	3.98	0.29	21.97
<b>Total</b>	<b>441.88</b>	<b>734.87</b>			<b>103.05</b>	<b>185.49</b>
<b>Long Term contracts with generators outside the State</b>						
DVC Reghunathpur TPS	13.18	31.30	2.81	2.34	3.70	7.32
DVC Mejia TPS	51.92	63.44	2.73	2.51	14.16	15.92
Maithon Power Ltd- Contract 1	74.58	99.31	2.61	2.43	19.49	24.13
Maithon Power Ltd- Contract II	74.58	99.31	2.61	2.43	19.49	24.13
Jindal Power Ltd-Bid I	116.57	123.12	1.31	1.31	15.27	16.13
Jhabhua Power Ltd -Bid I	57.89	70.79	1.96	1.95	11.35	13.80
Jindal Power Ltd-Bid II	87.45	92.34	1.31	1.19	11.46	10.99
Jhabhua Power Ltd -Bid II	50.36	61.56	1.88	1.73	9.47	10.65
Jindal India thermal Power Ltd	49.48	61.56	1.14	1.03	5.64	6.34
BALCO	55.34	61.56	1.16	1.22	6.42	7.51
TOTAL LTA	631.36	764.29			116.44	136.93
<b>Total</b>	<b>1073.24</b>	<b>1499.16</b>			<b>219.49</b>	<b>322.43</b>

Format-4										
Sourcewise Energy Input from July-2020 to August 2020 in MU										
Sl No	Particulars	Jul-20		Aug-20		Sep-20		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	419.74	652.93	603.26	727.46	641.51	686.66	1664.51	2067.05	-402.53
	(b) Less Aux consumption	2.10	3.26	3.02	3.64	3.21	3.43	8.32	10.34	-2.01
	(c) Net Hydro Gen	417.64	649.66	600.24	723.83	638.30	683.22	1656.19	2056.71	-400.52
2	KSEB thermal									
	(a) BDPP	0.00		0.00		0.00		0.00	0.00	
	(b) KDPP	0.00		0.00		0.00		0.00	0.00	
	(c) Subtotal	0.00		0.00		0.00		0.00	0.00	
	(d) Less Aux consumption	0.00		0.00		0.00		0.00	0.00	
	(e) Net BDPP+KDPP	0.00		0.00		0.00		0.00	0.00	
3	Wind Generation(net)	0.10	0.17	0.14	0.49	0.09	0.31	0.33	0.97	-0.64
4	Solar Generation(net)	1.07	3.97	1.53	3.97	1.28	3.97	3.88	11.90	-8.02
	Total own generation(net)	418.81	653.80	601.92	728.28	639.67	687.50	1660.40	2069.58	-409.18
3	CGS (Import)	793.47	925.05	750.22	990.55	684.45	940.16	2228.14	2855.76	-627.62
4	IPPs							0.00		0.00
	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	17.60		10.44		13.11		41.15		41.15
	Solar	4.69		4.25		3.78		12.72		12.72
	Ullunkal(EDCL)	1.67		0.59		1.51		3.77		3.77
	Iruttukanam Stage-I	2.35		2.50		2.51		7.36		7.36
	Iruttukanam Stage-II	1.25		1.28		1.28		3.81		3.81
	Karikkayam HEP(AHPL)	3.98		4.68		4.53		13.19		13.19
	Meenvallom (PSHCL)	0.56		1.25		1.57		3.37		3.37
	Pathamkayam	4.56		4.23		4.45		13.24		13.24
	Subtotal	36.65	23.84	29.22	23.84	32.74	23.07	98.62	70.75	27.87
6	Longterm contract							0.00		0.00
i	DVC Reghunathpur	21.30	32.35	16.47	32.35	13.18	31.30	50.95	96.00	-45.05
ii	DVC Mejia	63.23	65.56	58.99	0.00	51.92	63.44	174.14	129.00	45.14
iii	Maithon power-1,	96.81	102.62	91.58	102.62	74.58	99.31	262.97	304.55	-41.58
iv	Maithon power-II	96.81	102.62	91.58	102.62	74.58	99.31	262.97	304.55	-41.58
v	Jindal -Bid I	127.66	127.22	96.20	127.22	116.57	123.12	340.43	377.56	-37.13
vi	Jhabhua- Bid-I	74.29	73.15	63.20	73.15	57.89	70.79	195.39	217.09	-21.70
vii	Jhabhua- Bid II	64.32	63.61	54.98	63.61	50.36	61.56	169.66	188.78	-19.12
viii	Jindal -Bid II	95.71	95.42	72.27	95.42	87.45	92.34	255.43	283.18	-27.75
ix	JITPL	58.56	63.61	50.47	63.61	49.48	61.56	158.51	188.78	-30.27
x	BALCO	62.90	63.61	56.38	63.61	55.34	61.56	174.62	188.78	-14.16
	Sub Total	761.59	789.79	652.12	724.21	631.36	764.29	2045.07	2278.29	-233.22
	STOA	0.00		0.00				0.00		0.00
	Purchase through exchanges at SR periphery	9.53	0.00	1.86	0.00	3.55	0.00	14.94		14.94
	DSM at Kerala periphery	30.03		11.15		-2.25		38.92		38.92
	SWAP	0.00		0.00				0.00		0.00
	Addl RE energy approved		121.58		121.58		117.66		360.83	-360.83
	Power Purchase	1631.27	1860.26	1444.56	1860.18	1349.85	1845.18	4425.69	5565.63	-1139.94
	PGCIL losses	54.80	64.67	49.51	64.55	47.12	64.24	151.43	193.45	-42.02
	Net Power Purchase	1576.47	1795.60	1395.05	1795.63	1302.73	1780.94	4274.26	5372.17	-1097.92
	Total Gen & PP	1995.28	2449.40	1996.97	2523.91	1942.40	2468.44	5934.65	7441.75	-1507.10
	External sale	0.11	297.49	11.49	222.09	21.22	297.44	32.82	817.02	784.21
	Swap return	-109.60		-109.75		-77.03		-296.38		



