# 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 of Condonation of delay in filing of petition on 'Proposals to adjust the differential cost during the period October 2021 to December 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, Vydyuthi Bhavanam, Pattom, Thiruvananthapuram

**Applicant** 

Chief Engineer (Commercial & Tariff) Kerala State Electricity Board Limited Affidavit verifying the application of Condonation of delay in filing of petition on 'Proposals to adjust the differential cost during the period October 2021 to December 2021 against the approved level on Generation and Power Purchase due to variation in cost of fuel.

I, Sasankan Nair C.S, son of G Chellappan Pillai, aged 55 years residing at Sasindu, Snehapuri Road, Karimom, Thiruvananthapuram-13, do solemnly affirm and state as follows:

I am the **Chief Engineer (Commercial & Tariff)** 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 14<sup>th</sup> day of March 2022 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

Chief Engineer (Commercial & Tariff)
Kerala State Electricity Board Limited,
Vydyuthi Bhavanam, Pattom
Thiruvananthapuram – 695 004

**VERIFICATION** 

I, Sasankan Nair C.S, son of G Chellappan Pillai, aged 55 years residing at Sasindu, Snehapuri Road, Karimom, Thiruvananthapuram-13, the above named deponent, solemnly affirm at Thiruvananthapuram on this, the 14<sup>th</sup> day of March 2022 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

SANGEETHA S.B ADVOCATE & NOTARY Roll No. KF1232/2002 Vanchiyor, Typm-695 035 Deponent

Chief Engineer (Commercial & Tariff)
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 recover the additional liability

incurred during period from October 2021 to December 2021 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.

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 29106.51 MU as generation and power purchase of KSEBL for the year 2021-22; 7051.05 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. The present 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 the control period till date based on this concept. Out of this, this Honorable Commission has been pleased to issue orders on petitions relating to first and second quarters of FY 2019-20 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 8.44 Crores.
- XII. As stated in para X above, KSEBL withheld Rs 19.17 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 Rs 8.44 crores. KSEBL humbly requests before the Honorable Commission to pass on the amount payable as per final orders in the case of above mentioned 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 2021-22 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 have 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 July to September 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 July and August 2021 and the provisional REA for September 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 first half of 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.
- i. 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. 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. Further Coal India Ltd vide notification dated 30.07.2021 increased the evacuation facility charges by Rs.10/Ton to Rs 60/ton with effect from 01-08-2021 vide CIL price notification No CIL/M& S/pricing 733 dated 30-07-2021 and as per MCL notification 182/30-07-2021 surface transportation charges applicable for MCL from 01-08-2021 to 31-01-2022 has been increased to Rs. 83/ton (for 3-10km) from the existing rate of Rs 74/Ton.
- **iii.** There are frequent revisions in SCCL price notification compared to CIL. 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

- 15. SCCL price notification no.126/2021-22 dtd 31.03.2021 wef 01.04.2021.
- 16. Corrigendum 1 to price notification no,126/2021-22 dtd 26.04.2021.
- 17. Corrigendum 2 to price notification no,126/2021-22 dtd 29.05.2021 wef 01.06.2021
- 18. SCCL price notification no.127/2021-22 dtd 31.07.2021 wef 01.08.2021.
- 19. SCCL price notification no.128/2021-22 dtd 31.08.2021 wef 01.09.2021.
- 20. Corrigendum 1 to price notification no,128/2021-22 dtd 05.09.2021.
- 21. Corrigendum 2 to price notification no,128/2021-22 dtd 14.09.2021.
- 22. SCCL price notification no.129/2021-22 dtd 30.09.2021 wef 01.10.2021.
- 23. SCCL price notification no.130/2021-22 dtd 30.10.2021 wef 01.11.2021
- 24. Corrigendum 1 to price notification no,130/2021-22 dtd 30.11.2021.
- **iv.** 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:

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

v. 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:

vi. 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			
		Approved	А	ctual (Rs/ k	:Wh)
SI No	Source	(Rs/kWh)	Oct-21	Nov-21	Dec-21
	Central	Generating S	Stations		
1	NTPC-RSTPS Stage I & II	2.600	2.933	2.889	2.823
2	NTPC-RSTPS Stage III	2.540	2.876	2.834	2.774
3	Talcher	1.800	1.615	1.735	1.657
4	Simhadri TPS Stage II	3.010	2.914	2.989	3.036
5	NLC-Stage-1	2.750	2.655	2.664	2.751
6	NLC-Stage-II	2.740	2.655	2.664	2.751
7	NLC I Expansion	2.540	2.401	2.427	2.448
8	NLC II Expansion	2.540	2.548	2.553	2.567
9	Vallur STPS	3.260	3.238	4.042	3.811
10	NTPL	3.340	3.239	3.516	3.716
11	NTPCKudgi	4.060	3.399	3.334	4.286
	Independ	ent Power P	roducers		
12	RTPS	2.388	3.224	3.123	3.018
13	Mejia	2.557	2.974	2.953	2.926
14	Maithon I	2.483	2.823	2.729	2.645
15	Maithon II	2.483	2.823	2.729	2.645
16	Jindal Power Ltd-Bid I	1.340	1.330	1.330	1.330
17	Jhabua Power Ltd-Bid I	1.980	1.990	1.991	1.990
18	Jindal Power Ltd-Bid II	1.214	1.330	1.330	1.330
19	Jhabua Power Ltd-Bid II	1.765	2.000	2.003	2.000
20	JITPL	1.051	1.170	1.170	1.170
21	BALCO	1.240	1.170	1.160	1.160

<sup>\* -</sup> Variable charges adopted by KSEBL in estimating the power purchase in ARR

XIX. The summary of additional liability for third quarter of 2021-22 as per fuel surcharge regulations is given in **table 2** below.

