

**BEFORE THE HON'BLE KERALA STATE ELECTRICITY REGULATORY COMMISSION**

**In the matter of:** Petition under Regulation 78 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations 2021 seeking approval for entering into an agreement for banking of power with the traders M/s. Arunachal Pradesh Power Corporation Pvt Ltd (APPCL) for banking of power during the period from November 2023 to March 2024 for managing the power deficit during the months.

**KSEBL MOST HUMBLY STATES THAT:**

1. Kerala State Electricity Board Limited files the instant petition seeking approval for entering into an agreement for banking of power with the traders M/s. Arunachal Pradesh Power Corporation Pvt Ltd for banking of power during the period from November 2023 to March 2024 for managing the power deficit from Nov 2023 to 15.03.2024 (except January 2024 & February 2024) and return period from June 2024 to September 2024.
2. In view of the increasing power demand during the period September 2023 to May 2024, the Load-Generation-Balance (LGB) for the period was reviewed by KSEBL to ascertain the probable deficit /surplus assessment, so that early action to meet the expected power deficit during September 2023 to May 2024, including summer period of 2024 and to manage the expected energy surplus during Monsoon 2024, can be initiated.
3. On analysis of the peak and energy availability in the State in the above said months, it was observed that considerable shortage ranging from 350MW to 700 MW, during various time blocks of a day is anticipated during the above months. The LGB details is shown as Annexure 1.
4. Currently, the power shortage is being managed by way of purchase from Day Ahead Market (DAM), Term ahead Market (TAM) and Real Time Market (RTM). During August,

the average daily payout on account of these transactions was of the order of Rs. 8-9 Crores.

5. In addition to this, it may kindly be noted that, the unprecedented increase in demand along with lesser availability of power have resulted in huge purchase of power by the utilities from the market. The huge power procurement has resulted in steep rise in the average market clearing price (MCP) in the DAM as well as RTM. The MCP on 18.8.23 recorded Rs.9.23/unit in DAM. Also, the demand in the summer months will increase considerably due to the forthcoming Lok Sabha election.
6. Hence, as an optimistic and proactive measure, to insulate the volatility in MCP and to obtain confirmed power, purchase of SWAP power or purchase through DEEP power is to be initiated to meet the deficit in LGB due to the reduction in hydel generation and to meet the increased demand. Since SWAP power not only helps to meet the deficit but also reduces the per day pay out. Hence KSEBL decided to float tenders for processing power through 'SWAP' transaction.
7. Accordingly, tender was invited from utilities and traders for banking of power with KSEB Ltd during the period from 01.09.2023 to 30.09.2024 as below with last date of submission and opening on 07.09.2023 at 2.00 pm & 3.00 pm respectively.

Supply Period			Return Period					
Period	Duration (hrs)	MW	Month	Duration (Hours)/ Max MW Return possible against each slot				
				00.00 to 05.00	05.00 to 08.30	08.30 to 18.30	18.30 to 22.30	22.30 to 24.00
Sept 23	RTC	500	Month					
Oct 23	RTC	500	June 24	500	500	500	50	500
Nov 23	RTC	300	July 24	1500	1500	1500	250	1500
Dec 23	RTC	500						
March 24	RTC	200	Aug 24	900	900	900	350	900
April 24	RTC	500	Sept 24	950	950	950	450	950
May 24	RTC	500						

8. Two bids were received (Attached as Annexure II), from the following traders within the stipulated time

1) M/s Manikaran Power Limited (MPL)

2) M/s.Arunachal Pradesh Power Corporation Private Ltd (APPCPL)

9. M/s. Manikaran Power Limited (MPL) has offered 50 MW RTC power for November 2023 and 50 MW during December 2023 from 00.00 Hrs to 06.00 Hrs & 12.00 Hrs to 24.00 Hrs as Arrangement 1. Alternatively, they have also offered 50 MW RTC power for November 2023 and 50 MW RTC from 1st to 15th December 2023 with return 107.61% and trading margin 3 paise/kWh with confirmed LoI of BRPL which is the source utility.
10. M/s. Arunachal Pradesh Power Corporation Private Ltd (APPCPL) has offered 4 banking arrangements but confirmed LoI of BYPL (BSES Yamuna Power Ltd) was there only for the 1st arrangement and the same is as follows

Supply Period			Return Period		
Nov-23	RTC	100 MW	11th June to 10th July 2024	00.00 to 05.00	250 MW
1st to 15th March 2024	RTC	50 MW		05.00 to 08.30	50 MW
				08.30 to 18.30	100 MW
				18.30 to 22.30	50 MW
				22.30 to 24.00	250 MW

The return percentage quoted by them is 100% with a trading margin of 3 paise/kWh.

