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 short term power procurement arrangement with successful bidders as per the terms and conditions of the tender floated by KSEBL on 24.06.2023 through DEEP portal for meeting power shortage.

Petitioner :Kerala State Electricity Board Limited

Respondent

- 1. Adani Enterprises Ltd.
- 2. Tata Power Trading Company Limited
- 3. PTC India Limited
- 4. JINDAL POWER LIMITED
- 5. GMR ENERGY TRADING LIMITED
- 6. NTPC Vidyut Vyapar Nigam Ltd(NVVNL)
- 7. Manikaran Power Limited
- 8. Ambitious Power Trading Company Limited

KSEBL most humbly submit the following:

- 1. Kerala State Electricity Board Limited (KSEBL) is the deemed distribution licensee in the State of Kerala carrying out the functions of Generation, Transmission and Distribution in the State of Kerala. To meet the demand of the State, KSEBL has been entering into power purchase contracts with the approval of Hon'ble Commission.
- 2. It is most respectfully submitted that vide its order dated 10.05.2023 in OP No. 05/2021, this Hon'ble Commission has rejected the Petition i.e. OP No. 05/2021 filed by the Petitioner (KSEBL), praying for final orders for approval of 4 Power Supply Agreements (PSAs) entered between KSEBL and respective generators, namely, the following:-
 - PSA for 115 MW capacity (under Bid-1) with Jhabua Power Ltd.
 - (ii) PSA for 150 MW capacity (under Bid-2) with Jindal Power Ltd.
 - (iii) PSA for 100 MW capacity (under Bid-2) with Jhabua Power Ltd.
 - (iv) PSA for 100 MW capacity (under Bid-2) with Jindal India Thermal Power Ltd.
- It is submitted that pursuant to the order of Hon'ble Commission dated 10-5-2023 3. in OP 5/2021, filed by KSEBL seeking final orders with respect to the drawal of 465MW power from the unapproved DBFOO contracts, M/s Jhabua power Ltd

(215MW) had stopped scheduling of power from 1/6/2023 onwards, and M/s JITPL (100MW) and M/s Jindal power Ltd (150MW) from 3/6/2023 and 6/6/2023 respectively. Even after the order of this Hon'ble Commission dated 07.06.2023 in OP 24/2023 granting permission to continue the interim arrangement, the 3 unapproved generators (4 PSAs) were not scheduling power and were insisting for release their outstanding payments which has been withheld due to the various restrictions on payments imposed by Hon'ble KSERC/Hon'ble APTEL orders and are requesting to effect payment at PPA rate.

- 4. Subsequently, the generators M/s.Jhabua Power Limited and M/s.Jindal Power Limited started scheduling from 21-6-2023 onwards. However, the scheduling from these generators from 15-7-2023 is stopped due to suspension of coal supply to these generators from MCL and SECL citing non existence of valid PSAs.
- 5. In the case of Medium term tender floated by KSEBL on 07.06.2023, the Ministry of Power has modified the Power Purchase Agreement. But the RfP and RfQ of the medium term power procurement are not revised accordingly. KSEBL has submitted this matter before Hon'ble Commission and has requested time extension for finalizing the tender and issuing the LoA. KSEBL has also requested approval for revising the APP floated by KSEBL.
- 6. The SWAP power of 472.15 MU procured from February 2023 to May 2023 has to be returned from 16.06.2023 to 30.09.2023 and the quantum to be returned is 507.1 MU. Storage in all major reservoirs is very low. Further due to absence of rain, the demand is on a higher side (increase of 5-6 MU in the average daily consumption and 300 to 400 MW in the evening peak requirement).
- 7. The above incidents have aggravated the power shortage in the State. The load generation balance of the State without considering the unapproved DBFOO contracts for the period from July 2023 to May 2024 are enclosed as **Annexure-1**. It is observed that there is considerable power shortage and also energy deficit. Hence to tide over the above situation, short term power procurement of 250 MW RTC power from 01.07.2023 to 31.05.2024 is required.
- 8. Therefore, KSEBL floated the tender for short term power purchase through DEEP portal on 24.06.2023 as indicated in table A as per the guidelines of the MoP, for short-term Procurement of power by Distribution Licensees through Tariff based bidding process dated 30.03.2016 and as per the timelines under table B below for managing the power deficit from 15.07.2023 to 31.05.2024.