	Table 2 Addi	tional liabilit	y for the third	quarter 2021-2	<u>2</u>	
	Ener	gy procuren	nent	Add li	ability	
	Approved quantity	Actual	Admissible as per regulation	Actual	Admissible as per regulation	Claim of KSEBL in this petition
Source	(MU)	(MU)	(MU)	(Rs. Cr)	(Rs. Cr)	
CGS	2287.91	1629.29	1621.10	1.44	1.44	1.44
IPPs	2209.91	1990.18	1830.14	29.53	25.10	16.66
Total	4497.82	3619.47	3451.25	30.97	26.54	18.10

XX. It can be seen from the above table that as per the Regulations there is an additional liability of Rs 1.44 Cr during the third quarter of FY 2021-22 while purchasing

1629.29 MU of energy from various Central Generating Stations approved vide order dated 08.07.2019. Further there is a net additional liability of Rs 25.10 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 total additional liability as per fuel surcharge regulations is Rs 26.54 Cr. 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 Rs 8.44 crores. Thus KSEBL is claiming only Rs 18.10 Crores(1.44+25.10-8.44) as additional liability for the third quarter of Financial year 2021-22 .

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

# XXII. <u>Details regarding other purchases of power, which are not eligible for fuel price</u> variation as per Regulations 2018

- a. KSEBL purchased 5.073 MU through exchanges and 58.18 MU export through deviation settlement mechanism during the third quarter of FY-2021-22.
- b. KSEBL sold 745.25 MU during third quarter through exchanges. The details of power procurement/sale through short term transactions is enclosed as **Annexure VI.**
- 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 third quarter of FY-22 is to be adjusted from March 2022 onwards as per regulation. For calculation purpose, KSEBL is considering the energy sales for the period of three months April 2022 for calculating the rate of fuel surcharge recovery. Calculating on these lines the rate comes to 3 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 18.10 Cr, resulting from the variation in variable charges of power purchase from approved sources for the period from October to December 2021 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, @ 3 paise per unit from  $1^{st}$  April 2022 onwards.

Chief Engineer (Commercial & Tariff)

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

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**Formats** 

### Format-1

Deta	ails of energ	y billed for r	etail sale	for the third q	uarter of FY 2021-2	2
	Energy bi	illed (MU)*	Т8	D loss(%)	Energy Inpu	t(MU)
Month	Actual	Approved	Actual	Approved	Actual	Approved
October	1939.16			11.62% at	2168.52	
November	1954.78			the end of	2067.96	
December	1894.92			quarter	2247.84	
Total	5788.86				6484.33	

<sup>\*</sup>KSEBL is unable to furnish the monthly energy sales corresponding to energy input of a particular month and monthly T&D loss as required by the Honorable Commission due to following constraints.

In the current billing system almost 98% of consumers are billed bimonthly and the billing is done for almost all days for LT Domestic and Commercial bimonthly consumers. Hence the energy sales details corresponding to the energy input of a particular month is not available due to this extended billing. The energy billed data for a particular month includes the energy billed data for the previous two months from the date of billing and not the energy sales against the energy input of that particular month. Hence KSEBL is unable to furnish the monthly T&D loss and energy sales against the energy input of a particular month.

Instead KSEBL is furnishing the energy billed data for the month of October, November and December in the above table and not the energy sales corresponding to energy input during the quarter. The energy input and energy billed shown is exclusive of energy wheeled by embedded open access consumers and consumption against captive generation.

		Form	at-3			
Month Wise Deta	ils of Purch	ase of Energ	gy (claiming f	or fuel su	rcharge)	
	Cost		ariable cost			
	(MU) a	t exbus	(Rs/kW			Rs.Cr)
Source	Actual (A)	Approv ed ('B)	Actual (C)	Approv ed ('D)	Actual E=A*C	Approved (F=B*D)
Source		October-20	, ,	eu (D)	E-A'C	(F=B*D)
Central Generating Stations		October-20	<u> </u>			
	126.88	170.15	2.93	2.60	37.21	44.24
RSTPS III	26.39	42.77	2.88	2.54	7.59	10.86
Talcher Stage-II	206.90	224.57	1.61	1.77	33.41	39.75
	36.04	53.18	2.91	3.01	10.50	16.01
	20.98	28.12	2.66	2.75	5.57	7.73
9	33.85	52.41	2.66	2.74	8.99	14.38
	35.02	39.63	2.40	2.54	8.41	10.07
·	24.51	25.60	2.55	2.54	6.25	6.50
'	11.13	31.90	3.24	3.26	3.61	10.40
	11.29	46.30	3.24	3.34	3.66	15.46
	40.16	57.04	3.40	4.06	13.65	23.16
0	573.17	771.67	2.42	2.57	138.85	198.56
Long Term contracts with generat			2.42	2.57	130.03	196.50
	19.13	32.35	3.22	2.39	6.17	7.73
	43.12	65.56	2.97	2.56	12.82	16.76
•	90.88	0.00	2.82	2.48	25.65	0.00
Maithon Power Ltd- Contract II	90.88	102.62	2.82	2.48	25.65	25.48
	114.56	127.22	1.33	1.34	15.24	17.05
Jhabhua Power Ltd -Bid I	17.16	73.15	1.99	1.98	3.41	14.48
Jindal Power Ltd-Bid II	86.03	95.42	1.33	1.21	11.44	11.58
	14.93	63.61	2.00	1.76	2.99	11.22
	56.69	63.61	1.17	1.05	6.63	6.69
	9.17	63.61	1.17	1.24	1.07	7.89
	542.53	687.15	2.05	1.73	111.08	118.88
Total	1115.70	1458.82	2.24	2.18	249.93	317.44
	N	ovember- 2	2021			
Central Generating Stations						
RSTPS I & II	80.61	148.98	2.89	2.60	23.29	38.73
RSTPS III	11.37	41.39	2.83	2.54	3.22	10.51
Talcher Stage-II	202.62	217.32	1.74	1.77	35.16	38.47
Simhadri TPS Stage II	33.52	51.46	2.99	3.01	10.02	15.49
NLC Stage-I	13.32	34.70	2.66	2.75	3.55	9.54
NLC Stage-II	26.16	38.04	2.66	2.74	6.97	10.44
NLC 1 Expansion	17.42	38.35	2.43	2.54	4.23	9.74

