

**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 adjust the differential cost during the period
January 2021 to March 2021 against the approved level on Generation and Power
Purchase due to variation in cost of fuel.**

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 adjust the differential cost during the period January 2021 to March 2021 against the approved level on Generation and Power Purchase due to variation in cost of fuel'.

I, **B.Pradeep**, son of Sri.P.Balachandran, aged 56 years residing at Vipanchika, Anayara P.O., Thiruvananthapuram do solemnly affirm and state as follows:

I am the **Deputy Chief Engineer (Commercial & Planning) with full powers of Chief Engineer** of the Kerala State Electricity Board Limited, Vydyuthi Bhavanam, Pattom, Thiruvananthapuram, and the petitioner in the above matter and I am duly authorized by the Board to make this affidavit on its behalf. I solemnly affirm at Thiruvananthapuram on this the 30th day of April 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,
Vydyuthi Bhavanam, Pattom
Thiruvananthapuram – 695 004

VERIFICATION

I, the above named deponent, solemnly affirm at Thiruvananthapuram on this, the 30th day of April 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
Vydyuthi Bhavanam, Pattom
Thiruvananthapuram – 695 004.

Solemnly affirmed and signed before me.

Advocate and Notary

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

IN THE MATTER OF: **Proposals to adjust the differential cost in variable charges during the period January 2021 to March 2021 against the approved level on Generation and Power Purchase due to variation in cost of fuel.**

PETITIONER: **Kerala State Electricity Board Limited
Vydyuthi 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 and public hearing on

the same was scheduled on 12.03.2021 which was adjourned by Honorable Commission.

- 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 8.62 Crores.
- XII. As stated in para X above, KSEBL withheld Rs 18.34 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 8.62 crores. KSEBL humbly requests before the Honorable Commission to pass on the amount payable as per final orders in the case of abovementioned stations, 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 technical issues. 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 January to March 2021 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 January and February 2021 and the provisional one for March 2021 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 XIV, 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
 12. SCCL price notification no.125/2020-21 dtd 18/12/20 wef 19/12/2020
 13. Corrigendum 1 to price notification no,125/2020-21 dtd 05.01.2021 wef 06/1/2021
 14. Corrigendum 4 to price notification no,125/2020-21 dtd 27.02.2021 wef 01.03.2021
- 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. NLC has been raising invoices based on the LPPF of Rs 2241.5848 per MT. Hence energy charges of NLC stations has increased from the third quarter of FY-19 onwards. KSEBL has remitted the charges under protest till July 2020. As NLC did not have the jurisdiction to issue guidelines, KSEBL raised dispute against the same before Honorable CERC. Honorable CERC conducted public hearing and 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 based on the MoC guidelines issued vide order No 28012/1/2014-CA-II dated 2.1.2015. Since CERC stopped functioning after public hearing due to Covid pandemic daily orders and final orders on the same was not issued till 03.02.2020. Mean while based on oral directions, KSEBL has been admitting bills at the lignite transfer price of Rs 2132.239 per MT based on the MoC guidelines issued vide order No 28012/1/2014-CA-II dated 2.1.2015 from the month of August 2020 onwards.

- vi. Honorable CERC viide daily order dated 3.2.2021 has kept the said guidelines dated 17.09.2019 in abeyance and has directed that till the regulations for computation of input price of lignite are notified by the Commission , NLCIL is directed to continue to consider the lignite transfer price based on the MoC guidelines dated 2.1.2015 subject to revision in accordance with the regulations for computation of lignite transfer price to be notified by the CERC. 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. 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.
- vii. 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;
- viii. 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:
- ix. 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 VI**.

- x. Unit II of Kudgi power station has been under reserve shut down from 27.03.2020 onwards, unit I from 08.09.2020 onwards and Unit III from 09.09. onwards due to the backing of from scheduling Kudgi Power station by Southern Region beneficiaries on account of low demand and higher variable cost of Kudgi STPS. Karnataka, being the major beneficiary having more than 50 % allocation from the station, started scheduling the station from December onwards. This may be due to the reduction in variable cost of Kudgi. As Kudgi revived, and due to increase in demand during the summer months KSEBL started scheduling the station as it comes under the merit order dispatch due to the decrease in variable price. The variable price approved by Honorable Commission for Kudgi STPS was Rs 3.98 per unit . It can be seen from the below table that the actual variable cost of Kudgi station during this quarter is lesser as compared to approved variable cost. Thus there is a net additional savings of Rs 16.09 Cr from Kudgi station alone.

