

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

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

FILING NO /2021

CASE No.

IN THE MATTER OF:

**Filing of petition on 'Proposals to recover the additional cost incurred during the period
October 2020 to December 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 October 2020 to December 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 29th day of January 2021 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 29th day of January 2021 that the contents of the affidavit are true to my information, knowledge and belief, that no part of it is false and that no material has been concealed there from.

Deponent

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

Solemnly affirmed and signed before me.

Advocate and Notary

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

IN THE MATTER OF: **Proposal to recover the additional cost incurred during the period October 2020 to December 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.**

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

- I. Regulation 86 of KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 notified as per No. 2076/F&T/2017/KSERC dated 26th October 2018 (hereinafter referred to as 'Regulations 2018'), enables KSEBL 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 86 (5) therein 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. This Honourable Commission, as per tariff order dated 08.07.2019, has directed KSEB Ltd to submit regularly, application for approval of fuel surcharge as per provisions of the Tariff Regulations, 2018. Accordingly, KSEBL is filing this petition.
- III. KSEBL has power allocation from various Central Generating Stations and KSEBL has entered into long Term agreements with various generators for meeting the demand of the State. The details are enclosed as **Annexure-I**.
- IV. Honourable Commission vide order dated 08.07.2019 had approved a quantum of 28478.89 MU as generation and power purchase of KSEBL for the year 2020-21; 6844.83 MU as internal hydro generation, 11274.77 MU as purchase from Central Generating Stations and 8647.06 MU as purchase through long term contracts. Monthly schedule of purchase from various stations was subsequently approved by the Honourable Commission vide letter dated 06.08.2019. Copy is attached as **Annexure-II**. Current petition is prepared based on the same.

- V. Scheduling of power from fifteen Central Generating Stations and ten IPPs were approved by this Honorable Commission in the order dated 08.07.2019 on the ARR & ERC of KSEBL for the control period 2018-2022 and monthly schedule as per the letter 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 and first two quarters of FY 21, 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 Ltd- 100 MW, Jhabua Power Ltd- 100 MW and Jindal Power Ltd -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, 2018-2022.
- 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 and 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. 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 periphery. It is further submitted that KSEBL has filed separate petition before this Honorable Commission seeking final and conclusive order in the matter of the drawal of power contracted against the PSAs of the three generating stations. The petition is scheduled for hearing on 09.02.2020 and 15.02.2020.
- 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. The total additional liability from these three stations so arrived amounts to Rs 7.91 Crores.
- XII. As stated in para X above, KSEBL withheld Rs 14.79 Cr during this quarter by limiting the payment towards power purchase from the above mentioned three stations to the rate of M/s BALCO at Kerala periphery, complying the order of Honorable Commission. Hence KSEBL is not claiming the additional liability from these stations amounting to 7.91 crores. KSEBL humbly requests before the Honorable Commission to pass on the amount payable as per final orders in this matter, as and when the same materializes.
- XIII. 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.
- XIV. 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.

- XV. 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 October to December 2020 are indicated in the REA statements of SRPC.
- XVI. Invoices for the power supplied are prepared based on the REA statements published by SRPC. Final REA statements for the month of October and November 2020 and the provisional one for December 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.
- XVII. 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 from time to time whereas price of Coal India Ltd (CIL) is based on the notification dated 08.01.2018 for the month of October and November 2020. Fuel price is based on the coal price and the transportation cost. Coal India Ltd has issued price notification dated 27.11.2020 and revised the price and transportation cost with effect from December 2020. 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. As NLC did not have the jurisdiction to issue guidelines, KSEBL raised dispute against the same before Honorable CERC. Honorable CERC was pleased to issue stay on the guidelines issued by NLC at the time of hearing and directed NLC to continue the billing at the rates prevailing corresponding to the tariff period 2009-2014. Thus KSEBL has been paying the charges to NLC at

the rates corresponding to the tariff period 2009-2014 and is claiming the same through fuel surcharge petition. Even though, Honorable CERC has stayed the guidelines, daily orders and final orders are yet to be issued as Honorable CERC stopped its normal functioning from August 2020 onwards. As the final decision is pending, KSEBL humbly requests before the Honorable Commission to approve the actual expenses incurred once Honorable CERC issues final orders on the same.

- 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**.