NLC II Expansion	15.01	24.77	2.55	2.54	3.83	6.29
Vallur STPS	9.78	20.58	3.75	3.26	3.66	6.71
NTPL	12.02	44.80	3.52	3.34	4.23	14.96
Kudgi	5.95	55.20	3.33	4.06	1.99	22.41
Total	427.78	715.59	2.34	2.56	100.14	183.30
Long Term contracts with genera	tors outside	the State				
DVC Reghunathpur TPS	14.43	0.00	3.12	2.39	4.51	0.00
DVC Mejia TPS	31.81	63.44	2.95	2.56	9.39	16.22
Maithon Power Ltd- Contract 1	77.64	99.31	2.73	2.48	21.19	24.66
Maithon Power Ltd- Contract II	77.64	99.31	2.73	2.48	21.19	24.66
Jindal Power Ltd-Bid I	127.26	123.12	1.33	1.34	16.93	16.50
Jhabhua Power Ltd -Bid I	77.72	70.79	1.99	1.98	15.48	14.02
Jindal Power Ltd-Bid II	95.38	92.34	1.33	1.21	12.69	11.21
Jhabhua Power Ltd -Bid II	67.61	61.56	2.00	1.76	13.54	10.86
Jindal India thermal Power Ltd	63.03	61.56	1.17	1.05	7.37	6.47
BALCO	55.41	61.56	1.16	1.24	6.43	7.63
TOTAL LTA	687.94	732.99	1.87	1.80	128.71	132.23
Total	1115.72	1448.58	2.05	2.18	228.85	315.53
	[	December 20	021			
Central Generating Stations						
RSTPS I & II	87.12	129.64	2.82	2.60	24.60	33.71
RSTPS III	25.70	42.77	2.77	2.54	7.13	10.86
Talcher Stage-II	260.97	299.42	1.66	1.77	43.24	53.00
Simhadri TPS Stage II	50.86	53.18	3.04	3.01	15.44	16.01
NLC Stage-I	25.04	35.86	2.75	2.75	6.89	9.86
NLC Stage-II	38.33	39.31	2.75	2.74	10.54	10.79
NLC 1 Expansion	41.18	39.63	2.45	2.54	10.08	10.07
NLC II Expansion	32.24	25.60	2.57	2.54	8.28	6.50
Vallur STPS	23.01	31.90	3.81	3.26	8.77	10.40
NTPL	18.29	46.30	3.72	3.34	6.80	15.46
Kudgi	25.61	57.04	4.29	4.06	10.98	23.16
Total	628.35	800.65	2.43	2.50	152.74	199.81
Long Term contracts with genera		1			1 4	
DVC Reghunathpur TPS	22.99	32.35	3.02	2.39	6.94	7.73
DVC Mejia TPS	49.86	65.56	2.93	2.56	14.59	16.76
Maithon Power Ltd- Contract 1	93.39	102.62	2.64	2.48	24.70	25.48
Maithon Power Ltd- Contract II	93.39	102.62	2.64	2.48	24.70	25.48
Jindal Power Ltd-Bid I	140.95	127.22	1.33	1.34	18.75	17.05
Jhabhua Power Ltd -Bid I	62.64	73.15	1.99	1.98	12.47	14.48
Jindal Power Ltd-Bid II	105.72	95.42	1.33	1.21	14.06	11.58
Jhabhua Power Ltd -Bid II	54.47	63.61	2.00	1.76	10.89	11.22
Jindal India thermal Power Ltd	65.86	63.61	1.17	1.05	7.71	6.69
BALCO	70.43	63.61	1.16	1.24	8.17	7.89
TOTAL LTA	759.71	789.77	1.88	1.83	142.97	144.36
Total	1388.06	1590.42	2.13	2.16	295.71	344.17