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)	Jan-21	Feb-21	Mar-21
Central Generating Stations					
1	NTPC-RSTPS Stage I & II	2.54	2.390	2.383	2.455
2	NTPC-RSTPS Stage III	2.49	2.358	2.348	2.406
3	Talcher	1.77	1.942	2.034	1.908
4	Simhadri TPS Stage II	2.95	2.667	2.703	2.856
5	NLC-Stage-1	2.69	2.638	2.644	2.644
6	NLC-Stage-II	2.69	2.638	2.644	2.644
7	NLC I Expansion	2.49	2.420	2.424	2.424
8	NLC II Expansion	2.49	2.542	2.545	2.545
9	Vallur STPS	3.2	3.003	2.830	3.063
10	NTPL	3.28	2.934	2.933	2.984
11	NTPCKudgi	3.98	2.997	3.194	3.318
Independent Power Producers					
12	RTPS	2.341	2.613	2.656	2.935
13	Mejia	2.507	2.755	2.785	2.732
14	Maithon I	2.435	2.353	2.242	2.182
15	Maithon II	2.435	2.353	2.242	2.182

16	Jindal Power Ltd-Bid I	1.310	1.320	1.320	1.320
17	Jhabua Power Ltd-Bid I	1.950	1.970	1.970	1.970
18	Jindal Power Ltd-Bid II	1.190	1.320	1.320	1.323
19	Jhabua Power Ltd-Bid II	1.730	1.890	1.890	1.890
20	JITPL	1.030	1.150	1.150	1.150
21	BALCO	1.220	1.170	1.170	1.170

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

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

Table 2 Additional liability for the fourth 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	2394.03	2255.57	2147.49	-21.88	-18.71	-18.71
IPPs	2188.05	2084.98	1978.87	7.46	7.53	-1.09
Total	4582.08	4340.56	4126.35	-14.42	-11.18	-19.80

XX. It can be seen from the above table that as per the Regulations there is a net savings amounting to Rs 18.71 Cr during the fourth quarter of FY 2020-21 while purchasing 2255.57 MU of energy from various Central Generating Stations approved vide order dated 08.07.2019. Further there was a net additional liability of Rs 7.53 Cr as per regulation on account of purchase of energy from various IPPs approved by Honorable Commission vide order dated 08.07.2019, for scheduling energy. Thus the admissible savings as per fuel surcharge regulations is Rs 11.18 Cr (18.71-7.53). As explained in para XI and XII above, KSEBL is not claiming the additional liability from Jindal Power Ltd (150 MW), Jhabua Power Ltd (100 MW) and JITPL (100 MW), amounting to 8.62 crores. Thus the additional savings is Rs 19.80 Crores (11.18+8.62)

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**

- KSEBL purchased 64.77 MU through exchanges and 20.48 MU through deviation settlement mechanism during the fourth quarter of FY-2020-21.
- KSEBL sold 113.83 MU during fourth quarter through exchanges. The details of power procurement/sale through short term transactions is enclosed as **Annexure V**.

- c. KSEBL scheduled 99.66 MU from RGCCPP as per the agreement between KSEBL and M/s NTPC in the matter of disposing the balance of Naphtha. Further KSEBL scheduled 5.51 MU from KDPP during the month of January and February 2021. As Honorable Commission did not approve any schedule from KDPP as well as RGCCPP vide order dated 08.07.2019, KSEBL is not claiming the same through this petition. KSEBL humbly requests to consider the claim of the corresponding power purchase cost at the time of truing up.
- d. The actual demand during the quarter was more by 99.06 MU. Actual power purchase from CGS at exbus decreased by 223.80 MU, renewable energy purchase by 360.83 MU and exbus energy from private IPPs outside the State by 103.07 MU against the approved quantum. Thus there is a reduction in power purchase of 597.43 MU at Kerala periphery. There was external sale of 113.83 MU during the quarter. The actual hydro generation was 358.81 MU more than the approved quantum. Thus there was a net reduction in availability of 241.93 MU. In order to meet the reduction ; KSEBL purchased 85.26 MU through exchanges and through power transfer through deviation settlement mechanism and availed 65.85 MU through banking arrangements for meeting the demand of the State. As per the MYT order there is a surplus of 311.32 MU for which Honorable Commission has considered a revenue amounting to Rs 98.75 Cr @ Rs 5 per unit through external sale. The reduction in power purchase has led to reduction in energy sale outside the State by 197.49 MU. There is a reduction in revenue from external sale of Rs 42.75 Cr. As the impact of short-term purchase and impact of variation 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.
- e. The actual power purchase cost per unit vs approval is given in table below

Table III		
Month	Average rate of Power Purchase (Rs /unit)	
	Approved	Actual
January-21	4.01	4.33
February-21	4.01	4.42
March-21	4.01	4.26

The above table shows that the monthly average power purchase cost is much higher than the approved per unit cost for the fourth quarter of FY 2021.

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 fourth quarter of FY-21 is to be adjusted from June 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 and third quarter of FY-21 is pending. About Rs 289.39 Cr is pending for recovery/approval towards the additional liability due to variation of fuel charges from approved sources for the period from July 2019 to December 2020. Hence KSEBL humbly requests before the Honorable Commission to adjust the additional savings of Rs 19.80 Cr towards the amount pending for recovery/approval.

