

**BEFORE THE RAJASTHAN ELECTRICITY
REGULATORY COMMISSION JAIPUR (RAJASTHAN)**

FILING NO:.....

CASE NO. _____/2023

JAIPUR VIDYUT VITARAN NIGAM LTD. & ORS.

I N D E X

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Place: Jaipur

Date:



Counsel for the Petitioners



Executive Engineer (Regulation)
Jaipur Discom, Jaipur

**BEFORE THE RAJASTHAN ELECTRICITY REGULATORY
COMMISSION JAIPUR (RAJASTHAN)**

FILING NO:.....

CASE NO.....

IN THE MATTER OF:

**PETITION FOR APPROVAL OF POWER
PURCHASE FROM SHORT TERM SOURCES
FOR RAJASTHAN DISCOMS UNDER
REGULATION 9(e), 78, 95 OF THE
RAJASTHAN ELECTRICITY REGULATORY
COMMISSION (TERMS AND CONDITIONS FOR
DETERMINATION OF TARIFF) REGULATIONS,
2019 ISSUED BY RAJASTHAN ELECTRICITY
REGULATORY COMMISSION UNDER SECTION
61, 86(k), 94(f)(g) READ WITH SECTION 181
OF THE ELECTRICITY ACT, 2003.**

IN THE MATTER OF:

- 1. JAIPUR VIDYUT VITARAN NIGAM LTD.**
Vidyut Bhawan, Janpath,
Jaipur -302005
- 2. AJMER VIDYUT VITARAN NIGAM LTD.**
Old Power House, Hathi Bhata,
Jaipur Road, Ajmer-305001
- 3. JODHPUR VIDYUT VITARAN NIGAM LTD.**
New Power House, Industrial Area,
Jodhpur-342003

Petitioners

PETITION FOR APPROVAL OF POWER
PURCHASE FROM SHORT TERM SOURCES FOR
RAJASTHAN DISCOMS UNDER REGULATION
9(e), 78, 95 OF THE RAJASTHAN ELECTRICITY
REGULATORY COMMISSION (TERMS AND
CONDITIONS FOR DETERMINATION OF
TARIFF) REGULATIONS, 2019 ISSUED BY
RAJASTHAN ELECTRICITY REGULATORY
COMMISSION UNDER SECTION 61, 86(k),
94(f)(g) READ WITH SECTION 181 OF THE
ELECTRICITY ACT, 2003

MOST RESPECTFULLY SHOWETH:

1. The Petitioners herein are the Distribution Licensees (herein after referred to as "Discoms") in the State of Rajasthan and are undertaking the functions of distribution and retail supply of electricity to the public at large in their respective area of distribution.
2. The Petitioner would like to submit that most of the states across the country have been facing an **acute**

power crisis situation due to a gap between the demand of power from consumers and the supply available from generators with whom the respective state Discoms have long term power purchase agreements.

3. The mentioned crisis which began in the months of October- November 2021 have been continuing since after a brief period of relief in the first 2-3 months of FY 23. The same has been taken into cognizance by state and central governments. The Ministry of Power, GoI had acknowledged the crisis, in October 2021 and had also published a press note regarding the same on 09.10.2021.
4. Subsequently, the Ministry of Power, has initiated multiple measures to address this emergency situation. Steps include restarting idle imported coal-based plants, increasing allocation of railway rakes to power sector, directions to State Gencos for blending of imported coal (up to 10%), directions to all Gencos (including IPPs) under Section 11 of the Electricity Act



2003, for timely import of coal for blending thereby maximizing production in captive mines.

5. The Discoms have a Universal Supply Obligation to its consumers and are accordingly resorting to all possible measures to ensure a smooth and uninterrupted power supply.
6. Rajasthan's average electricity demand has observed an increasing trend from 9,227 MW in FY 2019-20 to 11,517 MW in FY 2022-23 (up to Feb-23). The average demand in night peak hours (12am to 6am) increased from 8,982 MW to 10,208 MW during the same period. It is further anticipated that the demand in the coming summer months especially during the peak night hours will increase substantially.
7. The month wise actual demand for FY23 and the anticipated demand for FY 24 is presented as under:

Month	Energy Consumed[LU/day, (MW)]	Peak Demand(in MW)
Apr-2022	2,750 (11,458)	14,167
May-2022	2,926 (12,192)	15,898
Jun-2022	2,961 (12,338)	16,012


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Month	Energy Consumed[LU/day, (MW)]	Peak Demand(in MW)
Jul-2022	2,347 (9,779)	12,332
Aug-2022	2,377 (9,904)	13,808
Sep-2022	2,913 (12,138)	15,843
Oct-2022	2,545 (10,604)	14,072
Nov-2022	2,936 (12,233)	16,023
Dec-2022	3,114 (12,975)	16,612
Jan-2023	3,104 (12,933)	17206
Feb-2023*	3075 (12,813)	16,754
Mar-2023*	2,876 (11,983)	15,300

* Feb-2023 as per actual till 16-Feb-2023 and Mar-23

are anticipated numbers

Month	Energy Requirement (LU/day)	Peak Demand(in MW)
Apr-2023	3,066 (12,775 MW, 11.50%)	15,333
May-2023	3,279 (13,664 MW, 12.08%)	17,206
Jun-2023	3,317 (13,882 MW, 12.03%)	17,330
Jul-2023	2,673 (11,136 MW, 13.86%)	13,347
Aug-2023	2,700 (11,251 MW, 13.61%)	14,945
Sep-2023	3,265 (13,605 MW, 12.09%)	17,146
Oct-2023	2,755 (11,479 MW, 8.23%)	15,230
Nov-2023	3,178 (13,241 MW, 8.23%)	17,341
Dec-2023	3,370 (14,043 MW, 8.23%)	17,979
Jan-2024	3,359 (13,998 MW, 8.23%)	18,622
Feb-2024	3,338 (13,867 MW,	18,133