Table A

Requis ition		riod	Required quantity	Duration (hrs)	Minimum Bid quantity MW
No	From	То	(MW)		
1	15.07.2023	31.07.2023	250	00:00 to 24:00	25
2	01.08.2023	31.08.2023	250	00:00 to 24:00	25
3	01.09.2023	30.09.2023	250	00:00 to 24:00	25
4	01.10.2023	31.10.2023	250	00:00 to 24:00	25
5	01.11.2023	30.11.2023	250	00:00 to 24:00	25
6	01.12.2023	31.12.2023	250	00:00 to 24:00	25
7	01.01.2024	31.01.2024	250	00:00 to 24:00	25
8	01.02.2024	29.02.2024	250	00:00 to 24:00	25
9	01.03.2024	31.03.2024	250	00:00 to 24:00	25
10	01.04.2024	30.04.2024	250	00:00 to 24:00	25
11	01.05.2024	31.05.2024	250	00:00 to 24:00	25

Table B

Sl. No.	Event	Date
1	Publication of RfP/Activation of Event	24.06.2023
2	Last date for submission of queries if any	27.06.2023
3	Reply of queries	30.06.2023
4	Submission of RfP (on line digitally signed non financial technical Bid and IPOs)	05.07.2023; 02:00pm
5	Opening of non financial technical Bids	05.07.2023; 03:00pm
6	Clarification, if any, sought from Bidder(s)	06.07.2023

7	Evaluation of nonfinancial technical Bids	07.07.2023
8	Opening of IPOs (upto 1300 hrs)	10.07.2023; 11:00am to 01:00pm
9	Start of e-RA	10.07.2023; 01:00pm to 03:00pm

- 9. The technical bids were opened on 05.07.2023 at 03:00 pm. Twenty Nine bidders submitted the bids and the technical evaluation details of the bids are attached as Annexure-2. All the bidders have accepted the terms and conditions of the RfP dated 24.06.2023 floated by KSEBL and thereafter the original BGs against the required EMD were also received. The technical bids submitted were in line with terms and conditions of the RfP floated by KSEB Ltd and hence all the bids are accepted.
- 10. The Initial Price Offers submitted by the bidders were opened on 10.07.2023 at 11:00 am, followed by e-Reverse Auction (e-RA) at 1:00 pm. The e-RA concluded at 06:00 pm. On completion of the bid process, the rates discovered through bucket filling in DEEP portal is attached as Annexure-3.
- 11. The standing committee constituted vides B.O. dated 11-04-2016, for evaluating all future short term power procurement through DEEP e-bidding portal made the following observations on the bids submitted by the bidders as shown below:
 - a) The requirement of power necessitated to meet power deficit from 15.07.2023 to 31.05.2024 was computed considering the return of SWAP power up to 30.09.2023, non scheduling of 100 MW RTC by unapproved DBFOO Generator M/s.Jindal India Thermal Power Ltd, non availability of 270 MW RTC under the Pilot Scheme-II from July 2023 to December 2023, the forecasted weak monsoon rainfalls and the increased demand in the forthcoming Summer of 2024.
 - b) There was good participation in the tender since 29 bids were received against the eleven requisitions for power purchase from 15.07.2023 to 31.05.2024. However, the total required quantum was not satisfied through bucket filling for October 2023 (220MW) and March 2024 (225 MW).
 - c) The price discovered for the eleven requisitions (from July 2023 to May 2024) in DEEP portal are reasonable when compared to the power exchange market rates discovered during these months for the last year and this year. The average market price during the previous years is attached as **Annexure-3**.
 - d) In the recent bids invited by other states in DEEP portal during the period from October 2023, the price discovered is comparatively higher than the rates of this bid. The details attached as **Annexure-4**.