PRAYER

KSEBL humbly prays before this Hon’ble Commission that,

- (a) Additional savings generated by KSEBL, amounting to Rs 19.80 Cr, resulting from the variation in variable charges of power purchase from approved sources for the period from January to March 2021 as per regulation 86 of KSERC Tariff Regulations 2018 as detailed in **Annexure IV** to this petition may kindly be approved.
- (b) This approved savings may kindly be allowed to adjust against the pending fuel surcharge for recovery/approval pertaining to the period from July 2019 to December 2020 and allowed to recover the remaining amount from consumers including bulk consumers and other licensees as fuel surcharge, as per the Regulation 86 of KSERC Tariff Regulations 2018.

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

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

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
January-21	1871.74			12.02% at the end of FY-20	2139.98	
February-21	1938.47				2066.14	
March	1921.98				2517.66	
Total	5732.20				6723.79	

*The energy billed for the month of January, February and March 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)
Jan-2021						
Central Generating Stations						
RSTPS I & II	120.15	170.15	2.390	2.540	28.72	43.22
RSTPS III	42.47	42.77	2.358	2.490	10.01	10.65
Talcher Stage-II	231.35	273.83	1.942	1.770	44.93	48.47
Simhadri TPS Stage II	59.62	53.18	2.667	2.950	15.90	15.69
NLC Stage-I	37.61	35.86	2.638	2.690	9.92	9.65
NLC Stage-II	29.27	52.41	2.638	2.690	7.72	14.10
NLC 1 Expansion	30.12	19.93	2.420	2.490	7.29	4.96
NLC II Expansion	27.17	25.60	2.542	2.490	6.91	6.37
Vallur STPS	25.80	31.90	3.003	3.200	7.75	10.21
NTPL	41.79	46.30	2.934	3.280	12.26	15.19
Kudgi	81.64	68.45	2.997	3.980	24.47	27.24
Sub total CGS	726.98	820.38	2.419	2.508	175.87	205.74
Long Term contracts with generators outside the State						
DVC Reghunathpur TPS	18.71	32.35	2.613	2.341	4.89	7.57
DVC Mejia TPS	50.19	65.56	2.755	2.507	13.83	16.44
Maithon Power Ltd- Contract 1	56.91	102.62	2.353	2.435	13.39	24.98
Maithon Power Ltd- Contract II	56.91	0.00	2.353	2.435	13.39	0.00
Jindal Power Ltd-Bid I	121.73	127.22	1.320	1.310	16.07	16.67
Jhabhua Power Ltd -Bid I	65.57	73.15	1.970	1.950	12.92	14.26
Jindal Power Ltd-Bid II	91.31	95.42	1.320	1.190	12.05	11.35
Jhabhua Power Ltd -Bid II	57.01	63.61	1.890	1.730	10.78	11.00
Jindal India thermal Power Ltd	62.72	63.61	1.150	1.030	7.21	6.55
BALCO	66.68	63.61	1.170	1.220	7.80	7.76
TOTAL LTA	647.74	687.15	1.734	1.697	112.33	116.60
Total	1374.72	1507.53	2.096	2.138	288.20	322.34
February 2021						
Central Generating Stations						
RSTPS I & II	134.17	126.61	2.383	2.540	31.97	32.16
RSTPS III	38.08	31.05	2.348	2.490	8.94	7.73
Talcher Stage-II	207.90	238.09	2.034	1.770	42.29	42.14
Simhadri TPS Stage II	57.63	48.64	2.703	2.950	15.58	14.35
NLC Stage-I	37.66	30.25	2.644	2.690	9.96	8.14
NLC Stage-II	36.74	49.25	2.644	2.690	9.71	13.25
NLC 1 Expansion	40.12	37.07	2.424	2.490	9.72	9.23