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

Table-1					
Sl No	Source	Approved	Actual (Rs/ kWh)		
		(Rs/ kWh)	Oct-20	Nov-20	Dec-20
Central Generating Stations					
1	NTPC-RSTPS Stage I & II	2.540	2.502	2.477	2.408
2	NTPC-RSTPS Stage III	2.490	2.469	2.436	2.369
3	Talcher	1.770	2.114	2.055	1.877
4	Simhadri TPS Stage II	2.950	2.922	2.824	2.692
5	NLC-Stage-1	2.690	2.774	2.775	2.775
6	NLC-Stage-II	2.690	2.774	2.775	2.775
7	NLC I Expansion	2.490	2.418	2.408	2.530
8	NLC II Expansion	2.490	2.524	2.534	2.661
9	Vallur STPS	3.200	3.081	2.895	2.789
10	NTPL	3.280	2.997	2.970	2.913
11	NTPC Kudgi	3.980	0.000	0.000	2.756
Independent Power Producers					
12	RTPS	2.341	2.867	2.840	2.882
13	Mejia	2.507	2.708	2.772	2.769
14	Maithon Power Ltd- Contract I	2.435	2.532	2.502	2.477
15	Maithon Power Ltd- Contract II	2.435	2.532	2.502	2.477
16	Jindal Power Ltd-Bid I	1.310	1.310	1.310	1.320
17	Jhabua Power Ltd-Bid I	1.950	1.960	1.960	1.970
18	Jindal Power Ltd-Bid II	1.190	1.310	1.310	1.320
19	Jhabua Power Ltd-Bid II	1.730	1.880	1.880	1.890
20	JITPL	1.030	1.140	1.140	1.140
21	BALCO	1.220	1.160	1.160	1.170

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

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

Table 2 Additional liability for the third quarter 2020-21						
Source	Energy procurement			Add liability		Claim of KSEBL in this petition
	Approved quantity	Actual	Admissible as per regulation	Actual	Admissible as per regulation	
	(MU)	(MU)	(MU)	(Rs. Cr)	(Rs. Cr)	
CGS	2287.91	1740.73	1675.28	5.80	4.74	4.74
IPPs	2209.91	2184.53	2029.08	18.72	16.50	8.59
Total	4497.82	3925.26	3704.36	24.52	21.24	13.33

XX. Accordingly, KSEBL has incurred an additional liability of Rs 24.52 crores for purchasing 3925.26 MU of energy from various approved thermal sources during the third quarter

of FY 2020-21. Admissible additional liability as per fuel surcharge regulations is Rs 21.24 Cr. KSEBL is claiming only Rs 13.33 Crores as explained in para XI and XII above.

XXI. Details in this regard as per the provisions of fuel surcharge formula specified in Tariff Regulations, 2018, are furnished in **Annexure IV**.

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

- a. KSEBL purchased 14.24 MU through exchanges and 27.30 MU through deviation settlement mechanism during the third quarter of FY-2020-21.
- b. KSEBL sold 103.29 MU during third quarter through exchanges. The details of power procurement/sale through short term transactions is enclosed as **Annexure VI**.
- c. The actual demand during the quarter was less by 470.51 MU. Actual power purchase from CGS at exbus decreased by 440 MU, renewable energy purchase by 360.83 MU and exbus energy from private IPPs outside the State by 25.38 MU against the approved quantum. Thus there is a reduction in power purchase of 810.39 MU at Kerala periphery. There was external sale of 103.29 MU during the quarter. The actual hydro generation was 293.51 MU more than the approved quantum. KSEBL purchased 41.54 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 116.62 MU for which Honorable Commission has considered a revenue amounting to Rs 58.31 Cr @ Rs 5 per unit through external sale. The reduction in power purchase has led to reduction in energy sale outside the State by 13 MU. There is a reduction in revenue from external sale of Rs 25.58 Cr. Reduction in demand of 470.51 MU has resulted in a reduction in revenue by Rs 289.09 Cr considering the revenue realisation approved by the Honourable Commission for the FY 2019-20 (Rs 6.144 per unit).
- d. Thus, the reduction in power purchase and reduction in demand has led to a reduction in revenue approved by Honorable Commission by Rs 314.67 Cr. Even though reduction in power purchase has led to reduction in power purchase cost amounting to Rs 222.56 Cr, KSEBL is suffering a reduction in revenue of Rs 314.67 Cr on account of the reduction in demand during the third 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.

XXIII. 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 March 2021 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 and second quarter of FY-21 is pending. Accordingly, KSEBL feels that it may not be possible to recover the fuel surcharge for the third quarter of FY 20-21 from March 2021 onwards. Hence, for calculation purpose, KSEBL is considering the energy sales for the period of three months from June 2021 for calculating the rate of fuel surcharge recovery. Calculating on these lines the rate comes to 2 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 13.33 Cr, resulting from the variation in variable charges of power purchase from approved sources for the period from October to December 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, @ 2 paise per unit from 1st June 2021 onwards.

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

Acc: 1. Formats I, III & IV
2. Annexure I-VII

Formats

Format-1

Details of energy billed for retail sale for third quarter 2020-21						
Month	Energy billed (MU)*		T&D loss(%)		Energy Input(MU)	
	Actual	Approved	Actual	Approved	Actual	Approved
Oct-2020	1690.57			12.02% at the end of FY-20	2018.96	
Nov-20	1771.05				2065.93	
Dec-20	1828.61				2120.40	
Total	5290.23				6205.30	