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	8.23%)	
Mar-2024	3,113 (12,970 MW, 8.23%)	16,559

8. The Petitioners also submit the month wise availability as anticipated for FY 2023-24 as under:

Month	Energy Requirement	RVUN - Coal & Gas (as per last year)	RTC Capacity other than RVUN**	RE Sources	Total Availability	Energy Surplus / (Deficit)
Apr-2023	3,066	1,044	1,045	530	2,825	(447)
May-2023	3,279	1,044	1,045	823	3,118	(367)
Jun-2023	3,317	1,044	1,045	830	3,126	(398)
Jul-2023	2,673	1,044	1,045	736	2,825	152
Aug-2023	2,700	1,044	1,045	787	2,876	176
Sep-2023	3,265	1,044	1,045	606	2,695	(570)
Oct-2023	2,755	1,044	1,045	510	2,599	(156)
Nov-2023	3,178	1,044	1,045	413	2,502	(676)
Dec-2023	3,370	1,044	1,045	385	2,474	(896)
Jan-2024	3,359	1,044	1,045	363	2,452	(907)
Feb-2024	3,328	1,044	1,045	456	2,545	(783)
Mar-2024	3,113	1,044	1,045	523	2,612	(501)

*** There is no possibility of additional power generation from the RTC capacity other than RVUN*

Month	Energy Surplus / (Deficit)		Committed additional generation from RVUN		Energy Surplus / (Deficit) after additional generation		Banking Arrangement	Revised Energy Surplus / (Deficit)	Purchase from exchange
	(LU/day)	(MW)	(LU/day)	(MW)	(LU/day)	(MW)			
Apr-2023	(447)	(1,862)	206	858	(241)	(1,004)		-241	433
May-2023	(367)	(1,530)	206	858	(161)	(672)		-161	300
Jun-2023	(398)	(1,657)	206	858	(192)	(799)		-192	345
Jul-2023	152	634	206	858	358	1,492		358	
Aug-2023	176	734	206	858	382	1,592		382	
Sep-2023	(570)	(2,373)	206	858	(364)	(1,515)		-364	654
Oct-2023	(156)	(649)	206	858	50	209		50	
Nov-2023	(676)	(2,815)	206	858	(470)	(1,957)		-470	845
Dec-2023	(896)	(3,735)	206	858	(690)	(2,877)	382	-309	574
Jan-2024	(907)	(3,781)	206	858	(701)	(2,923)	396	-305	568
Feb-2024	(783)	(2,924)	206	858	(577)	(2,404)	336	-241	419
Mar-2024	(501)	(2,086)	206	858	(295)	(1,288)	288	-7	12
Total									4,152

9. Rajasthan Discoms, in order to maintain the supply-demand equilibrium and overall grid stability will have to resort to procure power from short term power markets power exchanges. The tables above clearly indicate the precarious power deficit scenario expected

for FY 2023-24. **During FY 2022-23, average cost of power purchased from exchange is Rs. 5.50/kWh.**

Considering entire deficit is met through exchange at weighted average tariff of 6 Rs/kWh, Discoms may need Rs. 4,152 Cr for exchange power purchase.

10. The considerable demand-supply gap may be attributed to the following factors:

i. **Banking arrangements with UPPCL-** Rajasthan Discoms had entered into banking arrangement with UPPCL for meeting the power deficit during the Rabi Season (December-2022 to March-2023) and is under obligation to return this power to UPPCL during the period between April-2023 and September-2023

ii. **Availability from State Gencos (RVUNL)-** historical actual availability from the State Genco owned units have been much lower than the assured and normative levels. **During the last 4 years between FY 20 to FY 23, weighted**


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average availability was only 66% for State Genco units, while availability during FY 23 (up to Feb-23) is 61%, which translates to 4,425 MW against ex-bus capacity of 7,274 MW. The table below captures generating unit wise month wise availability for RVUNL:

Generator	Ex-bus capacity (MW)	Availability (%) for FY 2022-23										
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
KTPS Unit(I-VII)	1,121	80%	90%	71%	54%	72%	74%	74%	73%	75%	73%	97%
STPS-(I-VI)	1,353	75%	69%	57%	51%	65%	57%	38%	51%	55%	56%	46%
SSCTPP U#7	625	0%	0%	0%	0%	0%	0%	39%	70%	59%	43%	70%
SSCTPP U#8	625	69%	75%	78%	66%	36%	65%	31%	52%	34%	55%	53%
CTPP-I to IV	902	68%	71%	75%	44%	60%	65%	61%	75%	84%	80%	80%
CTPP-V &VI	1,250	75%	84%	83%	69%	61%	67%	61%	49%	61%	61%	58%
RGTP I to III	261	51%	48%	55%	66%	62%	66%	57%	57%	65%	64%	52%
KaTTP-I &II	1,137	47%	28%	63%	92%	75%	61%	39%	31%	80%	88%	70%
RVUNL Total	7,274	63%	63%	64%	58%	58%	59%	51%	56%	66%	67%	67%

11. It is submitted that the sale and purchase of power through exchange is a dynamic process. The market clearing prices in exchange are dependent on the bids submitted by buyers and other sellers and the power available in the entire market. It is important to note that the Discoms have no control over the mentioned