NLC II Expansion	32.36	23.95	2.545	2.490	8.24	5.96
Vallur STPS	29.32	30.62	2.830	3.200	8.30	9.80
NTPL	43.66	21.40	2.933	3.280	12.80	7.02
Kudgi	61.42	65.79	3.194	3.980	19.62	26.18
Total	719.05	702.72	2.463	2.504	177.13	175.96
Long Term contracts with generators outside the State						
DVC Reghunathpur TPS	28.75	27.76	2.656	2.341	7.64	6.50
DVC Mejia TPS	32.83	58.37	2.785	2.507	9.14	14.64
Maithon Power Ltd- Contract 1	56.57	92.73	2.242	2.435	12.68	22.58
Maithon Power Ltd- Contract II	56.57	92.73	2.242	2.435	12.68	22.58
Jindal Power Ltd-Bid I	118.25	114.91	1.320	1.310	15.61	15.05
Jhabhua Power Ltd -Bid I	72.93	66.07	1.970	1.950	14.37	12.88
Jindal Power Ltd-Bid II	88.73	86.18	1.320	1.190	11.71	10.26
Jhabhua Power Ltd -Bid II	63.42	57.46	1.890	1.730	11.99	9.94
Jindal India thermal Power Ltd	63.19	57.46	1.150	1.030	7.27	5.92
BALCO	57.51	57.46	1.170	1.220	6.73	7.01
TOTAL LTA	638.76	711.13	1.719	1.791	109.82	127.35
Total	1357.81	1413.85	2.113	2.145	286.94	303.31
March 2021						
Central Generating Stations						
RSTPS I & II	153.00	170.15	2.455	2.540	37.56	43.22
RSTPS III	39.63	42.77	2.406	2.490	9.54	10.65
Talcher Stage-II	288.23	299.42	1.908	1.770	54.99	53.00
Simhadri TPS Stage II	57.79	58.44	2.856	2.950	16.51	17.24
NLC Stage-I	40.43	35.86	2.644	2.690	10.69	9.65
NLC Stage-II	44.27	52.41	2.644	2.690	11.71	14.10
NLC 1 Expansion	23.42	39.63	2.424	2.490	5.68	9.87
NLC II Expansion	25.21	25.60	2.545	2.490	6.41	6.37
Vallur STPS	25.79	31.90	3.063	3.200	7.90	10.21
NTPL	37.65	46.30	2.984	3.280	11.23	15.19
Kudgi	74.13	68.45	3.318	3.980	24.60	27.24
Total	809.54	870.93	2.431	2.488	196.81	216.73
Long Term contracts with generators outside the State						
DVC Reghunathpur TPS	29.13	32.35	2.935	2.341	8.55	7.57
DVC Mejia TPS	65.87	65.56	2.732	2.507	18.00	16.44
Maithon Power Ltd- Contract 1	100.03	102.62	2.182	2.435	21.83	24.98
Maithon Power Ltd- Contract II	100.03	102.62	2.182	2.435	21.83	24.98
Jindal Power Ltd-Bid I	130.42	127.22	1.320	1.310	17.22	16.67
Jhabhua Power Ltd -Bid I	81.12	73.15	1.970	1.950	15.98	14.26
Jindal Power Ltd-Bid II	97.66	95.42	1.323	1.190	12.92	11.35
Jhabhua Power Ltd -Bid II	70.54	63.61	1.890	1.730	13.33	11.00
Jindal India thermal Power Ltd	62.91	63.61	1.150	1.030	7.23	6.55
BALCO	60.77	63.61	1.170	1.220	7.11	7.76
TOTAL LTA	798.48	789.77	1.803	1.793	143.99	141.58
Total	1608.02	1660.70	2.119	2.158	340.80	358.31

Format-4										
Sourcewise Energy Input from Jan-2021 to March 2021 in MU										
Sl No	Particulars	Jan-21		Feb-21		Mar-21		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	584.32	425.82	623.73	452.08	671.65	641.20	1879.71	1519.10	360.61
	(b) Less Aux consumption	2.92	2.13	3.12	2.26	3.36	3.21	9.40	7.60	1.80
	(c) Net Hydro Gen	581.40	423.69	620.61	449.82	668.30	637.99	1870.31	1511.50	358.81
2	KSEB thermal									
	(a) BDPP	0.00		0.00		0.00		0.00	0.00	
	(b) KDPP	4.86		0.64		0.00		5.51	0.00	
	(c) Subtotal	4.86		0.64		0.00		5.51	0.00	
	(d) Less Aux consumption	0.12		0.02		0.00		0.14	0.00	
	(e) Net BDPP+KDPP	4.74		0.63		0.00		5.37	0.00	
3	Wind Generation(net)	0.11	0.10	0.83	0.14	0.05	0.07	0.99	0.31	0.68
4	Solar Generation(net)	0.66	3.97	0.82	3.97	1.06	3.97	2.54	11.90	-9.36
	Total own generation(net)	586.91	427.76	622.89	453.93	669.40	642.02	1879.20	1523.71	355.49
3	CGS (Import)	926.15	974.61	868.31	910.36	961.40	1094.69	2755.86	2979.66	-223.80
4	IPPs							0.00		0.00
	RGCCPP	0.00		0.00		99.66		99.66		
	BSES	0.00		0.00		0.00		0.00		
	KPCL	0.00		0.00		0.00		0.00		
	Wind	6.70		4.61		10.00		21.31		21.31
	Solar	7.36		7.49		8.19		23.04		23.04
	Ullunkal(EDCL)	1.12		1.14		0.00		2.25		2.25
	Iruttukanam Stage-I	0.70		0.16		0.05		0.91		0.91
	Iruttukanam Stage-II	0.19		0.15		0.13		0.47		0.47
	Karikkayam HEP(AHPL)	2.17		2.15		2.32		6.64		6.64
	Meenvalloam (PSHCL)	0.17		0.09		0.05		0.31		0.31
	Pathamkayam	0.39		0.00		0.00		0.39		
	Deviar	0.01		0.00		0.00		0.01		0.01
	Subtotal	18.81	23.84	15.78	23.84	120.40	23.07	154.99	70.75	84.24
6	Longterm contract							0.00		0.00
i	DVC Reghunathpur	18.71	32.35	28.75	27.76	29.13	32.35	76.59	92.46	-15.87
ii	DVC Mejia	50.19	65.56	32.83	58.37	65.87	65.56	148.89	189.49	-40.60
iii	Maithon power-1,	56.91	102.62	56.57	92.73	100.03	102.62	213.51	297.97	-84.46
iv	Maithon power-II	56.91	0.00	56.57	92.73	100.03	102.62	213.51	195.35	18.16
v	Jindal -Bid I	121.73	127.22	118.25	114.91	130.42	127.22	370.40	369.35	1.05
vi	Jhabhua- Bid-I	65.57	73.15	72.93	66.07	81.12	73.15	219.62	212.37	7.25
vii	Jhabhua- Bid II	57.01	63.61	63.42	57.46	70.54	63.61	190.97	184.68	6.29
viii	Jindal -Bid II	91.31	95.42	88.73	86.18	97.66	95.42	277.70	277.02	0.68
ix	JITPL	62.72	63.61	63.19	57.46	62.91	63.61	188.82	184.68	4.14
x	BALCO	66.68	63.61	57.51	57.46	60.77	63.61	184.96	184.68	0.28
	Sub Total	647.74	687.15	638.76	711.13	798.48	789.77	2084.98	2188.05	-103.07
	STOA	0.00		0.00				0.00		0.00
	Purchase through exchanges at SR periphery	49.59	0.00	8.62	0.00	9.16	0.00	67.36		67.36
	DSM at Kerala periphery	10.35		-0.09		10.22		20.48		20.48
	SWAP	0.00		0.00		68.20		68.20		68.20
	Addl RE energy approved		121.58		121.58		117.66		360.83	-360.83
	Power Purchase	1652.64	1807.18	1531.38	1766.91	1967.86	2025.19	5151.88	5599.29	-447.41
	PGCIL losses	62.19	62.53	55.69	61.08	75.58	70.93	193.46	194.54	-1.07
	Net Power Purchase	1590.44	1744.66	1475.69	1705.83	1892.28	1954.27	4958.42	5404.75	-446.33
	Total Gen & PP	2177.35	2172.41	2098.59	2159.76	2561.68	2596.29	6837.62	6928.46	-90.84
	External sale	37.37		32.44		44.02	44.02	113.83	303.73	-189.89
	Swap return									
	Energy demand	2139.98		2066.14		2517.66		6723.79	6624.73	99.05