*The energy billed for the month of October, November and December 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)
Oct-2020						
Central Generating Stations						
RSTPS I & II	103.93	170.15	2.502	2.540	26.00	43.22
RSTPS III	32.89	42.77	2.469	2.490	8.12	10.65
Talcher Stage-II	264.03	224.57	2.114	1.770	55.82	39.75
Simhadri TPS Stage II	3.03	53.18	2.922	2.950	0.89	15.69
NLC Stage-I	10.40	28.12	2.774	2.690	2.88	7.56
NLC Stage-II	9.19	52.41	2.774	2.690	2.55	14.10
NLC 1 Expansion	23.98	39.63	2.418	2.490	5.80	9.87
NLC II Expansion	26.44	25.60	2.524	2.490	6.67	6.37
Vallur STPS	0.41	31.90	3.081	3.200	0.13	10.21
NTPL	24.78	46.30	2.997	3.280	7.43	15.19
Kudgi	0.00	57.04	0.000	3.980	0.00	22.70
Sub total CGS	499.08	771.67			116.29	195.31
Long Term contracts with generators outside the State						
DVC Reghunathpur TPS	10.43	32.35	2.867	2.341	2.99	7.57
DVC Mejia TPS	53.27	65.56	2.708	2.507	14.43	16.44
Maithon Power Ltd- Contract 1	69.97	0.00	2.532	2.435	17.72	0.00
Maithon Power Ltd- Contract II	69.96	102.62	2.532	2.435	17.71	24.98
Jindal Power Ltd-Bid I	108.31	127.22	1.310	1.310	14.19	16.67
Jhabhua Power Ltd -Bid I	63.60	73.15	1.960	1.950	12.47	14.26
Jindal Power Ltd-Bid II	81.21	95.42	1.310	1.190	10.64	11.35
Jhabhua Power Ltd -Bid II	55.33	63.61	1.880	1.730	10.40	11.00
Jindal India thermal Power Ltd	39.82	63.61	1.140	1.030	4.54	6.55
BALCO	46.70	63.61	1.160	1.220	5.42	7.76
TOTAL LTA	598.60	687.15			110.50	116.60
Total	1097.68	1458.82			226.78	311.90
November-2020						
Central Generating Stations						
RSTPS I & II	142.06	148.98	2.477	2.540	35.19	37.84
RSTPS III	41.18	41.39	2.436	2.490	10.03	10.31
Talcher Stage-II	211.87	217.32	2.055	1.770	43.54	38.47
Simhadri TPS Stage II	19.40	51.46	2.824	2.950	5.48	15.18
NLC Stage-I	35.45	34.70	2.775	2.690	9.84	9.33
NLC Stage-II	29.20	38.04	2.775	2.690	8.10	10.23
NLC 1 Expansion	21.87	38.35	2.408	2.490	5.27	9.55
NLC II Expansion	21.31	24.77	2.534	2.490	5.40	6.17
Vallur STPS	14.69	20.58	2.895	3.200	4.25	6.59
NTPL	41.19	44.80	2.970	3.280	12.23	14.69

Kudgi	0.00	55.20	0.000	3.980	0.00	21.97
Total	578.21	715.59			139.33	180.33
Long Term contracts with generators outside the State						
DVC Reghunathpur TPS	22.59	0.00	2.840	2.341	6.41	0.00
DVC Mejia TPS	56.64	63.44	2.772	2.507	15.70	15.91
Maithon Power Ltd- Contract 1	97.21	99.31	2.502	2.435	24.32	24.18
Maithon Power Ltd- Contract II	97.21	99.31	2.502	2.435	24.32	24.18
Jindal Power Ltd-Bid I	135.74	123.12	1.310	1.310	17.78	16.13
Jhabhua Power Ltd -Bid I	74.87	70.79	1.960	1.950	14.67	13.80
Jindal Power Ltd-Bid II	101.78	92.34	1.310	1.190	13.33	10.99
Jhabhua Power Ltd -Bid II	65.11	61.56	1.880	1.730	12.24	10.65
Jindal India thermal Power Ltd	61.73	61.56	1.140	1.030	7.04	6.34
BALCO	59.30	61.56	1.160	1.220	6.88	7.51
TOTAL LTA	772.18	732.99			142.71	129.68
Total	1350.40	1448.58			282.03	310.01
December-2020						
Central Generating Stations						
RSTPS I & II	153.39	129.64	2.408	2.540	36.94	32.93
RSTPS III	38.60	42.77	2.369	2.490	9.14	10.65
Talcher Stage-II	245.11	299.42	1.877	1.770	46.01	53.00
Simhadri TPS Stage II	35.82	53.18	2.692	2.950	9.64	15.69
NLC Stage-I	31.59	35.86	2.775	2.690	8.77	9.65
NLC Stage-II	23.88	39.31	2.775	2.690	6.63	10.57
NLC 1 Expansion	34.18	39.63	2.530	2.490	8.65	9.87
NLC II Expansion	26.25	25.60	2.661	2.490	6.99	6.37
Vallur STPS	15.39	31.90	2.789	3.200	4.29	10.21
NTPL	23.54	46.30	2.913	3.280	6.86	15.19
Kudgi	35.68	57.04	2.756	3.980	9.83	22.70
Total	663.44	800.65			153.74	196.82
Long Term contracts with generators outside the State						
DVC Reghunathpur TPS	26.88	32.35	2.882	2.341	7.75	7.57
DVC Mejia TPS	65.89	65.56	2.769	2.507	18.24	16.44
Maithon Power Ltd- Contract 1	100.83	102.62	2.477	2.435	24.98	24.98
Maithon Power Ltd- Contract II	100.83	102.62	2.477	2.435	24.98	24.98
Jindal Power Ltd-Bid I	139.22	127.22	1.320	1.310	18.38	16.67
Jhabhua Power Ltd -Bid I	78.46	73.15	1.970	1.950	15.46	14.26
Jindal Power Ltd-Bid II	104.41	95.42	1.320	1.190	13.78	11.35
Jhabhua Power Ltd -Bid II	68.22	63.61	1.890	1.730	12.89	11.00
Jindal India thermal Power Ltd	65.33	63.61	1.140	1.030	7.45	6.55
BALCO	63.69	63.61	1.170	1.220	7.45	7.76
TOTAL LTA	813.75	789.77			151.35	141.58
Total	1477.19	1590.42			305.09	338.40