## Annexures

Annexure-I				
Power contracted through long Term agreements				
Allocation from Central Generating Stations				
No.	Station	IC (MW)	Allocation	Allocated Capacity to KSEBL (MW)
		MW	%	2019-20
		MW	%	MW
1	RSPTS Stage I & II	2100	11.67%	245.07
2	RSTPS Stage III	500	12.20%	61
3	TALCHER - Stage II	2000	21.35%	427
4	Simhadri Exp	1000	8.56%	85.55
5	NLC-II- Stage-1	630	10.00%	63
6	NLC-II- Stage-2	840	10.72%	90.02
7	NLC- Exp- Stage-1	420	16.25%	68.24
8	NLC - II Exp	500	16.25%	81.23
9	MAPS	440	5.23%	23.01
10	KAIGA Stg I& II	440	8.64%	38.01
11	KAIGA Stg II	440	7.95%	34.98
12	Kudamkulam Unit I	1000	14.01%	140.1
13	Kudamkulam unit II	1000	13.30%	133
14	Vallur JV with	1500	3.33%	49.95
15	NTPL(Tuticorin JV)	1000	7.25%	72.5
16	Kudgi Unit I,II & III	2400	4.66%	111.72
17	NLC new thermal	500	3.24%	16.2
	<b>Total</b>			<b>1740.58</b>
Power contracted with IPPS through long Term contracts				
	Generator	Contracted capacity		
18	Maithon Power Ltd-Contract I	150		
19	Maithon Power Ltd-Contract I	150		
20	DVC Mejia TPS	100		
21	DVC Reghunathpur TPS	50		
22	Jindal Power Ltd -Bid I	200		
23	Jhabua Power Ltd-Bid I	115		
24	Jindal Power Ltd -Bid II	150		
25	Jhabua Power Ltd-Bid II	100		
26	Jindal India Thermal Power Ltd-Bid II	100		
27	BALCO	100		