Annexures

Annexure-I				
Power contracted through long Term agreements				
Allocation from Central Generating Stations				
No.	Station			Allocated Capacity to KSEBL (MW)
		IC (MW)	Allocation	2020-21
		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		

Mont. Wrenery Schedule Approved for Central Generating Stations atobug for the Year 2020-21												
Sl. No.	Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
1	ESTS Stage I	184.50	183.95	225.46	125.54	184.56	170.25	249.88	170.15	125.61	170.15	1,828.31
2	ESTS Stage II	41.39	42.77	41.33	42.77	41.39	42.77	41.39	42.77	41.39	42.77	463.37
3	ALICHER - Stage II	283.75	290.42	289.75	229.42	279.32	229.42	279.32	279.32	238.09	279.32	3,172.90
4	Sinhardi Exp	51.46	53.48	28.78	29.21	51.46	53.48	31.46	53.48	48.62	58.44	594.87
5	ALICHER - Stage I	77.22	95.86	27.22	35.84	34.70	23.42	36.70	35.85	30.25	35.86	397.35
6	N. C. S. Stage-2	35.72	52.61	38.04	38.31	50.72	52.41	38.04	39.31	48.25	52.41	557.42
7	N. C. S. Stage-1	38.35	38.63	38.35	20.50	38.35	39.31	38.35	39.31	37.57	39.31	423.02
8	ALICHER - Stage I	24.77	25.60	24.77	25.50	25.50	25.50	24.77	25.50	22.95	25.50	282.78
9	WAPS	11.28	11.45	11.28	11.45	11.68	11.68	11.08	11.45	10.60	11.45	123.59
10	ALICHER - Stage II	33.82	21.32	43.30	44.75	32.33	44.75	43.30	44.75	41.51	44.75	480.76
11	ALICHER - Stage I	137.54	142.23	137.54	142.23	137.54	142.23	137.54	142.23	124.43	142.23	1,588.37
12	WAPS	20.58	31.30	30.87	31.90	21.07	31.90	20.58	31.90	30.62	31.90	347.05
13	ALICHER - Stage II	44.80	46.30	22.11	46.30	44.80	46.30	44.80	46.30	22.11	46.30	501.59
14	WAPS	65.21	68.45	66.21	67.04	65.20	67.04	65.20	67.04	65.20	67.04	742.20
15	WAPS	24.52	24.52	24.52	25.34	24.52	25.34	24.52	25.34	21.11	25.34	271.21
16	WAPS	2022.03	1222.16	949.03	324.05	950.45	988.71	922.15	974.61	107.36	974.61	10,676.78

[illegible]