				For	nat-4					
	Source	cewise Ene	ergy Input	from Oc	tober 2021	to Decem	ber 2021 i	n MU		
		Oc1	t-21	No	v-21	Dec	:-21		Total	
Sl No	Particulars	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	1046.92	630.87	1128.35	491.31	769.45	459.60	2944.72	1581.78	1362.94
	(b) Less Aux consumption*	5.23	3.15	5.64	2.46	3.85	2.30	14.72		14.72
	(c) Net Hydro Gen	1041.69	627.72	1122.71	488.85	765.60	457.30	2930.00	1573.87	1356.12
2	KSEB thermal							0.00		
	(a) BDPP	0.00		0.00		0.00		0.00	0.00	0.00
	(b) KDPP	0.00		0.00		0.00		0.00	0.00	0.00
	(c) Subtotal	0.00		0.00		0.00		0.00	0.00	0.00
	(d) Less Aux consumption	0.00		0.00		0.00		0.00	0.00	0.00
	(e) Net BDPP+KDPP	0.00		0.00		0.00		0.00	0.00	0.00
3	Wind Generation(net)	0.04	0.25	0.07	0.06	0.14	0.10	0.25	0.41	-0.16
4	Solar Generation(net)	0.12	3.97	0.86	3.97	0.86	3.97	1.84	11.90	-10.06
	Total own generation(net)	1041.85		1123.64		766.60		2932.08	0.00	2932.08
3	CGS (Import)	823.21	989.71	653.29	932.13	895.27	945.97	2371.77	2867.81	-496.04
4	IPPs							0.00		0.00
	IPP's			0.00				0.00		
	RGCCPP	0.00		0.00		0.00		0.00		
	Solar	0.00		0.00		0.00		0.00		
	IREDA -SOLAR	5.97		4.98		7.27		18.22		
	THDCIL	7.58		6.63		9.23		23.44		
	Kuzhalmannam-ANERT	0.16		0.14		0.17		0.48		
	TOTAL SOLAR	13.71		11.75		16.67		42.13		
	WIND ENERGY	0.00		0.00		0.00		0.00		
	Agali	1.72		0.91		0.38		3.02		
	Koundikkal	0.68		0.35		0.21		1.24		
	Ramakkalmedu	1.44		1.07		1.34		3.86		
	Ahalya	0.83		0.80		1.19		2.82		
	Inox	1.44		1.39		3.02		5.84		
6	Kosamattom	0.09		0.06		0.07		0.21		
i	TOTAL WIND	6.20		4.58		6.22		17.00		
	SMALL HYDRO - SHEP	0.00		0.00		0.00		0.00		
iii	Ullunkal(EDCL)	2.03		1.93		1.81		5.77		
iv	Iruttukanam -I (VIYYAT)	2.48		2.29		1.32		6.09		
	Iruttukanam Stage-II	1.27		1.18		0.97		3.42	1	
	Karikkayam (AHPL) *	6.00		5.51		4.18		15.70	1	
	Maanuallam (DCHCL)	1.52		1.19		0.48		3.20	-	
viii	Pathamkayam (MREPPL)	4.28		2.87		0.65		7.80	1	
	Deviyar-Micro HEP	0.02		0.02		0.01		0.04	1	
	Anakampoyil								1	
х	TOTAL SHEP	4.96		3.68		0.75		9.39	4	
	TOTAL SHE	22.55		18.69		10.18		51.42	4	
	TOTAL - IPP	42.46	280.70 annually	35.01	280.70 annually	33.07	280.70 annually	110.55	280.70 annually	

Power purchase through traders (KSEB bus)	0.00		0.00		0.00		0.00		
Deviation settlement	-21.76		-26.49		-9.93		-58.18		
LTA	0.00		0.00		0.00		0.00		
Purchase From DVC RTPS	19.13	32.35	14.43	0.00	22.99	32.35	56.56	64.70	-8.1
Purchase from DVC									
Mejia	43.12	65.56	31.81	63.44	49.86	65.56	124.79	194.56	-69.
Purchase from Maithon									
power-1, ER	90.88	0.00	77.64	99.31	93.39	102.62	261.91	201.93	59.9
Purchase from Maithon		102.62		00.21		102.62			
power-2 ,ER	90.88	102.62	77.64	99.31	93.39	102.62	261.91	304.55	-42.
Purchase from (JPL		127.22		122.12		127.22			
STAGE2) -DBFOO	114.56	127.22	127.26	123.12	140.95	127.22	382.78	377.56	5.2
Purchase from jhabhua-									
SGPLNLR,TPCL		72.45		70.70		72.45			
DBFOO	17.16	73.15	77.72	70.79	62.64	73.15	157.52	217.09	-59.
Purchase from jhabhua-									
(PSA-2)SGPLNLR,TPCL									
DBFOO	14.93	95.42	67.61	92.34	54.47	95.42	137.00	283.18	-146
Purchase from (JPL									
STAGE2) -(PSA-2)DBFOO	86.03	63.61	95.38	61.56	105.72	63.61	287.12	188.78	98.
Purchase from JITPL	56.69	63.61	63.03	61.56	65.86	63.61	185.57	188.78	-3.2
Purchase from BALCO	9.17	63.61	55.41	61.56	70.43	63.61	135.01	188.78	-53.
TOTAL LTA	542.53	687.15	687.94	732.99	759.71	789.77	1990.18	2209.91	-219
Purchase from									
exchanges	0.73		0.05		4.32		5.10		
Purchase from SECI	9.71		8.40		14.34		32.45		
PGCIL loss	44.25		46.02		64.13		154.41		
Total Generation and									
Power Purchase	2394.48		2435.81		2399.25		7229.54		
External sale	225.99		367.85		151.41		745.25		
Energy demand	2168.49		2067.96		2247.84		6484.29		

	Anne	exure-l					
	Power contracted throu	gh long Term agreeme	ents				
	Allocation from Cent	ral Generating Stations					
				Allocated Capacity to KSEBL (MW)			
No.	Station	IC (MW)	Allocation	2021-22			
		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	1000 3.24% 32.4					
	Total			1756.54			
	Power contracted with IPPS	through long Term co	ontracts				
	Generator	Contra	cted capacit	y			
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				