Format-4										
Sourcewise Energy Input from October-2020 to December 2020 in MU										
Sl No	Particulars	Oct-20		Nov-20		Dec-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	754.31	588.9525	521.84	451.559	488.31	428.85	1764.46	1469.36	295.10
	(b) Less Aux consumption	3.16	2.94	2.80	2.26	2.98	2.14	8.94	7.35	1.59
	(c) Net Hydro Gen	751.15	586.01	519.04	449.30	485.33	426.70	1755.52	1462.01	293.51
2	KSEB thermal									
	(a) BDPP	0.00		0.00		0.00		0.00	0.00	
	(b) KDPP	0.00		0.00		2.33		2.33	0.00	
	(c) Subtotal	0.00		0.00		2.33		2.33	0.00	
	(d) Less Aux consumption	0.00		0.00		0.89		0.89	0.00	
	(e) Net BDPP+KDPP	0.00		0.00		1.44		1.44	0.00	
3	Wind Generation(net)	0.09	0.307349	0.07	0.05737	0.10	0.1057	0.26	0.47	-0.21
4	Solar Generation(net)	0.86	3.97	0.71	3.97	0.59	3.97	2.17	11.90	-9.73
	Total own generation(net)	752.10	590.28	519.82	453.32	487.46	430.77	1759.39	1474.38	285.01
3	CGS (Import)	752.65	989.71	796.85	932.13	878.16	945.98	2427.67	2867.82	-440.15
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	12.51		5.26		6.40		24.17		24.17
	Solar	5.27		6.31		6.97		18.55		18.55
	Ullunkal(EDCL)	2.26		1.39		1.18		4.83		4.83
	Iruttukanam Stage-I	2.41		1.86		1.01		5.28		5.28
	Iruttukanam Stage-II	1.27		0.29		0.12		1.68		1.68
	Karikkayam HEP(AHPL)	5.04		2.84		2.34		10.21		10.21
	Meenvalloam (PSHCL)	1.39		0.56		0.25		2.20		2.20
	Pathamkayam	2.43		0.50		0.20		3.14		3.14
	Subtotal	32.57	23.84	19.02	23.84	18.47	23.07	70.07	70.75	-0.68
6	Longterm contract							0.00		0.00
i	DVC Reghunathpur	10.43	32.35	22.59	0.00	26.88	32.35	59.90	64.70	-4.80
ii	DVC Mejia	53.27	65.56	56.64	63.44	65.89	65.56	175.80	194.56	-18.76
iii	Maithon power-1,	69.97	0.00	97.21	99.31	100.83	102.62	268.01	201.93	66.08
iv	Maithon power-II	69.96	102.62	97.21	99.31	100.83	102.62	268.00	304.55	-36.55
v	Jindal -Bid I	108.31	127.22	135.74	123.12	139.22	127.22	383.27	377.56	5.71
vi	Jhabhua- Bid-I	63.60	73.15	74.87	70.79	78.46	73.15	216.92	217.09	-0.17
vii	Jhabhua- Bid II	55.33	63.61	65.11	61.56	68.22	63.61	188.67	188.78	-0.11
viii	Jindal -Bid II	81.21	95.42	101.78	92.34	104.41	95.42	287.40	283.18	4.22
ix	JITPL	39.82	63.61	61.73	61.56	65.33	63.61	166.87	188.78	-21.91
x	BALCO	46.70	63.61	59.30	61.56	63.69	63.61	169.69	188.78	-19.09
	Sub Total	598.60	687.15	772.18	732.99	813.75	789.77	2184.53	2209.91	-25.38
	STOA	0.00		0.00				0.00		0.00
	Purchase through exchanges at SR periphery	0.38	0.00	11.89	0.00	2.52	0.00	14.78		14.78
	DSM at Kerala periphery	-5.11		10.64		21.76		27.30		27.30
	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	1379.09	1822.28	1610.59	1810.54	1734.66	1876.48	4724.34	5509.31	-784.97
	PGCIL losses	46.67	63.09	58.23	62.73	70.25	65.44	175.15	191.26	-16.11
	Net Power Purchase	1332.42	1759.20	1552.36	1747.81	1664.42	1811.04	4549.20	5318.05	-768.86
	Total Gen & PP	2084.52	2349.48	2072.18	2201.14	2151.88	2241.82	6308.58	6792.43	-483.85
	External sale	65.56	111.73	6.25	-13.71	31.48	18.61	103.29	116.62	13.34
	Swap return	0.00		0.00		0.00		0.00		
	Energy demand	2018.96	2237.75	2065.93	2214.85	2120.40	2223.21	6205.30	6675.81	-470.51