**Mont. Renewable Schedule Approved for Central Generating Stations at kb for the year 2020**

Source	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	
ESPS Stage I & II	184.50	153.95	225.56	153.55	129.54	184.86	170.25	249.89	170.64	170.15	1,824.31
RTS Stage I	41.39	42.77	41.39	42.77	41.39	41.39	42.77	41.39	42.77	31.25	453.27
ALPHEE - Stage II	280.75	290.42	280.75	224.57	259.42	217.32	224.57	217.32	236.42	273.83	2,094.82
Sirhind Exp	51.05	53.43	78.78	53.18	29.22	51.46	53.18	51.46	53.18	53.18	584.87
ALCO - Stage 1	27.22	35.86	27.22	33.84	35.86	34.70	23.22	34.70	35.86	35.86	337.35
ALCO - Stage 2	57.72	57.41	39.04	52.41	39.31	50.72	52.41	39.31	39.31	52.41	557.42
RLC - Exp - Stage 1	38.35	39.63	38.35	20.50	39.63	38.35	39.63	38.35	39.63	19.93	423.02
RLC - Exp	24.77	25.60	24.77	25.50	25.71	25.50	24.77	25.50	25.60	23.95	232.78
MAPS	11.28	11.42	11.28	11.45	11.45	11.69	11.69	11.68	11.68	11.45	123.59
Chandigarh	33.82	24.30	43.30	44.75	44.75	32.03	44.75	43.30	44.75	44.75	486.76
Kulam - I & II	137.54	142.22	137.54	142.22	142.22	137.64	142.22	137.54	142.22	142.22	1,586.37
Vellore - I & II	20.58	31.30	32.87	31.80	31.90	21.07	31.80	20.58	31.90	30.62	347.05
RTU (Bardoli)	47.60	46.50	24.11	46.30	46.30	47.60	46.30	46.30	46.30	21.40	501.69
Kargil (I & II)	65.23	63.45	66.24	67.04	67.04	65.20	67.04	65.20	67.04	66.45	742.20
Sharda	24.52	24.52	25.34	25.34	25.34	24.52	25.34	24.52	25.34	21.31	271.22
<b>Total</b>	<b>1,027.03</b>	<b>1,127.16</b>	<b>949.04</b>	<b>927.05</b>	<b>950.45</b>	<b>999.81</b>	<b>933.15</b>	<b>974.61</b>	<b>1,038</b>	<b>10,541.9</b>	<b>1,07,676.76</b>

**Monthly Schedule Approved for Wind Power for 2020**

Source	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	
Mathon power	94.31	102.62	94.31	102.62	102.62	94.31	94.31	94.31	102.62	91.73	1,051.73
Mathon power	94.31	102.62	94.31	102.62	102.62	94.31	94.31	94.31	102.62	91.73	1,051.73
DVC M. a TPS	63.44	65.56	63.44	65.56	65.56	63.44	63.44	63.44	65.56	58.37	705.50
JWC/R/PTI TPS	31.30	32.35	31.30	32.35	32.35	31.30	31.30	31.30	32.35	27.75	346.10
JWC/R/PTI TPS	31.30	32.35	31.30	32.35	32.35	31.30	31.30	31.30	32.35	27.75	346.10
India Power	52.34	53.42	52.34	53.42	53.42	52.34	52.34	52.34	53.42	46.18	595.42
India Power	52.34	53.42	52.34	53.42	53.42	52.34	52.34	52.34	53.42	46.18	595.42
Infal Thermal	61.56	63.61	61.56	63.61	63.61	61.56	61.56	61.56	63.61	57.46	744.98
Infal Thermal	61.56	63.61	61.56	63.61	63.61	61.56	61.56	61.56	63.61	57.46	744.98
Pabla Power	70.79	73.15	70.79	73.15	73.15	70.79	70.79	70.79	73.15	66.07	861.33
Pabla Power	70.79	73.15	70.79	73.15	73.15	70.79	70.79	70.79	73.15	66.07	861.33
Parbha Power	62.50	63.61	62.50	63.61	63.61	62.50	62.50	62.50	63.61	57.45	743.38
Parbha Power	62.50	63.61	62.50	63.61	63.61	62.50	62.50	62.50	63.61	57.45	743.38
SALCO	51.56	51.56	51.56	51.56	51.56	51.56	51.56	51.56	51.56	51.56	515.60
<b>Total</b>	<b>540.81</b>	<b>567.24</b>	<b>540.81</b>	<b>567.24</b>	<b>567.24</b>	<b>540.81</b>	<b>540.81</b>	<b>540.81</b>	<b>567.24</b>	<b>515.60</b>	<b>6,076.76</b>