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

Sl. No.	Name of the Station	Availability						Reason for low availability
		January (Low Demand in SR)		February (High Demand in SR)		March (High Demand in SR)		
		peak	off peak	peak	off peak	peak	off peak	
1	NTPC RSTPS Stg I & II	70.951	70.925	88.346	88.731	70.941	70.925	Unit 5 annual overhauling from 21.12.2020 to 29.01.2021 ; Unit 3 from annual overhauling from 16.01.2021 onwards
2	NTPC RSTPS Stage III	103.234	103.021	102.514	102.554	103.234	103.201	Above normative availabiliy
3	NTPC Talcher II	79.972	80.025	80.383	79.736	79.972	80.025	Unit 2 under forced outage due to boiler tube leakage from 14.01.2021; unit V under annual overhauling from 16.01
4	NTPC Simhadri Stg II	97.633	97.764	99.782	98.216	84.367	83.805	Above Normative availabiliy
5	NLC TPS I Expansion	64.732	64.659	96.025	95.664	74.673	73.558	Unit I ,II &6forced outage during January;
6	NLC TPS II Expansion	49.435	49.703	66.059	65.297	48.53	48.109	Unit I ,II forced outage during January Unit I & II forced outage during Feb;Unit II forced outage during March
8	NLC - II - Stage I	89.6	67.927	99.88	100.64	89.6	91.186	Unit I ,II & III forced outage during January
9	NLC - II - Stage II	48.692	49.943	52.55	54.203	48.692	49.943	Unit V Planned outage and Unit 6 forced outage during January; Unit 2 forced outage during feb; Unit V plannedoutage and Unit VI Forced outage
10	NTECL Vallur	81.237	81.814	98.411	98.385	81.237	81.814	Unit I Planned outage and Unit III Forced outage during January; Unit II under forced outage, Unit III under RSD during March
11	NTPL	88.414	87.983	99.933	99.258	88.414	87.983	Above normative availabiliy
12	Kudgi	98.088	98.386	85.769	85.375	98.088	98.386	Unit III planned outage during February

13	DVC Mejia (100MW)	73.177	73.177	53.341	53.386	97.288	96.667	
14	DVC RTPS (50 MW)	57.643	57.232	96.534	96.306	89.467	89.295.	
15	Maithon Power Ltd-PPA I	88.02	88.25	84.75	85.27	85.99	86.43	Above normative availability
16	Maithon Power Ltd-PPA II	88.02	88.25	84.75	85.27	85.99	86.43	
17	Jindal Power Ltd-PSA 1	99.26		100		100		Above normative availability
18	Jindal Power Ltd--PSA 2	99.26		100		100		
19	Jhabua Power Ltd-PSA 1	97.90		100		100		Above normative availability
20	Jhabua Power Ltd-PSA 2	97.90		100		100		
21	JITPL	88.74		98.98		89		Above normative availability
22	BALCO	94.33		90		88		Above Normative availability

ANNEXURE IV

DETAILS OF ADDITIONAL LIABILITY

1. Details of Power Purchases - Energy procurement from Central Generating Stations during the period January 2021 to March 2021

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							
Jan-21	170.15	120.15	120.15	2.540	2.390	-1.80	-1.80
Feb-21	126.61	134.17	126.61	2.540	2.383	-2.11	-1.99
Mar-21	170.15	153.00	153.00	2.540	2.455	-1.30	-1.30
Total	466.91	407.31	399.76	2.540	2.412	-5.21	-5.09
1.2 NTPC-RSTPS Stage III							
Jan-21	42.77	42.47	42.47	2.490	2.358	-0.56	-0.56
Feb-21	31.05	38.08	31.05	2.490	2.348	-0.54	-0.44
Mar-21	42.77	39.63	39.63	2.490	2.406	-0.33	-0.33
Total	116.59	120.18	113.15	2.490	2.371	-1.43	-1.33
1.3 NTPC Talcher-II STPS							
Jan-21	273.83	231.35	231.35	1.770	1.942	3.98	3.98
Feb-21	238.09	207.90	207.90	1.770	2.034	5.49	5.49
Mar-21	299.42	288.23	288.23	1.770	1.908	3.98	3.98
Total	811.34	727.48	727.48	1.770	1.955	13.45	13.45
1.4 NLC - TPS – II Stage 1							
Jan-21	35.86	37.61	35.86	2.690	2.638	-0.20	-0.19
Feb-21	30.25	37.66	30.25	2.690	2.644	-0.17	-0.14
Mar-21	35.86	40.43	35.86	2.690	2.644	-0.19	-0.16
Total	101.97	115.71	101.97	2.690	2.642	-0.55	-0.49
1.5 NLC-TPS-II Stage-2							
Jan-21	52.41	29.27	29.27	2.690	2.638	-0.15	-0.15
Feb-21	49.25	36.74	36.74	2.690	2.644	-0.17	-0.17
Mar-21	52.41	44.27	44.27	2.690	2.644	-0.20	-0.20
Total	154.07	110.28	110.28	2.690	2.642	-0.52	-0.52