Annexures

Annexure-I				
Power contracted through long Term agreements				
Allocation from Central Generating Stations				
No.	Station			Allocated Capacity to KSEBL (MW)
		IC (MW)	Allocation	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
	Total			1740.58
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		

Monthly Schedule Approved for Central Generating Stations at KSB for the year 2020-21												
Source	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
ESPS Stage-I	164.50	153.95	125.56	153.53	125.54	184.86	170.15	170.15	170.15	170.15	170.15	170.15
ESPS Stage-II	41.39	42.77	41.39	42.77	41.39	42.77	41.39	42.77	41.39	42.77	41.39	42.77
ALCHER-Stage-I	283.75	290.42	280.75	224.57	299.42	217.32	224.57	217.32	224.57	217.32	224.57	217.32
Simhadri Exp	51.46	53.18	26.78	53.18	29.22	51.46	53.18	51.46	53.18	51.46	53.18	51.46
ALCH-Stage-I	77.22	35.86	77.22	35.86	35.86	34.70	23.42	34.70	35.86	35.86	35.86	35.86
N.C.H-Stage-2	57.72	52.41	38.04	52.41	38.31	50.74	52.41	38.31	50.74	52.41	38.31	50.74
N.C-Exo-Stage-1	38.35	38.63	38.35	20.50	39.63	38.35	39.63	38.35	39.63	38.35	39.63	38.35
N.C-Exp	24.77	25.60	24.77	25.60	25.71	25.60	25.71	25.60	25.71	25.60	25.71	25.60
WAPS	11.28	11.45	11.28	11.45	11.45	11.09	11.09	11.09	11.09	11.09	11.09	11.09
Coastal Stage-I	33.82	24.33	43.30	44.75	44.75	32.03	44.75	44.75	44.75	44.75	44.75	44.75
Coastal Stage-II	137.54	142.23	137.54	142.23	142.23	137.54	142.23	137.54	142.23	137.54	142.23	137.54
WAPS-1 & II	20.58	31.30	32.87	31.90	31.90	21.07	31.90	20.58	31.90	31.90	31.90	31.90
WAPS-1 & II	47.60	46.30	25.11	46.30	45.30	47.60	46.30	44.00	46.30	45.30	46.30	45.30
WAPS-1 & II	65.28	63.45	66.24	57.04	57.04	55.20	57.04	55.20	57.04	55.20	57.04	55.20
WAPS-1 & II	24.57	24.57	24.57	25.34	25.34	24.57	25.34	24.57	25.34	24.57	25.34	24.57
Total	1022.03	1022.03	949.04	949.04	949.04	949.04	949.04	949.04	949.04	949.04	949.04	949.04

Monthly Schedule Approved for KSB for the year 2020-21												
Source	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Mathon Power	94.31	102.62	94.31	102.62	102.62	94.31	102.62	94.31	102.62	94.31	102.62	94.31
Mathon Power	94.31	102.62	94.31	102.62	102.62	94.31	102.62	94.31	102.62	94.31	102.62	94.31
DWD Mathon TPS	63.44	65.56	63.44	65.56	65.56	63.44	65.56	63.44	65.56	63.44	65.56	63.44
DWD PPTP TPS	33.30	30.96	31.30	32.85	32.85	31.30	32.85	31.30	32.85	31.30	32.85	31.30
India Power	123.12	127.22	123.12	127.22	127.22	123.12	127.22	123.12	127.22	123.12	127.22	123.12
India Power	52.34	53.42	52.34	53.42	53.42	52.34	53.42	52.34	53.42	52.34	53.42	52.34
Indira Thermal	61.56	63.61	61.56	63.61	63.61	61.56	63.61	61.56	63.61	61.56	63.61	61.56
Indira Power	70.79	72.15	70.79	72.15	72.15	70.79	72.15	70.79	72.15	70.79	72.15	70.79
Indira Power	61.56	63.61	61.56	63.61	63.61	61.56	63.61	61.56	63.61	61.56	63.61	61.56
SALCO	51.56	53.61	51.56	53.61	53.61	51.56	53.61	51.56	53.61	51.56	53.61	51.56
Total	1022.03	1022.03	949.04	949.04	949.04	949.04	949.04	949.04	949.04	949.04	949.04	949.04