**Annexure III Details of energy availability for the second quarter of FY-21**

Sl. No.	Name of the Station	Availability						Reason for low availability
		July (Low Demand in SR)		August Low Demand in SR)		(Low Demand in SR)		
		peak	off peak	peak	off peak	peak	off peak	
1	NTPC RSTPS Stg I & II	100.631	100.803	90.534	90.637	64.246	64.377	Unit 6 from 25.08 onwards due to high bearing vibration and Unit 2 from 09.09 onwards due to high turbine vibrations
2	NTPC RSTPS Stage III	103.742	103.322	102.569	102.582	102.002	101.915	Above normative availability
3	NTPC Talcher II	102.275	102.182	90.999	91.241	81.919	81.951	Normative availability
4	NTPC Simhadri Stg II	94.491	94.056	65.572	65.85	100.595	100.596	Unit 3 under RSD from 19.09 and Unit 4 under shut down due to low demand from 18.09
5	NLC TPS I Expansion	100.963	100.949	97.868	98.38	50.165	50.048	Unit I AOH from 03.09 onwards
6	NLC TPS II Expansion	17.036	16.941	54.265	53.67	59.887	60.104	Outage due to FBHE coil puncture on Unit I from 24.06 to 17.07;26.07 to 06.08.2020; boiler side problem from 20.09 to 27.09;Boiler tube leakage problem in Unit II from 29.06 to 23.07; Outage in Unit II due to FBHE coil puncture from 10.08 to 24.08;
8	NLC - II - Stage I	35.154	34.107	41.952	42.533	51.606	52.103	Unit I under maintenance from 01.07.2020 to 11.07 due to water wall tube leakage from 15.07 to 19.07 due to planned maintenance works from 28.07 to due to boiler tube leakage to and Unit II under maintenance from 02.07.to 27.08 due to boiler tube leakage. Unit III under maintenance from 28.08 to; Unit I under annual maintenance from 20.09.2020 onwards.Unit III Boiler side problem from 25.09.2020 onwards
9	NLC - II - Stage II	0.778	.971	0	0	20.807	21.203	Outage of Unit IV due to technical problem from 01.07.2020 to 25.08 & unit VII due to technical problem from 01.07.2020 to 25.08 ; Unit VII restored on 01.09.2020 again shut down for boiler