- e) The price discovered for this tender through bucket filling is comparable to the prevailing power exchange rates. The present market rates are attached as **Annexure-5**.
- f) One of the reasons considered for inviting short term tender during July 2023 was the weak monsoon rainfalls. As against the anticipated weak monsoon rainfall, Kerala received better monsoon during July 2023. Hence against the tendered quantum of 250 MW during July 2023, it was suggested to purchase 150 MW.
- g) As the Onam festival of 2023 is during the month of August, low power demand is expected during Onam holidays, and hence procurement of 220 MW RTC power is suggested in the place of 250 MW.
- h) As per the previous year's weather conditions, summer rains are forecasted during October 2023. Hence purchase of 150 MW RTC power is suggested.
- i) The RTC power of 250 MW under Pilot Scheme-II for the upcoming year 2024 is to commence from 01.01.2024. Considering this it is suggested to procure 175 MW instead of 250 MW during January 2023.
- j) Considering the situation of high demand and the forthcoming elections, the advance procurement of power for the summer period of 2024 at the rate discovered in this bid seems to be advantageous. Hence procurement of 250 MW RTC power from this short term tender may be considered for the remaining months from Feb 2024 to May 2024.
- 12. The price discovered in this bid from July 2023 to May 2024 is comparable to the prevailing power exchange market rates. Therefore, Board decided to issue Letter of Award (LoA) and execute PPA with the successful bidders as per the price discovered through bucket filling during the e-RA in the DEEP portal on 10.07.2023 as shown in the Table C below, after obtaining the approval of Hon'ble KSERC.

Table C

Re qui siti on	Period	Total Quantum (MW)	Bidd er	Generator/Trader	Quantu m (MW) on Firm basis	Rate (Rs/kWh)	Source	Type of Fuel
1	15.07. 2023	150	L1	Adani Enterprises Ltd	100	4.97	Adani power Ltd, Raipur	Coal
1	to 31.07. 2023	130	L2	Tata Power Trading Company Limited	50	4.97	Adhunik Power & natural Resourc	Coal

				<u> </u>		1					
							es Ltd MP				
							Ltd,WB				
							Adhunik				
							Power &				
				Tata Power Trading			natural				
				Company Limited			Resourc				
				Company Limited			es				
			L1		50	5.23	Ltd,WB	Coal			
								3.23	Adani	Cour	
				Adani Enterprises			power				
				Ltd			Ltd,				
			L2	Ltd	100	5.23	Raipur	Coal			
_	Aug-					0.20	NavaBh				
2	23	220					arath				
	25			Tata Power Trading			Venture				
				Company Limited			S				
				company _mmee			Ltd,Odis				
			L3		45	5.23	ha	Coal			
							NavaBh				
										arath	
						DTC India Limited			Venture		
			PTC India Limited			S					
							Ltd,Odis				
			L4		25	5.23	ha	Coal			
							Jindal				
				Tata Davies Tue die e			India				
			L1	Tata Power Trading	75	5.38	Thermal	Coal			
				Company Limited	7.5	3.50	Power	Cour			
							Ltd,Oris				
							sa				
							Adhunik				
				Tata Davis T			Power &				
			L2	Tata Power Trading	50	5.38	natural	Coal			
				Company Limited	•		Resourc				
_	Sep-	256					es				
3	23	250					Ltd,WB				
							NavaBh				
				Tata Dower Trading			arath				
			L3	Tata Power Trading	45	5.39	Venture	Coal			
				Company Limited			s Ltd,Odis				
							ha				
							Jindal				
							Power				
			L4	JINDAL POWER	80	5.42	Ltd,	Coal			
			-'	LIMITED		3	Chattisg	3001			
							arh				
							Jindal				
4	Oct-23 150			Tata Power Trading	100	5.12	India	Coal			
'	550 25	100	L1	Company Limited	100	J.12	Thermal				
L			L			1	THEITHUI				