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

Sl. No.	Name of the Station	Availability						Reason for low availability
		October (Low Demand in SR)		November (Low Demand in SR)		December (Low Demand in SR)		
		peak	off peak	peak	off peak	peak	off peak	
1	NTPC RSTPS Stg I & II	79.626	79.671	86.643	86.723	90.434	90.835	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	90.914	91.659	103.211	103.203	93.446	93.876	Above normative availabilily
3	NTPC Talcher II	95.143	94.746	74.538	75.2	85.506	84.875	Overhauling of Talcher Unit VI from 04.11.2020 to 21.12.2020.
4	NTPC Simhadri Stg II	99.951	99.978	100.296	100.296	97.984	97.502	Above Normative availabilily
5	NLC TPS I Expansion	64.229	64.62	48.618	48.85	74.673	73.558	Unit I - turbine tripped- from 10.10.2020 to 03.11.2020.Outage from 04.11.2020 to 14.12.2020-turbine problem
6	NLC TPS II Expansion	59.406	58.282	40.148	41.273	48.53	48.109	Unit II-annual overhauling from 17.10.2020 to 10.11.2020. Unit I - boiler maintenance work from 20.11 to 19.12.2020. Unit II outage from 28.11.2020 to 06.12.2020 due to boiler tube leakage
8	NLC - II - Stage I	37.856	38.377	91.607	92.056	73.23	76.566	Unit I under annual maintenance from 20.09.2020 onwards. Unit III -Boiler side problem from 25.09.2020 -30.10.2020
9	NLC - II - Stage II	23.08	23.36	52.55	54.203	39.768	40.929	Unit IV –Boiler license renewal (27.09 to) 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	98.808	99.058	90.42	91.858	58.674	58.984	Unit I -COAL HANDLING ISSUE DUE TO NIVAR CYCLONE AND RAIN

11	NTPL	101.061	101.061	101.061	101.061	53.795	53.795	Unit I -Annual Maintenance from 03.12.2020
12	Kudgi	100	100	100	100	71.019	71.479	Unit II annual overhauling from 01.12.2020 to 24.12.2020
13	DVC Mejia (100MW)	102.005	102.005	85.997	86.227	96.835	96.835	Above normative availability
14	DVC RTPS (50 MW)	98.39	97.43	80.61	80.78	88.00	88.11	
15	Maithon Power Ltd-PPA I	83.10	82.92	96.57	96.68	97.23	96.53	Outage in October due to boiler problem
16	Maithon Power Ltd-PPA II	83.10	82.92	96.57	96.68	97.23	96.53	
17	Jindal Power Ltd-PSA 1	99.71		99.93		98.59		Above normative availability
18	Jindal Power Ltd--PSA 2	99.71		99.93		98.58		
19	Jhabua Power Ltd-PSA 1	100		100		99.95		Above normative availability ;
20	Jhabua Power Ltd-PSA 2	100		100		99.95		
21	JITPL	97.57		100		98.47		Above normative availability
22	BALCO	83.98		87.32		90.11		Technical problem in CHP area

ANNEXURE IV

DETAILS OF ADDITIONAL LIABILITY

1. Details of Power Purchases - Energy procurement from Central Generating Stations during the period October to December 2020

Table 1 - Central Generating Stations							
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)
1.1 NTPC-RSTPS Stage I & II							
Oct-20	170.15	103.93	103.93	2.540	2.502	-0.39	-0.39
Nov-20	148.98	142.06	142.06	2.540	2.477	-0.89	-0.89
Dec-20	129.64	153.39	129.64	2.540	2.408	-2.02	-1.71
Total	448.77	399.38	375.64	2.540	2.457	-3.31	-3.00
1.2 NTPC-RSTPS Stage III							
Oct-20	42.77	32.89	32.89	2.490	2.469	-0.07	-0.07
Nov-20	41.39	41.18	41.18	2.490	2.436	-0.22	-0.22
Dec-20	42.77	38.60	38.60	2.490	2.369	-0.47	-0.47
Total	126.93	112.66	112.66	2.490	2.423	-0.76	-0.76
1.3 NTPC Talcher-II STPS							
Oct-20	224.57	264.03	224.57	1.770	2.114	9.08	7.73
Nov-20	217.32	211.87	211.87	1.770	2.055	6.04	6.04
Dec-20	299.42	245.11	245.11	1.770	1.877	2.62	2.62
Total	741.31	721.01	681.55	1.770	2.016	17.74	16.39
1.4 NLC - TPS – II Stage 1							
Oct-20	28.12	10.40	10.40	2.690	2.774	0.09	0.09
Nov-20	34.70	35.45	34.70	2.690	2.775	0.30	0.29
Dec-20	35.86	31.59	31.59	2.690	2.775	0.27	0.27
Total	98.68	77.44	76.69	2.690	2.775	0.66	0.65
1.5 NLC-TPS-II Stage-2							
Oct-20	52.41	9.19	9.19	2.690	2.774	0.08	0.08
Nov-20	38.04	29.20	29.20	2.690	2.775	0.25	0.25
Dec-20	39.31	23.88	23.88	2.690	2.775	0.20	0.20
Total	129.76	62.27	62.27	2.690	2.775	0.53	0.53