11. It may be noted that, as per the tender condition, the swapping of power shall be from the month of September, but the bidders who participated in the bid has quoted the power from the month of November only.
12. Since the quantum offered were less and that also for short period, both firms were requested to reduce the trading margin. In addition to that M/s Manikaran Power Ltd was requested to reduce the return percentage also.
13. In response to this, M/s.Arunachal Pradesh Power Corporation Private Ltd (APPCPL) reduced the trading margin to 2.90 Paisa/unit and intimated willingness to

supply additional 62.50 MW RTC power during December 2023 with 100 % return during September 2024 as follows

<b>Return Period for additional quantum in September 2024</b>	
00 to 05	100 MW
05 to 08.30	25 MW
08.30 to 18.30	50 MW
18.30 to 22.30	78.13 MW
22.30 to 24	100 MW

14. However, M/s. Arunachal Pradesh Power Corporation Private Ltd (APPCPL) has not submitted the LoI from the utility for the additional offer as mentioned above. Hence they were requested to submit the same. Accordingly, they have further offered an additional quantum of 50 MW each for November 2023 & 1st to 15th March 2024 with the revision of the additional quantum offered for the month of December 2023 to 50 MW from 62.5 MW along with the LoI of the same from BYPL.
15. M/s Manikaran Power Limited (MPL) has reduced the return percentage to 107.31 from 107.61 but no reduction has been offered in trading margin. The letter received is attached as Annexure III. Since the offered return percentage and trading margin are higher and quantum offered is lesser, it was decided not to enter agreement with M/s Manikaran Power Limited (MPL).
16. It may be noted that, in present scenario, the storage position in the reservoir is around 60.06% only [as on 25.10.2023], this corresponds to gross generation capability of 2486.671 MU. Against this, the gross generation capability in the last year was 3424.393 MU. Further, this storage position is the lowest position in the last four to five years. This clearly indicate that the present storage position is poor compared with previous years. It is further submitted that, even with more rainfall in October 2023, due to poor rainfall received in the previous months, the storage position may continue in low position compared to previous years. Also, their exist a

situation to reserve the water in the reservoir to ensure the availability of power in the coming summer months. Further, there exist a situation where the price of electricity remains high in the market. As per IEX, during the month of September 2023, RTC price in the DAM was Rs. 6.231 per unit and evening rate was Rs. 8.272 per unit. In the month of October 2023, till date, the RTC price in the DAM is Rs. 6.74 per unit and evening rate is Rs. 8.319 per unit. If the above trend continuous, the daily pay out for power purchase will increase considerably unless an alternate arrangement is made.

17. Considering all, provisional LoA was issued on 16.10.2023 to M/s.Arunachal Pradesh Power Corporation Private Ltd (APPCPL) with a condition that, LoA is subjected to the approval from KSERC. As per the provisional LoA, the delivery point is the Regional periphery of the Exporting utility for both the supply and return period. The issued LoA is attached as Annexure IV.

Supply from APPCPL-BYPL to KSEBL			Return from KSEBL to APPCPL-BYPL						Trading Margin (paise/kWh)	
Supply period	Duration (Hrs)	Quantum (MW)	Return period	Duration(Hrs)/Max MW return possible against each slot						Return %
				00.00 -05.00	05.00 -08.30	08.30 - 18.30	18.30 -22.30	22.30 -24.00		
November 2023	RTC	100	11.06.24 to 10.07.24	250	50	100	50	250	100	2.90
1 <sup>st</sup> to 15 <sup>th</sup> March 2024	RTC	50								
<b>Additional Quantum</b>										
November 2023	RTC	50	11.06.24 to 30.06.24	70	26	25.985	0	70		
December 2023	RTC	50	01.07.24 to 31.07.24	70	25	25	45	70		

1 <sup>st</sup> to 15 <sup>th</sup> March 2024	RTC	50	01.08.24 to 31.08.24	70	25	25	45	70		
			01.09.24 to 15.09.24	70	26	25.985	45	70		

18. As per Regulation 78 of the KSERC (Terms and Conditions for Determination of Tariff) Regulations 2021, approval of Hon'ble Commission is required for short-term power procurement agreement or arrangement by way of exchange of energy under banking transactions, Therefore, the instant petition is filed seeking approval of Hon'ble Commission for issuing LoA to M/s. Arunachal Pradesh Power Corporation Pvt Ltd for banking of power during the period from 01.11.2023 to 15.03.2024 for managing the power deficit from November 2023 to March 2024 (except January 2024 & February 2024).