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							Power Ltd,Oris	
							sa	
							Prayagr	
							aj	
							Power	
				Tata Power Trading	50	5.14	Generati	Coal
				Company Limited			on	
							Compan y Ltd,	
			L2				UP	
							Jindal	
							India	
			L1	Tata Power Trading	150	5.38	Thermal	Coal
				Company Limited	130	3.30	Power	Coai
							Ltd,Oris	
							sa Maadur	
							ga	
	Nerv						Thermal	
5	Nov- 23	250	L2	GMR ENERGY	25	5.38	Power	Coal
	23		LZ	TRADING LIMITED	25	5.30	Compan	Coai
							у	
							Ltd,Odis	
							ha Jindal	
				TIME ALL DOWNER			Power	
			L3	JINDAL POWER	75	5.46	Ltd,	Coal
				LIMITED			Chattisg	
							arh	
							Maadur	
							ga Thermal	
				GMR ENERGY	2=	F 40	Power	6
			L1	TRADING LIMITED	25	5.48	Compan	Coal
							У	
							Ltd,Odis	
							ha Jindal	
							India	
6	Dec-	250		Tata Power Trading	450	F 40	Thermal	C!
	23		L2	Company Limited	150	5.48	Power	Coal
				, ,			Ltd,Oris	
							sa	
							Jaipee Nigree	
				NTPC VIDYUT			Nigree Super	
			L3	VYAPAR NIGAM	75	5.5	Thermal	Coal
				LIMITED			Power	
							Plant,	
							MP	

			L1	GMR ENERGY	25	5.49	Maadur ga Thermal Power	Coal
			Li	TRADING LIMITED	23	3.43	Compan y Ltd,Odis ha	Cour
7	7 Jan-24	175	L2	NTPC VIDYUT VYAPAR NIGAM LIMITED	100	5.49	Jaipee Nigree Super Thermal Power Plant, MP	Coal
			L3	NTPC VIDYUT VYAPAR NIGAM LIMITED	50	5.49	Jaipee Binaa Super Thermal Power Plant, MP	Coal
			L1	NTPC VIDYUT VYAPAR NIGAM LIMITED	100	5.58	Jaipee Nigree Super Thermal Power Plant, MP	Coal
	Feb-		L2	NTPC VIDYUT VYAPAR NIGAM LIMITED	50	5.58	Jaipee Binaa Super Thermal Power Plant, MP	Coal
8	24	250	L3	GMR ENERGY TRADING LIMITED	25	5.58	Maadur ga Thermal Power Compan y Ltd,Odis ha	Coal
			L4	Tata Power Trading Company Limited	45	5.75	Tata Power Haldia	Flue Gas
			L5	Adani Enterprises Ltd	30	5.82	Adani power Ltd, Raipur	Coal

9 Mar- 24		L1	NTPC VIDYUT VYAPAR NIGAM LIMITED	100	6.13	Jaipee Nigree Super Thermal Power Plant, MP	Coal	
			L2	NTPC VIDYUT VYAPAR NIGAM LIMITED	50	6.13	Jaipee Binaa Super Thermal Power Plant, MP	Coal
	225	L3	GMR ENERGY TRADING LIMITED	25	6.13	Maadur ga Thermal Power Compan y Ltd,Odis ha	Coal	
			L4	Manikaran Power Limited	25	6.25	BLA Power Private Ltd,Unit- II,MP	Coal
			L5	Manikaran Power Limited	25	6.34	BLA Power Private Ltd,Unit- I,MP	Coal
			L1	GMR ENERGY TRADING LIMITED	25	6.1	Maadur ga Thermal Power Compan y Ltd,Odis ha	Coal
10	10 Apr-24	250	L2	NTPC VIDYUT VYAPAR NIGAM LIMITED	100	6.1	Jaipee Nigree Super Thermal Power Plant, MP	Coal
			L3	NTPC VIDYUT VYAPAR NIGAM LIMITED	50	6.1	Jaipee Binaa Super Thermal Power	Coal