								renewal On 27.09 ; Unit V from 30.06.2020 onwards due to boiler furnace problem; Unit VI due to boiler explosion from 07.05.2020 onwards
10	NTECL Vallur	89.956	90.177	97.368	96.787	85.734	85.181	Unit I under RSD due to low demand from 29.08.2018 and Unit II under RSD from 02.09.2020 onwards
11	NTPL	90.47	90.486	83.245	83.757	100.121	100.742	Above normative availability
12	Kudgi	100.183	99.96	100.042	100.036	100.222	100.212	Above normative availability. Unit I under RSD due to low demand from 07.04 to 30.08.20 and from 08.09.2020 and Unit II from 27.03.2020 and unit III from 02.08 to 30.08.20 and from 09.09.2020 onwards
13	DVC Mejia (100MW)	94.190	94.848	95.186	94.888	96.905	96.680	Above normative availability
14	DVC RTPS (50 MW)	92.127	92.333	98.708	97.885	100.403	100.403	Above normative availability
15	Maithon Power Ltd-PPA I	94.29	93.94	97.15	96.97	98.08	97.96	Above normative availability
16	Maithon Power Ltd-PPA II	94.29	93.94	97.15	96.97	98.08	97.96	Above normative availability
17	Jindal Power Ltd-PSA 1	90.88		98.36		98.80		Above normative availability;the schedule during August 2020 and Sep 2020 was less due to low demand.
18	Jindal Power Ltd--PSA 2	90.88		98.36		98.80		
19	Jhabua Power Ltd-PSA 1	99.93		100.00		85.45		Above normative availability ; Unscheduled maintenance reported from 19.09.2020 to 23.09.2020.
20	Jhabua Power Ltd-PSA 2	99.93		100.00		85.45		
21	JITPL	97.84		97.55		96.66		Above normative availability
22	BALCO	90.19		88.23		97.51		Above normative availability

## ANNEXURE IV

### DETAILS OF ADDITIONAL LIABILITY

#### 1. Details of Power Purchases - Energy procurement from Central Generating Stations during the period July to September 2020

<b>Table 1 - Central Generating Stations</b>							
Month	Energy purchased at ex bus			Variable cost of power Purchase at ex bus		Additional Liability	
	Approved	Actual	Admissible for FPA	Approved	Actual	Actual	Admissible
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
<b>1.1 NTPC-RSTPS Stage I &amp; II</b>							
July-20	153.95	168.07	153.95	2.540	2.498	-0.71	-0.65
Aug-20	129.64	142.93	129.64	2.540	2.490	-0.71	-0.65
Sept-20	164.66	77.78	77.78	2.540	2.363	-1.38	-1.38
Total	448.25	388.78	361.37	2.540	2.468	-2.80	-2.67
<b>1.2 NTPC-RSTPS Stage III</b>							
July-20	0.00	42.41	0.00	2.490	2.464	-0.11	0.00
Aug-20	42.77	41.05	41.05	2.490	2.458	-0.13	-0.13
Sept-20	41.39	33.46	33.46	2.490	2.325	-0.55	-0.55
Total	84.16	116.92	74.51	2.490	2.422	-0.79	-0.68
<b>1.3 NTPC Talcher-II STPS</b>							
July-20	224.57	296.35	224.57	1.770	2.011	7.14	5.41
Aug-20	299.42	263.11	263.11	1.770	2.064	7.74	7.74
Sept-20	217.32	217.15	217.15	1.770	2.100	7.17	7.17
Total	741.31	776.61	704.83	1.770	2.054	22.04	20.31
<b>1.4 NLC - TPS – II Stage 1</b>							
July-20	35.86	13.84	13.84	2.69	2.771	0.11	0.11
Aug-20	35.86	15.97	15.97	2.69	2.633	-0.09	-0.09
Sept-20	34.70	16.45	16.45	2.69	2.767	0.13	0.13
Total	106.42	46.26	46.26	2.69	2.72	0.15	0.15
<b>1.5 NLC-TPS-II Stage-2</b>							
July-20	52.41	0.36	0.36	2.690	2.771	0.003	0.003
Aug-20	39.31	0.00	0.00	2.690	0.000	0.00	0.000
Sept-20	50.72	9.41	9.41	2.690	2.767	0.072	0.072
Total	142.44	9.77	9.77	2.690	2.767	0.08	0.08