## Prayer

KSEBL humbly request Hon'ble Commission to grant approval for entering into banking transactions as submitted in the instant petition with M/s.Arunachal Pradesh Power Corporation Pvt Ltd for banking of power during the period from November 2023 to 15.03.2024, for managing the power deficit from November 2023 to March 2024 (except January 2024 & February 2024), and return period from June 2024 to September 2024.

**Chief Engineer(Commercial & Tariff)**

Annexure 1.

<b>Nov'23</b>	00:00 to 05:00	05:00 to 08:00	08:00 to 14:00	14:00 to 18:00	18:00 to 22:00	22:00 to 24:00
<b>Demand (MW)</b>	<b>2900</b>	<b>3200</b>	<b>3300</b>	<b>3500</b>	<b>4200</b>	<b>3675</b>
<b>Availability</b>						
Hydro	200	200	150	350	1550	650
CGS	1351	1351	1351	1351	1351	1351
LTA	571	571	571	571	571	571
DEEP	250	250	250	250	250	250
MTOA	0	0	0	0	0	0
SWAP Ret	0	0	0	0	0	0
REMC	20	50	100	90	30	30
Wind+Solar	5	45	155	185	10	5
Others	50	50	50	50	50	50
<b>Total</b>	<b>2447</b>	<b>2517</b>	<b>2627</b>	<b>2847</b>	<b>3812</b>	<b>2907</b>
<b>Surp(+)/Def(-)</b>	<b>-453</b>	<b>-683</b>	<b>-673</b>	<b>-653</b>	<b>-388</b>	<b>-768</b>
<b>Dec'23</b>	00:00 to 05:00	05:00 to 08:00	08:00 to 14:00	14:00 to 18:00	18:00 to 22:00	22:00 to 24:00
<b>Demand (MW)</b>	<b>3000</b>	<b>3200</b>	<b>3300</b>	<b>3550</b>	<b>4250</b>	<b>3700</b>
<b>Availability</b>						
Hydro	200	150	150	250	1550	600
CGS	1262	1262	1262	1262	1262	1262
LTA	571	571	571	571	571	571
DEEP	250	250	250	250	250	250
MTOA	0	0	0	0	0	0
SWAP Ret	0	0	0	0	0	0
REMC	20	50	100	90	30	30
Wind+Solar	5	45	155	185	10	5
Others	50	50	50	50	50	50
<b>Total</b>	<b>2358</b>	<b>2378</b>	<b>2538</b>	<b>2658</b>	<b>3723</b>	<b>2768</b>
<b>Surp(+)/Def(-)</b>	<b>-642</b>	<b>-822</b>	<b>-762</b>	<b>-892</b>	<b>-527</b>	<b>-932</b>
<b>Jan'24</b>	00:00 to 05:00	05:00 to 08:00	08:00 to 14:00	14:00 to 18:00	18:00 to 22:00	22:00 to 24:00
<b>Demand (MW)</b>	<b>3050</b>	<b>3275</b>	<b>3350</b>	<b>3600</b>	<b>4300</b>	<b>3750</b>
<b>Availability</b>						
Hydro	150	200	150	300	1550	650
CGS	1298	1298	1298	1298	1298	1298
LTA	571	571	571	571	571	571