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							
Jan-21	19.93	30.12	19.93	2.490	2.420	-0.21	-0.14
Feb-21	37.07	40.12	37.07	2.490	2.424	-0.26	-0.24
Mar-21	39.63	23.42	23.42	2.490	2.424	-0.15	-0.15
Total	96.63	93.65	80.42	2.490	2.423	-0.63	-0.54
1.7 NLC-TPS-II Expansion							
Jan-21	25.60	27.17	25.60	2.490	2.542	0.14	0.13
Feb-21	23.95	32.36	23.95	2.490	2.545	0.18	0.13
Mar-21	25.60	25.21	25.21	2.490	2.545	0.14	0.14
Total	75.15	84.74	74.76	2.49	2.544	0.46	0.40
1.8 NTPC Simhadri TPS – Stage II							
Jan-21	53.18	59.62	53.18	2.950	2.667	-1.69	-1.50
Feb-21	48.64	57.63	48.64	2.950	2.703	-1.42	-1.20
Mar-21	58.44	57.79	57.79	2.950	2.856	-0.54	-0.54
Total	160.26	175.03	159.61	2.950	2.741	-3.65	-3.25
1.9 Vallur STPS							
Jan-21	31.90	25.80	25.80	3.200	3.003	-0.51	-0.51
Feb-21	30.62	29.32	29.32	3.200	2.830	-1.08	-1.08
Mar-21	31.90	25.79	25.79	3.200	3.063	-0.35	-0.35
Total	94.42	80.91	80.91	3.20	2.959	-1.95	-1.95
1.10 NTPL							
Jan-21	46.30	41.79	41.79	3.280	2.934	-1.45	-1.45
Feb-21	21.40	43.66	21.40	3.280	2.933	-1.51	-0.74
Mar-21	46.30	37.65	37.65	3.280	2.984	-1.11	-1.11
Total	114.00	123.09	100.84	3.28	2.949	-4.08	-3.30
1.11 NTPC KUDGI(Unit I,II & III)							
Jan-21	68.45	81.64	68.45	3.98	2.997	-8.03	-6.73
Feb-21	65.79	61.42	61.42	3.98	3.194	-4.83	-4.83
Mar-21	68.45	74.13	68.45	3.98	3.318	-4.91	-4.53
Total	202.69	217.18	198.32	3.98	3.162	-17.76	-16.09

2. Details of Power Purchases - Energy procurement from Private Generators Outside the State during the period January 2021 to March 2021.

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							
Jan-21	102.62	56.91	56.91	2.435	2.353	-0.46	-0.46
Feb-21	92.73	56.57	56.57	2.435	2.242	-1.09	-1.09
Mar-21	102.62	100.03	100.03	2.435	2.182	-2.53	-2.53
Total	297.97	213.51	213.51	2.435	2.243	-4.08	-4.08
2.2 Maithon Power Ltd (150 MW) - Contract II							
Jan-21	0.00	56.91	0.00	2.435	2.353	-0.46	0.00
Feb-21	92.73	56.57	56.57	2.435	2.242	-1.09	-1.09
Mar-21	102.62	100.03	100.03	2.435	2.182	-2.53	-2.53
Total	195.35	213.51	156.60	2.435	2.24	-4.08	-3.62
2.3 Jindal Power Limited –Bid I (200 MW)							
Jan-21	127.22	121.73	121.73	1.310	1.320	0.12	0.12
Feb-21	114.91	118.25	114.91	1.310	1.320	0.12	0.11
Mar-21	127.22	130.42	127.22	1.310	1.320	0.13	0.13
Total	369.35	370.40	363.86	1.310	1.320	0.37	0.36
2.4 Jhabua Power Limited-Bid I (115 MW)							
Jan-21	73.15	65.57	65.57	1.950	1.970	0.13	0.13
Feb-21	66.07	72.93	66.07	1.950	1.970	0.15	0.13
Mar-21	73.15	81.12	73.15	1.950	1.970	0.16	0.15
Total	212.37	219.62	204.79	1.950	1.970	0.44	0.41
2.5 Jindal Power Limited –Bid II (150 MW)							
Jan-21	95.42	91.31	91.31	1.190	1.320	1.19	1.19
Feb-21	86.18	88.73	86.18	1.190	1.320	1.15	1.12
Mar-21	95.42	97.66	95.42	1.190	1.323	1.30	1.27
Total	277.02	277.70	272.91	1.190	1.321	3.64	3.57