Month	Energy purchased at ex bus			Variable cost of power purchase at ex bus		Additional Liability	
	Approved	Actual	Admissible for FPA	Approved	Actual	Actual	Admissible
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
<b>1.6 NLC-TPS-I Expansion</b>							
July-20	20.50	46.53	20.50	2.490	2.555	0.30	0.13
Aug-20	39.63	40.66	39.63	2.490	2.552	0.25	0.25
Sept-20	38.35	16.69	16.69	2.490	2.552	0.10	0.10
Total	98.48	103.88	76.82	2.490	2.553	0.66	0.48
<b>1.7 NLC-TPS-II Expansion</b>							
July-20	25.60	9.22	9.22	2.490	2.566	0.07	0.07
Aug-20	15.71	27.09	15.71	2.490	2.570	0.22	0.13
Sept-20	15.20	25.79	15.20	2.490	2.570	0.21	0.12
Total	56.51	62.11	40.13	2.490	2.569	0.49	0.32
<b>1.8 NTPC Simhadri TPS – Stage II</b>							
July-20	53.18	48.06	48.06	2.950	3.059	0.52	0.52
Aug-20	29.22	27.62	27.62	2.950	3.100	0.41	0.41
Sept-20	51.46	20.75	20.75	2.950	3.061	0.23	0.23
Total	133.86	96.43	96.43	2.950	3.071	1.17	1.17
<b>1.9 Vallur STPS</b>							
July-20	31.90	0.03	0.03	3.200	3.355	0.00	0.00
Aug-20	31.90	0.01	0.01	3.200	3.237	0.00	0.00
Sept-20	21.07	0.11	0.11	3.200	3.144	0.00	0.00
Total	84.87	0.14	0.14	3.200	3.189	0.00	0.00
<b>1.10 NTPL</b>							
July-20	46.30	43.24	43.24	3.280	2.856	-1.83	-1.83
Aug-20	46.30	32.10	32.10	3.280	2.841	-1.41	-1.41
Sept-20	44.80	23.43	23.43	3.280	2.805	-1.11	-1.11
Total	137.40	98.77	98.77	3.280	2.839	-4.36	-4.36
<b>1.11 NTPC KUDGI(Unit I,II &amp; III)</b>							
July-20	57.04	0.00	0.00	3.980		0.00	0.00
Aug-20	57.04	0.00	0.00	3.980		0.00	0.00
Sept-20	55.20	0.87	0.87	3.980	3.350	-0.05	-0.05
Total	169.28	0.87	0.87	3.980	3.350	-0.05	-0.05

**2. Details of Power Purchases - Energy procurement from Private Generators Outside the State during the period July to September 2020.**

<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	Admissible for FPA	Approved	Actual	Actual	Admissible
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
<b>2.1 Maithon Power Ltd (150 MW) - Contract I</b>							
July-20	102.62	96.81	96.81	2.430	2.775	3.34	3.34
Aug-20	102.62	91.58	91.58	2.430	2.713	2.59	2.59
Sept-20	99.31	74.58	74.58	2.430	2.613	1.36	1.36
Total	304.55	262.97	262.97	2.430	2.707	7.30	7.30
<b>2.2 Maithon Power Ltd (150 MW) - Contract II</b>							
July-20	102.62	96.81	96.81	2.430	2.775	3.34	3.34
Aug-20	102.62	91.58	91.58	2.430	2.713	2.59	2.59
Sept-20	99.31	74.58	74.58	2.430	2.613	1.36	1.36
Total	304.55	262.97	262.97	2.430	2.707	7.30	7.30
<b>2.3 Jindal Power Limited –Bid I (200 MW)</b>							
July-20	127.22	127.66	127.22	1.310	1.310	0.00	0.00
Aug-20	127.22	96.20	96.20	1.310	1.310	0.00	0.00
Sept-20	123.12	116.57	116.57	1.310	1.310	0.00	0.00
Total	377.56	340.43	339.99	1.310	1.310	0.00	0.00
<b>2.4 Jhabua Power Limited-Bid I (115 MW)</b>							
July-20	73.15	74.29	73.15	1.950	1.960	0.07	0.07
Aug-20	73.15	63.20	63.20	1.950	1.960	0.06	0.06
Sept-20	70.79	57.89	57.89	1.950	1.960	0.06	0.06
Total	217.09	195.39	194.25	1.950	1.960	0.20	0.19
<b>2.5 Jindal Power Limited –Bid II (150 MW)</b>							
July-20	95.42	95.71	95.42	1.190	1.310	1.15	1.15
Aug-20	95.42	72.27	72.27	1.190	1.310	0.87	0.87
Sept-20	92.34	87.45	87.45	1.190	1.310	1.05	1.05
Total	283.18	255.43	255.14	1.190	1.310	3.07	3.06