							Plant, MP	
			L4	Ambitious Power Trading Company Limited	75	6.24	Simhapu ri Energy Itd, AP	Impor ted coal
			L1	GMR ENERGY TRADING LIMITED	25	6.12	Maadur ga Thermal Power Compan y Ltd,Odis ha	Coal
11	May- 24	250	L2	NTPC VIDYUT VYAPAR NIGAM LIMITED	100	6.12	Jaipee Nigree Super Thermal Power Plant, MP	Coal
			L3	NTPC VIDYUT VYAPAR NIGAM LIMITED	50	6.12	Jaipee Binaa Super Thermal Power Plant, MP	Coal
			L4	Ambitious Power Trading Company Limited	75	6.24	Simhapu ri Energy Itd, AP	Impor ted coal

- 13. The bid validity period of the tender is 30 days from the date of e Reverse Auction i.e. up to 09-08-2023. As per the RfP, within this time frame LoA has to be issued and PPA to be executed with the successful bidders of the tender after obtaining the approval of Hon'ble KSERC.
- 14. It is requested that approval may kindly be granted for issuing Letter of Award to the successful bidders, as per Table-C above, and to execute PPAs with these successful bidders as per the terms and conditions of the already approved Standard RfP floated by KSEBL on 24.06.2023.

Prayer

Considering the submissions made above, KSEBL humbly request approval of Hon'ble Commission to adopt the tariff discovered in accordance with section 63 of the Act and

for issuing Letter of Award to the successful bidders, as per Table-C above, and to execute PPAs with these successful bidders as submitted above.

Chief Engineer(Commercial & Tariff)

<u>Load Generation Balance from July 2023 to May 2024</u> <u>(without unapproved DBFOO)</u>

			without	<u>unapprov</u>	rea DBFO	<u>U)</u>		
July (16/07-	00:00 to	05:00 to	08:30 to	14:00 to	17:00 to	18:30 to	22:30 to	(MU)
31/07)	05:00	08:30	14:00	17:00	18:30	22:30	24:00	(IVIO)
Demand (MW)	2650	2950	3050	3250	3200	3842	3100	72.98
Availability								72.30
Hydro	508	861	868	990	1197	1631	922	22.34
CGS	1200	1200	1200	1200	1200	1200	1200	28.80
LTA(without								
DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	0	0	0	0	0	0	0	0.00
SWAP Ret	-150	-250	-250	-250	-250	-50	-150	-4.44
Wind REMC	50	40	30	30	60	60	60	1.04
Solar	0	40	190	175	25	0	0	1.73
Others	20	20	20	20	20	20	20	0.47
Total	2199	2482	2629	2736	2823	3432	2623	62.76
Surp(+)/Def(-	-451	-468	-421	-514	-377	-410	-477	-10.43
Aug'23	00:00 to 05:00	05:00 to 08:30	08:30 to 14:00	14:00 to 17:00	17:00 to 18:30	18:30 to 22:30	22:30 to 24:00	(MU)
Demand (MW)	2650	2900	3000	3175	3200	3943	3300	73.00
Availability								
Hydro	518	761	808	847	1037	1641	1067	21.32
CGS	1300	1300	1300	1300	1300	1300	1300	31.20
LTA(without								
DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	0	0	0	0	0	0	0	0.00
SWAP Ret	-150	-250	-250	-250	-250	-50	-150	-4.44
Wind REMC	40	40	30	30	50	40	40	0.87
Solar	0	40	200	180	25	0	0	1.80
Others	20	20	20	20	20	20	20	0.47
Total	2299	2482	2679	2698	2753	3522	2848	64.00
Surp(+)/Def(-)	-351	-418	-321	-477	-447	-421	-452	-9.23
Sep'23	00:00 to 05:00	05:00 to 08:30	08:30 to 14:00	14:00 to 17:00	17:00 to 18:30	18:30 to 22:30	22:30 to 24:00	(MU)
Demand (MW)	2800	3050	3050	3270	3400	4002	3150	75.09
Availability								
Hydro	670	970	770	1005	1331	1671	970	23.42
CGS	1248	1248	1248	1248	1248	1248	1248	29.95
LTA(without DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	0	0	0	0	0	0	0	0.00
SWAP Ret	-150	-250	-250	-250	-250	-50	-100	-4.37
JVVAI NEL	130	230	230	230	230		100	7.57