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)
1.6 NLC-TPS-I Expansion							
Oct-20	39.63	23.98	23.98	2.490	2.418	-0.17	-0.17
Nov-20	38.35	21.87	21.87	2.490	2.408	-0.18	-0.18
Dec-20	39.63	34.18	34.18	2.490	2.530	0.14	0.14
Total	117.61	80.03	80.03	2.490	2.463	-0.22	-0.22
1.7 NLC-TPS-II Expansion							
Oct-20	25.60	26.44	25.60	2.490	2.524	0.09	0.09
Nov-20	24.77	21.31	21.31	2.490	2.534	0.09	0.09
Dec-20	25.60	26.25	25.60	2.490	2.661	0.45	0.44
Total	75.97	74.00	72.51	2.490	2.575	0.63	0.62
1.8 NTPC Simhadri TPS – Stage II							
Oct-20	53.18	3.03	3.03	2.950	2.922	-0.01	-0.01
Nov-20	51.46	19.40	19.40	2.950	2.824	-0.24	-0.24
Dec-20	53.18	35.82	35.82	2.950	2.692	-0.92	-0.92
Total	157.82	58.26	58.26	2.950	2.748	-1.18	-1.18
1.9 Vallur STPS							
Oct-20	31.90	0.41	0.41	3.200	3.081	0.00	0.00
Nov-20	20.58	14.69	14.69	3.200	2.895	-0.45	-0.45
Dec-20	31.90	15.39	15.39	3.200	2.789	-0.63	-0.63
Total	84.38	30.49	30.49	3.200	2.844	-1.09	-1.09
1.10 NTPL							
Oct-20	46.30	24.78	24.78	3.280	2.997	-0.70	-0.70
Nov-20	44.80	41.19	41.19	3.280	2.970	-1.28	-1.28
Dec-20	46.30	23.54	23.54	3.280	2.913	-0.86	-0.86
Total	137.40	89.51	89.51	3.280	2.962	-2.84	-2.84
1.11 NTPC KUDGI(Unit I,II & III)							
Oct-20	57.04	0.00	0.00	3.980	0.000	0.00	0.00
Nov-20	55.20	0.00	0.00	3.980	0.000	0.00	0.00
Dec-20	57.04	35.68	35.68	3.980	2.756	-4.37	-4.37
Total	169.28	35.68	35.68	3.980	2.756	-4.37	-4.37

2. Details of Power Purchases - Energy procurement from Private Generators Outside the State during the period October to December 2020.

Table 2 - Private Generators Outside the State							
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)
2.1 Maithon Power Ltd (150 MW) - Contract I							
Oct-20	0.00	69.97	0.00	2.435	2.532	0.68	0.00
Nov-20	99.31	97.21	97.21	2.435	2.502	0.66	0.66
Dec-20	102.62	100.83	100.83	2.435	2.477	0.43	0.43
Total	201.93	268.01	198.04	2.435	2.500	1.77	1.08
2.2 Maithon Power Ltd (150 MW) - Contract II							
Oct-20	102.62	69.96	69.96	2.435	2.532	0.68	0.68
Nov-20	99.31	97.21	97.21	2.435	2.502	0.66	0.66
Dec-20	102.62	100.83	100.83	2.435	2.477	0.43	0.43
Total	304.55	268.00	268.00	2.435	2.500	1.77	1.77
2.3 Jindal Power Limited –Bid I (200 MW)							
Oct-20	127.22	108.31	108.31	1.310	1.310	0.00	0.00
Nov-20	123.12	135.74	123.12	1.310	1.310	0.00	0.00
Dec-20	127.22	139.22	127.22	1.310	1.320	0.14	0.13
Total	377.56	383.27	358.65	1.310	1.314	0.14	0.13
2.4 Jhabua Power Limited-Bid I (115 MW)							
Oct-20	73.15	63.60	63.60	1.950	1.960	0.06	0.06
Nov-20	70.79	74.87	70.79	1.950	1.960	0.07	0.07
Dec-20	73.15	78.46	73.15	1.950	1.970	0.16	0.15
Total	217.09	216.92	207.54	1.950	1.964	0.30	0.28
2.5 Jindal Power Limited –Bid II (150 MW)							
Oct-20	95.42	81.21	81.21	1.190	1.310	0.97	0.97
Nov-20	92.34	101.78	92.34	1.190	1.310	1.22	1.11
Dec-20	95.42	104.41	95.42	1.190	1.320	1.36	1.24
Total	283.18	287.40	268.97	1.190	1.314	3.55	3.32