		11011	VIII) adiil		Aug	Sept .	Oct	Nov	Dec	Jan	רבח	INIdI	Jorai
	051001	4500	175 16	53 05	20	164.66	170.15	148.98	129.64	170.15	126.61	170.15	1,808.01
RSPTS Stage   & II	164.66	77.77	71.30	0000	42.77	41.39	42.77	41.39	42.77	42.77	31.05	42.77	453.27
RSTPS Stage III	41.39	17.74	37.000	22457	299.42	217.32	224.57	217.32	299.42	273.83	238.09	29.42	3,172.90
TALCHER - Stage II	789.76	793.47	07.697	24.07	0000	E1 16.	. 53 18	51.46	53.18	53.18	48.64	58.44	584.87
Simhadri Exp	51.46	53.18	87.87	23.10	77.67	01:10			1			25 95	307 35
NLC-II- Stage-1	27.22	35.86	27.22	35.86	35.86	34.70	28.12	34.70	35.86	35.86		22.00	00.100
NI C-II- Stage-2	50.72	52.41	38.04	52.41	39.31	50.72	52.41	38.04	39.31	52.41	49.25	52.41	567.42
NIC- Evn- Stage-1	38.35	39.63	38.35	20.50	39.63	38.35	39.63	38.35	39.63	19.93	37.07	39.63	429.02
אווע וו באש	74 77	25.60	24.77	25.60	15.71	15.20	25.60	24.77	25.60	25.60	23.95	25.60	282.78
ארר - וו באף		11 15	1100	11 45.	11 45	11.08	5.72	11.08	5.72	11.45	10.60	11.45	123.59
MAPS	11.00	C+.11	11.00	2				000			11 11	77 11	486 76
KAIGA Ste I& II	33.82	24.32	43.30	44.75	44.75	32.03	44,75	43.30	44.75	44./5		44.70	2001
1,8   mclud/v	13.7 64	142.23	137.64	142.23	142.23	137.64	142.23	137.64	69.52	72.71	134.43	142.23	1,538.37
Mulaill - 1 Mil	20.58	31 90	30.87	31.90	31.90	21.07	31.90	20.58	31.90	31.90	30.62	31.90	347.05
valiut Jv with	00.04			00 37	76 30	AA 80	46.30	44.80	46.30	46.30	21.40	46.30	501.99
NTPL(Tuticorin JV)	44.80	46.30	11.77	46.30	46.30	00:11						100	00000
Kudei Unit I II & III	66.24	68.45	66.24	57.04	57.04	55.20	57.04	55.20	.57.04	68.45	62.79	68.45	742.20
Bhavini	24.52		24.52	25.34	25.34	24.52	25.34	24.52	25.34	25.34	21.11	25.34	271.21
	00200	1.027.46	9/19/03	925.05	990.55	940.16	989.71	932,15	945.97	974.61	910.36	1,094.69	11,706.77

Monthly energy schedule approved for Central Generating Stations at exbus for the year 2021-22

and the second state of the second												
Anr	May	June	Júlv	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
99.31	102.62	99.31	102.62	102.62	99.31		99.31	102.62	102.62	92.73	102.62	1,105.73
99.31	102.62	99.31	102.62	102.62	99.31	102.62	99.31	102.62		92.73	102.62	1,105.73
63.44	65.56	63.44	65.56		63.44	65.56	63.44	65.56	92.59	58.37	65.56	705.50
31.30	32.35	31.30	32.35	32.35	31.30	32.35		32.35	32.35	27.76	32.35	348.10
123.12	127.22	123.12	. 127.22	127.22	123.12	127.22	123.12	127.22	127.22	114.91	127.22	1,497.96
92.34	95.42	92.34	95.42	95.42	92.34	95.42	92.34	95.42	95.42	86.18	95.42	1,123.47
61.56	63.61	61.56	63.61	63.61	61.56	63.61	61.56	63.61	63.61	57.46	63.61	748.98
70.79	73.15	70.79		.73.15	70.79	73.15	70.79	73.15	73.15	66.07	73.15	861.33
61.56	63.61	61.56	63.61	63.61	61.56	63.61	61.56	63.61	63.61	57.46	63.61	748.98
61.56	63.61	61.56	63.61	63.61	61.56	63.61			63.61	57.46	63.61	748.98
764.31	789.79	764.31	789.79	724.23	764.31	687.16	733.01	789.79	687,16	711.13	789.79	8,994.76

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	Anne	xure III Deta	ils of energ	y availabili	ty for the t	hird quarte	er of FY-21-	22
				Avail	ability			
		Oct	ober	Nove	mber	Dece	mber	Reason for low availability
SI.No.	Name of the Station	peak	off peak	peak	off peak	peak	off peak	
								Unit 5 BTL from 19/12/21 to
								21/12/21, Unit 5 Boiler tube
		88.257	88.974	87.156	87.298	66.608	66.242	leakage from 22/12/21 to
								25/12/21 , unit 4 overhauling
1	NTPC RSTPS Stg I & II							from 02/12/21
2	NTPC RSTPS Stage III	102	101.994	100.076	99.914	95.363	94.459	
		75.552	75.449	91.387	91.854	96.137	95.461	from 20/09/21 annual overhauling
3	NTPC Talcher II							till 03/11/2021
4	NTPC SimhadriStg II	82.616	80.032	103.979	103.979	104.152	104.383	
		100.000	100.670	C2 127	64.07	00.266	00.205	Annual maintenance from
5	NLC TPS I Expansion	100.908	100.679	63.137	64.07	99.366	99.285	08/11/21 to 17/11/21
	·							Unit 1 BTL from 13/10/21 to
								22/10/21, Unit 2 BT puncture
								from 08/10/21 to 16/10/21, Unit
		46.411	46.375	30.736	30.28	59.409	59.732	1 BTL from 05-11-21 to 08/11/21,
								BTL from 13/11/21 to
								01/12/21,Bolier tube puncture
6	NLC TPS II Expansion							30/12/21