Wind+REMC	25	30	20	20	25	25	25	0.56
Solar	0	50	230	215	45	0	0	2.14
Others	20	20	20	20	20	20	20	0.47
Total	2384	2639	2609	2829	2990	3485	2734	64.97
Surp(+)/Def(-	-416	-411	-441	-441	-410	-517	-416	
)							22:30	-10.34
Oct'23	00:00 to 05:00	05:00 to 08:30	08:30 to 14:00	14:00 to 17:00	17:00 to 18:30	18:30 to 22:30	to 24:00	(MU)
Demand (MW)	2900	3140	3100	3200	3550	4068	3350	76.70
Availability								
Hydro	503	708	603	621	1110	1671	955	19.34
CGS	1259	1259	1259	1259	1259	1259	1259	30.22
LTA(without DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	0	0	0	0	0	0	0	0.00
SWAP Ret	0	0	0	0	0	0	0	0.00
Wind REMC	30	33	25	25	30	30	30	0.67
Solar	0	50	290	260	45	0	0	2.60
Others	20	20	20	20	20	20	20	0.47
Total	2383	2641	2768	2756	3035	3551	2835	66.10
Surp(+)/Def(-)	-517	-499	-332	-444	-515	-517	-515	-10.83
Nov'23	00:00 to 05:00	05:00 to 08:30	08:30 to 14:00	14:00 to 17:00	17:00 to 18:30	18:30 to 22:30	22:30 to 24:00	(MU)
Demand (MW)	2650	3150	3175	3350	3580	4102	3209	76.32
Availability								
Hydro	278	621	401	667	1036	1559	745	16.13
CGS	1300	1300	1300	1300	1300	1300	1300	31.20
LTA(without DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	0	0	0	0	0	0	0	0.00
SWAP Ret	0	0	0	0	0	0	0	0.00
Wind+REMC	28	28	28	23	29	29	29	0.65
Solar	0	55	330	300	48	0	0	2.96
Others	20	20	20	20	20	20	20	0.47
Total Surp(+)/Def(-	2197	2595	2650	2881	3004	3479	2665	64.17
)	-453	-555	-525	-469	-576	-623	-544	-12.37
Dec'23	00:00 to 05:00	05:00 to 08:30	08:30 to 14:00	14:00 to 17:00	17:00 to 18:30	18:30 to 22:30	22:30 to 24:00	(MU)
Demand (MW)	2700	3200	3250	3425	3500	4125	3260	77.41
Availability								·
Hydro	321	737	453	656	1030	1547	853	17.06
IIyuIO								

		ı	ı	1	ı	ı	1	
LTA(without								
DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	0	0	0	0	0	0	0	0.00
SWAP Ret	0	0	0	0	0	0	0	0.00
Wind REMC	28	31	23	23	51	51	43	0.77
Solar	0	65	375	355	55	0	0	3.41
Others Total	20	20	20	20	20	20	20	0.47
Surp(+)/Def(-	2202	2686	2704	2887	2989	3451	2749	64.79
Surp(+)/Der(-	-498	-514	-546	-538	-511	-674	-511	-12.83
,							22:30	
Jan'24	00:00 to	05:00 to	08:30 to	14:00 to	17:00 to	18:30 to	to	(MU)
Demand	05:00	08:30	14:00	17:00	18:30	22:30	24:00	
(MW)	2800	3250	3100	3350	3600	4187	3434	77.65
Availability								
Hydro	259	598	339	417	912	1587	843	14.93
CGS	1298	1298	1298	1298	1298	1298	1298	31.15
LTA(without								
DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	260	260	260	260	260	260	260	6.24
SWAP Ret	0	0	0	0	0	0	0	0.00
Wind+REMC	20	20	23	23	45	45	35	0.65
Solar	0	70	450	420	75	0	0	4.07
Others	20	20	20	20	20	20	20	0.47
Total	2428	2837	2961	3009	3181	3781	3027	70.14
Surp(+)/Def(-)	-372	-413	-139	-341	-419	-406	-407	-7.74
Feb'24	00:00 to 05:00	05:00 to 08:30	08:30 to 14:00	14:00 to 17:00	17:00 to 18:30	18:30 to 22:30	22:30 to 24:00	(MU)
Demand (MW)	3100	3400	3350	3710	3810	4378	3895	83.78
Availability								
Hydro	424	670	322	634	1018	1580	1219	17.21
CGS	1300	1300	1300	1300	1300	1300	1300	31.20
LTA(without								
DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	260	260	260	260	260	260	260	6.24
SWAP Ret	0	0	0	0	0	0	0	0.00
Wind REMC	15	15	20	20	20	20	20	0.43
Solar	0	85	470	450	120	0	0	4.38
Others	20	20	20	20	20	20	20	0.47
Total	2590	2921	2963	3255	3309	3751	3390	72.59
Surp(+)/Def(-)	-510	-479	-387	-455	-501	-627	-505	-11.46
Mar'24	00:00 to 05:00	05:00 to 08:30	08:30 to 14:00	14:00 to 17:00	17:00 to 18:30	18:30 to 22:30	22:30 to 24:00	(MU)