Month	Energy purchased at ex bus			Variable cost of power Purchase at ex bus		Additional Liability	
	Approved	Actual	Admissible for FPA	Approved	Actual	Actual	Admissible
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
<b>2.6 Jhabua Power Limited-Bid II (100 MW)</b>							
July-20	63.61	64.32	63.61	1.73	1.880	0.96	0.95
Aug-20	63.61	54.98	54.98	1.73	1.880	0.82	0.82
Sept-20	61.56	50.36	50.36	1.73	1.880	0.76	0.76
Total	188.78	169.66	168.95	1.73	1.880	2.54	2.53
<b>2.7 Jindal India Thermal Power Limited-Bid II (100 MW)</b>							
July-20	63.61	58.56	58.56	1.030	1.140	0.64	0.64
Aug-20	63.61	50.47	50.47	1.030	1.140	0.56	0.56
Sept-20	61.56	49.48	49.48	1.030	1.140	0.58	0.58
Total	188.78	158.51	158.51	1.030	1.140	1.88	1.88
<b>2.9 BALCO – BID II(100 MW)</b>							
July-20	63.61	62.90	62.90	1.220	1.160	-0.38	-0.38
Aug-20	63.61	56.38	56.38	1.220	1.160	-0.34	-0.34
Sept-20	61.56	55.34	55.34	1.220	1.160	-0.33	-0.33
Total	188.78	174.62	174.62	1.220	1.160	-1.05	-1.05
<b>2.10 DVC Mejia (100 MW)</b>							
July-20	65.56	63.23	63.23	2.510	2.716	1.30	1.30
Aug-20	0.00	58.99	0.00	2.510	2.765	1.50	0.00
Sept-20	63.44	51.92	51.92	2.510	2.728	1.13	1.13
Total	129.00	174.14	115.15	2.510	2.736	3.94	2.43
<b>2.11 DVC RTPS (50 MW)</b>							
July-20	32.35	21.30	21.30	2.340	3.077	1.57	1.57
Aug-20	32.35	16.47	16.47	2.340	3.080	1.22	1.22
Sept-20	31.30	13.18	13.18	2.340	2.808	0.62	0.62
Total	96.00	50.95	50.95	2.340	3.008	3.41	3.41

### 3 Summary of total additional liability for the second quarter

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

Source	Approved energy requirement (MU)	Actual Energy procurement (MU)	Per unit cost		Additional liability	
			Approved	Actual	Actual	Admissible
			(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
CGS						
RSTPS I & II	448.25	388.78	2.540	2.468	-2.80	-2.67
RSTPS III	84.16	116.92	2.490	2.422	-0.79	-0.68
Talcher STPS	741.31	776.61	1.770	2.054	22.04	20.31
Simhadri TPS Stage-II	133.86	96.43	2.950	3.071	1.17	1.17
NLC Stage-I	106.42	46.26	2.690	2.722	0.15	0.15
NLC Stage-II	142.44	9.77	2.690	2.767	0.08	0.08
NLC 1 Expansion	98.48	103.88	2.490	2.553	0.66	0.48
NLC II Expansion	56.51	62.11	2.490	2.569	0.49	0.32
Vallur STPS	84.87	0.14	3.200	3.189	0.00	0.00
NTPL	137.40	98.77	3.280	2.839	-4.36	-4.36
Kudgi	169.28	0.87	3.980	3.350	-0.05	-0.05
<b>Sub Total CGS</b>	<b>2202.98</b>	<b>1700.53</b>			<b>16.58</b>	<b>14.74</b>
<b>Private IPPs outside the State</b>						
DVC RTPS	96.00	50.95	2.340	3.008	3.41	3.41
DVC Mejia	129.00	174.14	2.510	2.736	3.94	2.43
Maithon Power Ltd-I	304.55	262.97	2.430	2.707	7.30	7.30
Maithon Power Ltd-II	304.55	262.97	2.430	2.707	7.30	7.30
Jindal Power ltd-Bid I	377.56	340.43	1.310	1.310	0.00	0.00
Jhabua Power Ltd-Bid I	217.09	195.39	1.950	1.960	0.20	0.19
Jhabua Power Ltd-Bid II*	283.18	255.43	1.190	1.310	3.07	3.06
Jindal Power ltd-Bid II*	188.78	169.66	1.730	1.880	2.54	2.53
JITPL*	188.78	158.51	1.030	1.140	1.88	1.88
BALCO	188.78	174.62	1.220	1.160	-1.05	-1.05
	<b>2278.27</b>	<b>2045.07</b>			<b>28.57</b>	<b>27.05</b>
	<b>4481.25</b>	<b>3745.60</b>			<b>45.16</b>	<b>41.79</b>