8	NLC - II - Stage I	85.339	85.66	58.663	59.575	69.213	70.517	Annual maintenance and license renewal unit 4 from 24/09/21, unit 3 availiability reduces due to wet lignite on various span
9	NLC - II - Stage II	63.072	63.246	51.77	51.878	66.641	68.796	Unit 7 water valve puncture 14/11/21 to 17/11/2021, unit 6 water valve puncture 24/11/2021, due to wet lignite on various span
10	NTECL Vallur	57.888	57.21	66.158	69.628	100.669	100.596	Unit 2 BTL from 14/10/21 till 25/10/21, Unit 2 bunker choked from 11/11/21 to 03/12/21
11	NTPL	24.742	25.093	37.314	36.961	45.372	48.63	Unit 2 from 28/09/21 AOH, converted to planned shut down from 07/10/21 due to coal shortage
12	Kudgi	67.245	53.335	67.042	67.064	71.647	70.898	Unit 1 Annual Overhauling from 01/08/21 till 24/12/21. Unit 1 BTL from 25/12/21 till 30/12/21
13	DVC Mejia (100MW)	74.252	74.3	103.388	102.983	104.032	104.032	
14	DVC RTPS (50 MW)	58.499	58.122	67.61	66.629	86.339	86.658	
15	Maithon Power Ltd-PPA I	98.01	97.8	98.4	98.23	98.12	98.02	
16	Maithon Power Ltd-PPA II	98.01	97.8	98.4	98.23	98.12	98.02	
17	Jindal Power Ltd-PSA 1	81	2	93	.42	99	.71	

18	Jindal Power LtdPSA 2	81.3	93.35	99.71	
19	Jhabua Power Ltd-PSA 1	85.51	98.81	77.06	
20	Jhabua Power Ltd-PSA 2	86.85	98.85	77.06	
21	JITPL	80.39	96.8	93.18	
22	BALCO	13.18	86.44	99.65	

# ANNEXURE IV DETAILS OF ADDITIONAL LIABILITY

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

		Table 2	L - Central	Generatin	g Stations		
Month	Energy purchased at ex bus			Variable cost of power Purchase at ex bus		Additional Liability	
MOIILII	Approved	Actual	Admissible for FPA	Approved	Actual	Actual	Admissible
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
		1.	1 NTPC-RS	TPS Stage	I & II		
Oct-21	170.15	126.88	126.88	2.600	2.933	4.23	4.23
Nov-21	148.98	80.61	80.61	2.600	2.889	2.33	2.33
Dec-21	129.64	87.12	87.12	2.600	2.823	1.94	1.94
Total	448.77	294.62	294.62	2.600	2.889	8.50	8.50
			1.2 NTPC	-RSTPS Sta	ge III		
Oct-21	42.77	26.39	26.39	2.54	2.88	0.89	0.89
Nov-21	41.39	11.37	11.37	2.54	2.83	0.33	0.33
Dec-21	42.77	25.70	25.70	2.54	2.77	0.60	0.60
Total	126.93	63.46	63.46	2.54	2.83	1.82	1.82
			1.3 NTPC	Talcher-II	STPS		
Oct-21	224.57	206.90	206.90	1.770	1.615	-3.21	-3.21
Nov-21	217.32	202.62	202.62	1.770	1.735	-0.71	-0.71
Dec-21	299.42	260.97	260.97	1.770	1.657	-2.95	-2.95
Total	741.31	670.49	670.49	1.770	1.668	-6.86	-6.86
		1	.4 NLC - TP	S – II Stage	e 1		
Oct-21	28.12	20.98	20.98	2.750	2.655	-0.20	-0.20
Nov-21	34.70	13.32	13.32	2.750	2.664	-0.11	-0.11
Dec-21	35.86	25.04	25.04	2.750	2.751	0.00	0.00
Total	98.68	59.34	59.34	2.750	2.698	-0.31	-0.31
	•	•		•			
		1	.5 NLC-TPS	-II Stage-2			
Oct-21	52.41	33.85	33.85	2.744	2.655	-0.30	-0.30
Nov-21	38.04	26.16	26.16	2.744	2.664	-0.21	-0.21
Dec-21	39.31	38.33	38.33	2.744	2.751	0.03	0.03
Total	129.76	98.34	98.34	2.744	2.695	-0.48	-0.48