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)							
Jan-21	63.61	57.01	57.01	1.730	1.890	0.91	0.91
Feb-21	57.46	63.42	57.46	1.730	1.890	1.01	0.92
Mar-21	63.61	70.54	63.61	1.730	1.890	1.13	1.02
Total	184.68	190.97	178.08	1.730	1.890	3.06	2.85
2.7 Jindal India Thermal Power Limited-Bid II (100 MW)							
Jan-21	63.61	62.72	62.72	1.030	1.150	0.75	0.75
Feb-21	57.46	63.19	57.46	1.030	1.150	0.76	0.69
Mar-21	63.61	62.91	62.91	1.030	1.150	0.75	0.75
Total	184.68	188.82	183.09	1.030	1.150	2.27	2.20
2.9 BALCO – BID II(100 MW)							
Jan-21	63.61	66.68	63.61	1.220	1.170	-0.33	-0.32
Feb-21	57.46	57.51	57.46	1.220	1.170	-0.29	-0.29
Mar-21	63.61	60.77	60.77	1.220	1.170	-0.30	-0.30
Total	184.68	184.96	181.84	1.220	1.170	-0.92	-0.91
2.10 DVC Mejia (100 MW)							
Jan-21	65.56	50.19	50.19	2.507	2.755	1.24	1.24
Feb-21	58.37	32.83	32.83	2.507	2.785	0.91	0.91
Mar-21	65.56	65.87	65.56	2.507	2.732	1.48	1.47
Total	189.49	148.89	148.58	2.507	2.751	3.63	3.63
2.11 DVC RTPS (50 MW)							
Jan-21	32.35	18.71	18.71	2.341	2.613	0.51	0.51
Feb-21	27.76	28.75	27.76	2.341	2.656	0.91	0.87
Mar-21	32.35	29.13	29.13	2.341	2.935	1.73	1.73
Total	92.46	76.59	75.60	2.34	2.752	3.15	3.11

3 Summary of total additional liability for the fourth 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	466.91	407.31	2.540	2.412	-5.21	-5.09
RSTPS III	116.59	120.18	2.490	2.371	-1.43	-1.33
Talcher STPS	811.34	727.48	1.770	1.955	13.45	13.45
Simhadri TPS Stage-II	160.26	175.03	2.950	2.741	-3.65	-3.25
NLC Stage-I	101.97	115.71	2.690	2.642	-0.55	-0.49
NLC Stage-II	154.07	110.28	2.690	2.642	-0.52	-0.52
NLC 1 Expansion	96.63	93.65	2.490	2.423	-0.63	-0.54
NLC II Expansion	75.15	84.74	2.490	2.544	0.46	0.40
Vallur STPS	94.42	80.91	3.200	2.959	-1.95	-1.95
NTPL	114.00	123.09	3.280	2.949	-4.08	-3.30
Kudgi	202.69	217.18	3.980	3.162	-17.76	-16.09
Sub Total CGS	2394.03	2255.57	2.500	2.44	-21.88	-18.71
Private IPPs outside the State						
DVC RTPS	92.46	76.59	2.341	2.752	3.15	3.11
DVC Mejia	189.49	148.89	2.507	2.751	3.63	3.63
Maithon Power Ltd-I	297.97	213.51	2.435	2.243	-4.08	-4.08
Maithon Power Ltd-II	195.35	213.51	2.435	2.243	-4.08	-3.62
Jindal Power Ltd-Bid I	369.35	370.40	1.310	1.320	0.37	0.36
Jhabua Power Ltd-Bid I	212.37	219.62	1.950	1.970	0.44	0.41
Jhabua Power Ltd-Bid II*	184.68	190.97	1.730	1.890	3.06	2.85
Jindal Power Ltd-Bid II*	277.02	277.70	1.190	1.321	3.64	3.57
JITPL*	184.68	188.82	1.030	1.150	2.27	2.20
BALCO	184.68	184.96	1.220	1.170	-0.92	-0.91
LTA subtotal	2188.05	2084.98	1.762	1.756	7.46	7.53
Total	4582.08	4340.56	2.147	2.110	-14.42	-11.18
Claim						-19.80

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

Annexure V Power procurement /sale/transfer through short term contracts/DSM/banking arrangements			
	January		
		Energy at Kerala periphery(units)	Amount (Rs)
A	Power purchase through short term contracts		
I	Power through exchanges		
	IEX (DAM)	348,12,943.0	1126,10,290
	IEX RTM	126,99,903	447,79,183
II	PXIL DAM	1,10,333	3,39,933
III	Power transfer through DSM	103,52,354	-305,94,751
	February		
I	Power purchase through short term contracts		
	IEX (DAM)	31,32,685	113,62,088
	IEX RTM	51,72,595	208,99,859
III	Power transfer through DSM	-89,313	-473,50,010
	March		
I	Power through IEX TAM	56,76,758	21328.06
	Power through IEX TAM	31,67,728	125,92,645
II	Power through DSM	102,20,100	-288,93,706
B	Power transfer through Banking arrangements		
	SWAP from TPDDL	658,45,040	17,58,360
C	Power sale outside the State		
	January		
	IEX	360,90,933	1544,70,828
	PXIL	12,76,500	45,95,469
	February		
	IEX	290,54,985	1393,71,385
	PXIL	33,89,790	131,76,506
	March		
	IEX	417,40,705	2370,88,459
	PXIL	22,80,000	112,42,845