\*Variable cost of these stations were not separately approved. Thus variable cost as per MYT projection is taken as approved rate.

**Annexure-V**

<b>Rate of Fuel Surcharge in Paise per unit</b>	
Amount of Fuel Surcharge (F) in crore	41.79
Energy expected to be billed for Retail sale to whole consumers for the three months starting from March 2021 in MU	6703.81
Energy billed for domestic consumers having monthly consumption less than 20 units and connected load below 20 units for the three months starting from March 2021 in MU	0.22
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 the three months starting from March 2021 (E) in MU	6703.59
Rate of fuel surcharge in Paise per unit (F/E)*100	6.23
<b>Rounded to 6.00 paise per unit</b>	

<b>Annexure VI Power procurement through short term contracts</b>			
<b>July</b>			
		Energy at Kerala periphery (units)	Amount (Rs )
A	Power purchase through short term contracts		
I	Power through exchanges		
	IEX (DAM)	77,18,770	1,98,16,002
	IEX (TAM)	16,02,360	34,91,807
II	Power transfer through DSM	3,00,29,857	4,41,53,043
<b>August</b>			
I	Power through exchanges		
	IEX (DAM)	15,68,080	36,57,485
	IEX (RTM)	2,47,940	3,82,349
II	Power transfer through DSM	1,11,45,243	-94,30,392
<b>September</b>			
I	Power through exchanges		
	Power through IEX DAM	32,19,620	85,05,807
	Power through IEX RTM	2,61,003	7537387
II	Power transfer through DSM	-22,52,028	-62,42,750
B	Power sale outside the State		
<b>July</b>			
	IEX(DAM)	40,490	1,56,384
	IEX(TAM)/RTM	65,780	2,61,665
<b>August</b>			
	IEX(DAM)	80,86,430	1,92,48,132
	IEX(TAM)/RTM	33,99,080	86,37,849
<b>September</b>			
	IEX (DAM)	1,05,30,340	2,95,35,820
	PXIL (DAM)	15,44,278	52,14,716
	IEX RTM	91,50,043	2,74,72,970
C	SWAP RETURN		
<b>JULY</b>			
	SWAP RETURN through BYPL	24424920	1235262.00
	SWAP return through PTCIL (TPDDL)	55075020	2746521.00
	SWAP return from TPDDL thru Manikaran	30104200	1515343.00
<b>AUGUST</b>			
	SWAP RETURN through BYPL	24458040	1942373.00
	SWAP return through PTCIL (TPDDL)	55150410	4341005.00
	SWAP return from TPDDL thru Manikaran	30141020	2386535.00
<b>SEPTEMBER</b>			
	SWAP RETURN through BYPL	23757330	1890052.00
	SWAP return through PTCIL(TPDDL)	53272520	4200759.00
	SWAP return from TPDDL thru Manikaran	0	0.00