	Energy purchased at ex bus			Variable cost of power purchase at ex bus		Additional Liability		
Month	Approved	Actual	Admissibl e for FPA	Approved	Actual	Actual	Admissible	
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)	
1.6 NLC-TPS-I Expansion								
Oct-21	39.63	35.02	35.02	2.540	2.401	-0.49	-0.49	
Nov-21	38.35	17.42	17.42	2.540	2.427	-0.20	-0.20	
Dec-21	39.63	41.18	39.63	2.540	2.448	-0.38	-0.36	
Total	117.61	93.61	92.06	2.540	2.427	-1.06	-1.05	
		1	.7 NLC-TPS	-II Expansi	on			
Oct-21	25.60	24.51	24.51	2.540	2.548	0.02	0.02	
Nov-21	24.77	15.01	15.01	2.540	2.553	0.02	0.02	
Dec-21	25.60	32.24	25.60	2.540	2.567	0.09	0.07	
Total	75.97	71.76	65.12	2.540	2.558	0.13	0.11	
		1.8	NTPC Simh	adri TPS –	Stage II			
Oct-21	53.18	36.04	36.04	3.01	2.914	-0.35	-0.35	
Nov-21	51.46	33.52	33.52	3.01	2.989	-0.07	-0.07	
Dec-21	53.18	50.86	50.86	3.01	3.036	0.13	0.13	
Total	157.82	120.42	120.42	3.01	2.986	-0.28	-0.28	
		1		llur STPS				
Oct-21	31.90	11.13	11.13	3.260	3.238	-0.02	-0.02	
Nov-21	20.58	9.78	9.78	3.260	3.747	0.48	0.48	
Dec-21	31.90	23.01	23.01	3.260	3.811	1.27	1.27	
Total	84.38	43.93	43.93	3.260	3.651	1.72	1.72	
			1.10 N	TPL				
Oct-21	46.30	11.29	11.29	3.340	3.239	-0.11	-0.11	
Nov-21	44.80	12.02	12.02	3.340	3.516	0.21	0.21	
Dec-21	46.30	18.29	18.29	3.340	3.716	0.69	0.69	
Total	137.40	41.60	41.60	3.340	3.529	0.79	0.79	
			1.11 N	TPC KUDG	I(Unit I,II 8	& III)		
Oct-21	57.04	40.16	40.16	4.060	3.399	-2.65	-2.65	
Nov-21	55.20	5.95	5.95	4.060	3.334	-0.43	-0.43	
Dec-21	57.04	25.61	25.61	4.060	4.286	0.58	0.58	
Total	169.28	71.73	71.73	4.060	3.710	-2.51	-2.51	

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

Table 2 - Private Generators Outside the State							
	Energy purchased at ex bus			Variable cost of power Purchase at ex bus		Additional Liability	
Month	Approved	Actual	Admissible for FPA	Approved	Actual	Actual	Admissible
	(MU)	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
	2	2.1 Mait	hon Power l	Ltd (150 M	W) - Conti	ract I	
Oct-21	0.00	90.88	0.00	2.483	2.823	3.09	0.00
Nov-21	99.31	77.64	77.64	2.483	2.729	1.91	1.91
Dec-21	102.62	93.39	93.39	2.483	2.645	1.51	1.51
Total	201.93	261.91	171.04	2.483	2.732	6.51	3.42
		2.2 M	laithon Pow	er Ltd (150	) MW) - Ca	ontract II	
Oct-21	102.62	90.88	90.88	2.483	2.823	3.09	3.09
Nov-21	99.31	77.64	77.64	2.483	2.729	1.91	1.91
Dec-21	102.62	93.39	93.39	2.483	2.645	1.51	1.51
Total	304.55	261.91	261.91	2.483	2.732	6.51	6.51
		<i>2.3</i> Jin	dal Power I	imited –B	id I (200 M	IW)	
Oct-21	127.22	114.56	114.56	1.340	1.330	-0.11	-0.11
Nov-21	123.12	127.26	123.12	1.340	1.330	-0.13	-0.12
Dec-21	127.22	140.95	127.22	1.340	1.330	-0.14	-0.13
Total	377.56	382.78	364.90	1.340	1.330	-0.38	-0.36
		2.4 Jh	abua Power	Limited-B	id I (115 N	1W)	
Oct-21	73.15	17.16	17.16	1.980	1.990	0.02	0.02
Nov-21	70.79	77.72	70.79	1.980	1.991	0.09	0.08
Dec-21	73.15	62.64	62.64	1.980	1.990	0.06	0.06
Total	217.09	157.52	150.59	1.980	1.991	0.17	0.16
2.5 Jindal Power Limited –Bid II (150 MW)							
Oct-21	95.42	86.03	86.03	1.214	1.330	1.00	1.00
Nov-21	92.34	95.378	92.34	1.214	1.330	1.11	1.07
Dec-21	95.42	105.71 7	95.42	1.214	1.330	1.23	1.11
Total	283.18	287.12	273.79	1.214	1.330	3.33	3.18

	Energy purchased at ex bus			Variable cost of power Purchase at ex bus		Additional Liability			
Month	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-21	63.61	14.93	14.93	1.765	2.000	0.35	0.35		
Nov-21	61.56	67.61	61.56	1.765	2.003	1.61	1.47		
Dec-21	63.61	54.47	54.47	1.765	2.000	1.28	1.28		
Total	188.78	137.00	130.95	1.765	2.001	3.24	3.10		
	2.7 Jin	dal India	Thermal P	ower Limit	ted-Bid II (	100 MW)			
Oct-21	63.61	56.69	56.69	1.051	1.170	0.67	0.67		
Nov-21	61.56	63.03	61.56	1.051	1.170	0.75	0.73		
Dec-21	63.61	65.86	63.61	1.051	1.170	0.78	0.76		
Total	188.78	185.57	181.86	1.051	1.170	2.21	2.16		
		2.	9 BALCO –	BID II(100	MW)				
Oct-21	63.61	9.17	9.17	1.240	1.170	-0.06	-0.06		
Nov-21	61.56	55.41	55.41	1.240	1.160	-0.44	-0.44		
Dec-21	63.61	70.43	63.61	1.240	1.160	-0.56	-0.51		
Total	188.78	135.01	128.19	1.240	1.161	-1.07	-1.02		
			2.10 DVC M	ejia (100 N	ΛW)				
Oct-21	65.56	43.12	43.12	2.557	2.974	1.80	1.80		
Nov-21	63.44	31.81	31.81	2.557	2.953	1.26	1.26		
Dec-21	65.56	49.86	49.86	2.557	2.926	1.84	1.84		
Total	194.56	124.79	124.79	2.557	2.949	4.90	4.90		
2.11 DVC RTPS (50 MW)									
Oct-21	32.35	19.13	19.13	2.388	3.224	1.60	1.60		
Nov-21	0.00	14.43	0.00	2.388	3.123	1.06	0.00		
Dec-21	32.35	22.99	22.99	2.388	3.018	1.45	1.45		
Total	64.70	56.56	42.12	2.388	3.114	4.11	3.05		