DEEP	175	175	175	175	175	175
MTOA	760	760	760	760	760	760
SWAP Ret	0	0	0	0	0	0
REMC	20	40	80	80	20	20
Wind+Solar	5	55	180	225	10	5
Others	50	50	50	50	50	50
<b>Total</b>	<b>3029</b>	<b>3149</b>	<b>3264</b>	<b>3459</b>	<b>4434</b>	<b>3529</b>
<b>Surp(+)/Def(-)</b>	<b>-21</b>	<b>-126</b>	<b>-86</b>	<b>-141</b>	<b>134</b>	<b>-221</b>
<b>Feb'24</b>	00:00 to 05:00	05:00 to 08:00	08:00 to 14:00	14:00 to 18:00	18:00 to 22:00	22:00 to 24:00
<b>Demand (MW)</b>	<b>3150</b>	<b>3450</b>	<b>3400</b>	<b>3710</b>	<b>4378</b>	<b>3895</b>
<b>Availability</b>						
Hydro	250	200	150	350	1550	800
CGS	1307	1307	1307	1307	1307	1307
LTA	571	571	571	571	571	571
DEEP	250	250	250	250	250	250
MTOA	760	760	760	760	760	760
SWAP Ret	0	0	0	0	0	0
REMC	20	40	80	80	20	20
Wind+Solar	5	75	200	230	15	5
Others	50	50	50	50	50	50
<b>Total</b>	<b>3213</b>	<b>3253</b>	<b>3368</b>	<b>3598</b>	<b>4523</b>	<b>3763</b>
<b>Surp(+)/Def(-)</b>	<b>63</b>	<b>-197</b>	<b>-32</b>	<b>-112</b>	<b>145</b>	<b>-132</b>
<b>Mar'24</b>	00:00 to 05:00	05:00 to 08:00	08:00 to 14:00	14:00 to 18:00	18:00 to 22:00	22:00 to 24:00
<b>Demand (MW)</b>	<b>3851</b>	<b>3684</b>	<b>3834</b>	<b>4196</b>	<b>4800</b>	<b>4630</b>
<b>Availability</b>						
Hydro	450	200	220	600	1550	1200
CGS	1400	1400	1400	1400	1400	1400
LTA	571	571	571	571	571	571
DEEP	225	225	225	225	225	225
MTOA	760	760	760	760	760	760
SWAP Ret	0	0	0	0	0	0
REMC	20	40	80	80	20	20
Wind+Solar	5	75	200	230	15	5
Others	50	50	50	50	50	50
<b>Total</b>	<b>3481</b>	<b>3321</b>	<b>3506</b>	<b>3916</b>	<b>4591</b>	<b>4231</b>
<b>Surp(+)/Def(-)</b>	<b>-370</b>	<b>-363</b>	<b>-328</b>	<b>-280</b>	<b>-209</b>	<b>-399</b>
<b>Apr'24</b>	00:00 to 05:00	05:00 to 08:00	08:00 to 14:00	14:00 to 18:00	18:00 to 22:00	22:00 to 24:00
<b>Demand (MW)</b>	<b>4531</b>	<b>4062</b>	<b>4119</b>	<b>4554</b>	<b>5371</b>	<b>5309</b>
<b>Availability</b>						
Hydro	600	400	300	750	1550	1300



CGS	1450	1450	1450	1450	1450	1450
LTA	571	571	571	571	571	571
DEEP	250	250	250	250	250	250
MTOA	760	760	760	760	760	760
SWAP Ret	0	0	0	0	0	0
REMC	20	40	80	80	20	20
Wind+Solar	5	75	200	230	15	5
Others	50	50	50	50	50	50
<b>Total</b>	3706	3596	3661	4141	4666	4406
<b>Surp(+)/Def(-)</b>	<b>-825</b>	<b>-466</b>	<b>-458</b>	<b>-413</b>	<b>-705</b>	<b>-903</b>
<b>May'24</b>	00:00 to 05:00	05:00 to 08:00	08:00 to 14:00	14:00 to 18:00	18:00 to 22:00	22:00 to 24:00
<b>Demand (MW)</b>	<b>4326</b>	<b>4054</b>	<b>4095</b>	<b>4451</b>	<b>5281</b>	<b>5175</b>
<b>Availability</b>						
Hydro	600	400	300	750	1550	1300
CGS	1315	1315	1315	1315	1315	1315
LTA	571	571	571	571	571	571
DEEP	250	250	250	250	250	250
MTOA	760	760	760	760	760	760
SWAP Ret	0	0	0	0	0	0
REMC	20	40	80	80	20	20
Wind+Solar	5	75	200	230	15	5
Others	50	50	50	50	50	50
<b>Total</b>	3571	3461	3526	4006	4531	4271
<b>Surp(+)/Def(-)</b>	<b>-755</b>	<b>-593</b>	<b>-569</b>	<b>-445</b>	<b>-750</b>	<b>-904</b>