Demand	3851	3534	3714	4096	4194	4800	4630	04.26
(MW) Availability								94.36
Hydro	954	635	412	844	1257	1616	1566	21.87
CGS	1300	1300	1300	1300	1300	1300	1300	31.20
LTA(without	1300	1300	1300	1300	1300	1500	1300	31.20
DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	260	260	260	260	260	260	260	6.24
SWAP Ret	0	0	0	0	0	0	0	0.00
Wind+REMC	10	10	15	15	20	20	15	0.34
Solar	0	100	490	470	150	0	0	4.65
Others	20	20	20	20	20	20	20	0.47
Total	3115	2896	3068	3480	3578	3787	3732	77.44
Surp(+)/Def(-	-736	-638	-646	-616	-616	-1013	-898	-17.23
1							22:30	17.23
Apr'24	00:00 to 05:00	05:00 to 08:30	08:30 to 14:00	14:00 to 17:00	17:00 to 18:30	18:30 to 22:30	to 24:00	(MU)
Demand (MW)	4631	4062	4119	4554	4546	5371	5309	107.21
Availability								
Hydro	1004	954	670	1044	1157	1616	1566	24.99
CGS	1400	1400	1400	1400	1400	1400	1400	33.60
LTA(without								
DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	260	260	260	260	260	260	260	6.24
SWAP Ret	0	0	0	0	0	0	0	0.00
Wind REMC	14	15	15	15	35	40	25	0.49
Solar	0	100	490	470	150	0	0	4.65
Others	20	20	20	20	20	20	20	0.47
Total	3269	3320	3426	3780	3593	3907	3842	83.06
Surp(+)/Def(-)	-1362	-742	-693	-774	-953	-1464	1467	-24.50
-							22:30	(2.5.1)
May'24	00:00 to 05:00	05:00 to 08:30	08:30 to 14:00	14:00 to 17:00	17:00 to 18:30	18:30 to 22:30	to 24:00	(MU)
Demand (MW)	4326	4054	4095	4451	4431	5281	5175	104.50
Availability								
Hydro	670	970	770	1005	1231	1626	1576	23.97
CGS	1400	1400	1400	1400	1400	1400	1400	33.60
LTA(without								
DBFOO)	571	571	571	571	571	571	571	13.70
MTOA	260	260	260	260	260	260	260	6.24
SWAP Ret	0	0	0	0	0	0	0	0.00
Wind+REMC	20	20	20	25	50	60	50	0.72
Solar	0	100	490	470	150	0	0	4.65
Others	20	20	20	20	20	20	20	0.47
Total	2941	3341	3531	3751	3682	3937	3877	82.28

Surp(+)/Def(-)	-1385	-713	-564	-700	-749	-1344	- 1298	-22.57
								0.00
Remarks: For CGS, LTA & MTOA, Credible outage of 100MW is considered								