### 3 Summary of total additional liability for the third quarter of FY 2021-22

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

	Approved		Pe	r unit cost	Additional liability	
	energy requirement	Actual Energy procurement	Approved	Actual	Actual	Admissible
Source	(MU)	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)
CGS						
RSTPS I & II	448.77	294.62	2.60	2.89	8.50	8.50
RSTPS III	126.93	63.46	2.54	2.83	1.82	1.82
Talcher STPS	741.31	670.49	1.77	1.67	-6.86	-6.86
Simhadri TPS Stage-II	157.82	120.42	3.01	2.99	-0.28	-0.28
NLC Stage-I	98.68	59.34	2.75	2.70	-0.31	-0.31
NLC Stage-II	129.76	98.34	2.74	2.69	-0.48	-0.48
NLC 1 Expansion	117.61	93.61	2.54	2.43	-1.06	-1.05
NLC II Expansion	75.97	71.76	2.54	2.56	0.13	0.11
Vallur STPS	84.38	43.93	3.26	3.65	1.72	1.72
NTPL	137.40	41.60	3.34	3.53	0.79	0.79
Kudgi	169.28	71.73	4.06	3.71	-2.51	-2.51
Sub Total CGS	2287.91	1629.29	2.45	2.51	1.44	1.44
Private IPPs outside	the State					
DVC RTPS	64.70	56.56	2.39	3.11	4.11	3.05
DVC Mejia	194.56	124.79	2.56	2.95	4.90	4.90
Maithon Power Ltd-I	201.93	261.91	2.48	2.73	6.51	3.42
Maithon Power	304.55	261.91	2.48	2.73	6.51	6.51
Jindal Power ltd- Bid I	377.56	382.78	1.34	1.33	-0.38	-0.36
Jhabua Power Ltd- Bid I	217.09	157.52	1.98	1.99	0.17	0.16
Jhabua Power Ltd- Bid II*	188.78	137.00	1.76	2.00	3.24	3.10
Jindal Power ltd- Bid II*	283.18	287.12	1.21	1.33	3.33	3.18
JITPL*	188.78	185.57	1.05	1.17	2.21	2.16
BALCO	188.78	135.01	1.24	1.16	-1.07	-1.02
LTA subtotal	2209.91	1990.18	1.49	1.66	29.53	25.10
Total	4497.82	3619.47	1.99	2.07	30.97	26.54
Claim						18.10

<sup>\*</sup>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						
Particulars	Quantum					
Amount of Fuel Surcharge (F) in crores	18.10					
Energy estimation for Retail sale as per MYT petition to whole consumers April 2022 to June 2022 in MU	6696.12					
Energy expected for Retail sale to domestic consumers having monthly consumption less than 20 units and connected load below 20 units from April to June 2022 in MU	0.22					
Energy estimation for Retail sale as per MYT petition to domestic consumers other than the consumers with connected load less than 500 W and monthly consumption below 20 units consumers for April 2022 to June 2022 (E) in MU	6695.9					
Rate of fuel surcharge in Paise per unit(F*1000/E)	2.70					
Rounded to 3 paise per unit						

	Annexure –VI Power procurement /sale/transfer through short term contracts/DSM/banking arrangements									
	October									
		Energy at Kerala periphery(units)	Amount (Rs )							
Α	Power purchase through short term contracts									
I	Power through exchanges									
	IEX RTM	0.70910	1.04830							
III	Power transfer through DSM	-21.76	-12.82							
	Novem	ber								
I	Power purchase through short term contracts									
	Power through exchanges									
	IEX (DAM)	0.048	0.008							
III	Power transfer through DSM	-26.49	-9.86							
	Decem	ber								
I	Power through IEX DAM	4.286	0.812							
	Power through IEX RTM	0.030	0.007							
II	Power through DSM	-10	-8.64							
В	Power sale outside the State									
	Octob	er								
	IEX (DAM)	149.02	108							
	PXIL (DAM)	0.26	0							
	PXIL (TAM )	18.86	7							
	IEX ( TAM/ RTM)	57.86	56							
	Novem	ber	<u> </u>							
	IEX (DAM)	241	75							
	PXIL (DAM)	1	0							
	PXIL (TAM )	55	18							
	IEX ( RTM)	71	21							
	Decem	ber								
	IEX (DAM)	104.80	43							
	PXIL (DAM)	0.27	0							
	PXIL (TAM )	4.42	2							
	IEX ( TAM/ RTM)	41.92	16							

<sup>(-)</sup> indicates export of energy through DSM