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)
2.6 Jhabua Power Limited-Bid II (100 MW)							
Oct-20	63.61	55.33	55.33	1.730	1.880	0.83	0.83
Nov-20	61.56	65.11	61.56	1.730	1.880	0.98	0.92
Dec-20	63.61	68.22	63.61	1.730	1.890	1.09	1.02
Total	188.78	188.67	180.50	1.730	1.884	2.90	2.77
2.7 Jindal India Thermal Power Limited-Bid II (100 MW)							
Oct-20	63.61	39.82	39.82	1.030	1.140	0.44	0.44
Nov-20	61.56	61.73	61.56	1.030	1.140	0.68	0.68
Dec-20	63.61	65.33	63.61	1.030	1.140	0.72	0.70
Total	188.78	166.87	164.99	1.030	1.140	1.84	1.81
2.9 BALCO – BID II(100 MW)							
Oct-20	63.61	46.70	46.70	1.220	1.160	-0.28	-0.28
Nov-20	61.56	59.30	59.30	1.220	1.160	-0.36	-0.36
Dec-20	63.61	63.69	63.61	1.220	1.170	-0.32	-0.32
Total	188.78	169.69	169.61	1.220	1.164	-0.95	-0.95
2.10 DVC Mejia (100 MW)							
Oct-20	65.56	53.27	53.27	2.507	2.708	1.07	1.07
Nov-20	63.44	56.64	56.64	2.507	2.772	1.50	1.50
Dec-20	65.56	65.89	65.56	2.507	2.769	1.72	1.72
Total	194.56	175.80	175.48	2.507	2.751	4.29	4.28
2.11 DVC RTPS (50 MW)							
Oct-20	32.35	10.43	10.43	2.341	2.867	0.55	0.55
Nov-20	0.00	22.59	0.00	2.341	2.840	1.13	0.00
Dec-20	32.35	26.88	26.88	2.341	2.882	1.45	1.45
Total	64.70	59.90	37.31	2.341	2.864	3.13	2.00

3 Summary of total additional liability for the third 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	448.77	399.38	2.540	2.457	-3.31	-3.00
RSTPS III	126.93	112.66	2.490	2.423	-0.76	-0.76
Talcher STPS	741.31	721.01	1.770	2.016	17.74	16.39
Simhadri TPS Stage-II	157.82	58.26	2.950	2.748	-1.18	-1.18
NLC Stage-I	98.68	77.44	2.690	2.775	0.66	0.65
NLC Stage-II	129.76	62.27	2.690	2.775	0.53	0.53
NLC 1 Expansion	117.61	80.03	2.490	2.463	-0.22	-0.22
NLC II Expansion	75.97	74.00	2.490	2.575	0.63	0.62
Vallur STPS	84.38	30.49	3.200	2.844	-1.09	-1.09
NTPL	137.40	89.51	3.280	2.962	-2.84	-2.84
Kudgi	169.28	35.68	3.980	2.756	-4.37	-4.37
Sub Total CGS	2287.91	1740.73			5.80	4.74
Private IPPs outside the State						
DVC RTPS	64.70	59.90	2.341	2.864	3.13	2.00
DVC Mejia	194.56	175.80	2.507	2.751	4.29	4.28
Maithon Power Ltd-I	201.93	268.01	2.435	2.500	1.77	1.08
Maithon Power Ltd-II	304.55	268.00	2.435	2.500	1.77	1.77
Jindal Power Ltd-Bid I	377.56	383.27	1.310	1.314	0.14	0.13
Jhabua Power Ltd-Bid I	217.09	216.92	1.950	1.964	0.30	0.28
Jhabua Power Ltd-Bid II*	188.78	188.67	1.730	1.884	2.90	2.77
Jindal Power Ltd-Bid II*	283.18	287.40	1.190	1.314	3.55	3.32
JITPL*	188.78	166.87	1.030	1.140	1.84	1.81
BALCO	188.78	169.69	1.220	1.164	-0.95	-0.95
LTA subtotal	2209.91	2184.53			18.72	16.50
Total	4497.82	3925.26			24.52	21.24
Claim						13.33

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

Annexure-V

Rate of Fuel Surcharge in Paise per unit	
Amount of Fuel Surcharge (F) in crore	13.33
Energy expected to be billed for Retail sale to whole consumers for the three months starting from June 2021 in MU	6059.93
Energy billed for domestic consumers having monthly consumption less than 20 units and connected load below 20 units for the three months starting from June 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 June 2021 (E) in MU	6059.71
Rate of fuel surcharge in Paise per unit $(F*10/E)*100$	2.199
Rounded to 2 paise per unit	

Annexure VI Power procurement through short term contracts			
October			
		Energy at Kerala periphery (units)	Amount (Rs)
A	Power purchase through short term contracts		
I	Power through exchanges		
	IEX (RTM)	370342.5	12,54,329
II	Power transfer through DSM	-5111809	-53006253
November			
I	Power through exchanges		
	IEX (DAM)	106,64,890	296,66,576
	IEX (RTM)	7,86,843	50,18,445
II	Power transfer through DSM	10644532	-155,46,615
December			
I	Power through exchanges		
	Power through IEX DAM	9,86,510	36,36,246
	Power through IEX RTM	14,34,903	7537387
II	Power transfer through DSM	217,63,371	239,71,577
B	Power sale outside the State		
October			
	IEX(DAM/TAM/RTM)	605,68,013	1701,76,884
	PXIL(DAM,TAM,RTM)	49,88,865	138,90,292
November			
	IEX(DAM/TAM/RTM)	54,17,699	20586382.47
	PXIL(DAM,TAM,RTM)	8,36,740	28,16,804
December			
	IEX(DAM/TAM/RTM)	28068585	108940885.8
	PXIL(DAM,TAM,RTM)	34,07,000	108,99,815