



Petition No. 1805 of 2021

**BEFORE
THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION
LUCKNOW**

Date of Order: 11.03.2022

PRESENT:

Hon'ble Shri Raj Pratap Singh, Chairman
Hon'ble Shri Kaushal Kishore Sharma, Member
Hon'ble Shri Vinod Kumar Srivastava, Member (Law)

IN THE MATTER OF Petition under Section 86 (1) (b) of the Electricity Act, 2003, in the matter of Procurement of Bilateral Power from DEEP Portal of Government of India, for the period May 2022 to September 2022 of FY 2022-23.

Dakhshinanchal Vidyut Vitran Nigam Ltd.,
Urja Bhawan, NH2 (Agra Delhi Bypass Road),
Sikandra, Agra, Uttar Pradesh

Kanpur Electricity Supply Company Ltd.,
Kesa House, 14/71, Civil Lines, Kanpur, Uttar Pradesh

Madhyanchal Vidyut Vitran Nigam Ltd.,
4A, Gokhale Vihar Marg, Block 1, Gokhale Vihar,
Butler Colony, Lucknow, Uttar Pradesh - 226 001.

Purvanchal Vidyut Vitran Nigam Ltd.,
Vidyut Nagar, Bhikharipur,
Post Office DLW, Varanasi, Uttar Pradesh - 220 101.

Pashchimanchal Vidyut Vitran Nigam Ltd,
Urja Bhawan, Victoria Park, Meerut, Uttar Pradesh - 250 001

Uttar Pradesh Power Corporation Limited,
7th Floor, Shakti Bhawan, 14, Ashok Marg,
Lucknow, Uttar Pradesh - 226 001

..... Petitioner

The following were present:

1. CE-PPA, UPPCL
2. CE, RMU, Lucknow
3. CE, Commercial, UPPCL
4. Shri Pratyusha Khandelwal
5. Shri Ravi Prakash Dubey
6. Shri Mohit Goyal, Consultant, UPPCL



Order
(Date of Hearing: 11.02.2022)

1. The Petitioner, Uttar Pradesh Power Corporation Limited ("UPPCL"), has filed the instant petition under Section 86 (1) (b) of the Electricity Act, 2003, in the matter of Procurement of Bilateral Power from DEEP Portal of Government of India, for the period May 2022 to September 2022 of FY 2022-23.
2. The Petitioner has prayed as follows:
 - i. Admit the Petition;
 - ii. Allow the procurement of Short term Power for the period May, 2022 to September, 2022 through DEEP portal of Government of India and approve the quantum of Short term of Power as part of overall power procurement requirements along with ARR for FY 2022-23;
 - iii. To condone any inadvertent omissions/errors/shortcomings and permit the Petitioners to add/change/modify/alter this filing and make further submissions as may be required at a future date;
 - iv. To pass such Orders as deemed fit and proper in the facts and circumstances of the case in the interest of justice.

Background

3. UPPCL has submitted that the demand in the State of Uttar Pradesh has been in a way that the State is having surplus power during the months of November to April and if there is any power shortage during the peak hours, it is generally met through purchases from the Power Exchange. But during the months of May to April, the deficit generally tends to be a little higher during the evening peak and early morning hours due to high demand in the State. The power requirement is generally so high during May to October that some part of procurement is done through Exchange and some part through bilateral arrangements through DEEP portal of Government of India.
4. The Commission vide Tariff Order for FY 2021-22 directed licensees to follow the Central Government Guidelines for procurement of power for the short term. The relevant extract of the Commissions' Order is as under:

"6.5.24. *The power purchase is being done by the Licensees considering the above directions as approval for purchase of power through short term. It is clarified that the above directions are provided from the perspective of taking benefit of low-price prevailing in short term power market (including exchange or bilateral mode). It is pertinent to give clarification that no approval will be required for purchasing power through exchange or to fulfil contingent requirements, however for all other purchases, prior approval of the Commission is required. The Licensees are also required to strictly follow the Central Government Guidelines for Procurement of power for short term (i.e. for a period more than one day to one year) through tariff-based bidding process using National e-bidding portal.*"



5. Further, as per the MoP guidelines vide ref. no. 23/25/2011-R7R (Vol-III) dated 30.03.2016 for procurement of short-term power (i.e., for a period more than one day to one year) by Distribution Licensees through tariff-based bidding process using national e-bidding portal issued, the Licensees shall procure the short-term power as per the plan approved by the Commission. Furthermore, in case procurement of short-term power exceeds the approved annual short term procurement plan, the licensees shall obtain prior approval from the Commission. The relevant clause of the MoP guideline is as under:

4. Preparation for inviting bids

4.1. The Procurer(s) shall procure short term power as per the plan approved by Appropriate Commission or appropriate body as may have been constituted for the purpose by the Appropriate Commission. In such case the Distribution Licensees will intimate about the initiation of the procurement process to the Appropriate Commission.

4.2. In case procurement of short-term power exceeds the approved annual short term procurement plan, the Procurer(s) shall obtain prior approval from the Appropriate Commission, or any appropriate body as may have been constituted for the purpose by the Appropriate Commission.

6. Considering the present and upcoming plants availability and based on historic data, 78% of total Availability is considered as base supply. Generation from hydro plants have been considered as per their historic schedules. The following upcoming plants are considered as per the expected COD:

COD of Upcoming Plants				
SR. No.	Plant		Capacity (MW)	Expected COD
1	Harduaganj Extension	Unit-1	660	Dec-21
2	Jawaharpur	Unit-1	660	Sep-22
3	Obra-C	Unit-1	660	Oct-22
4	Ghatampur	Unit-1	561	Oct-22

7. Hence, the expected availability for the summer months April 2022 to October 2022 of FY 2022-23 is as below:

Power Availability for FY 2022-23 (MW)							
Time	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
00:00-01:00	19405	21289	21170	20917	20472	20776	20917
01:00-02:00	19352	21156	21091	20908	20416	20484	20697
02:00-03:00	19263	21010	21055	20839	20347	20238	20642
03:00-04:00	19210	20916	20873	20760	20272	20065	20603
04:00-05:00	19085	20899	20799	20791	20267	20063	20699
05:00-06:00	19088	20759	20543	20513	20014	20200	20972
06:00-07:00	19334	20838	20726	20554	20182	20424	21112
07:00-08:00	19587	21222	21079	20913	20633	20892	21192
08:00-09:00	20194	21622	21647	21444	21134	21447	21331
09:00-10:00	20568	22087	22158	21931	21579	21963	21783



Power Availability for FY 2022-23 (MW)							
10:00-11:00	20857	22615	22572	22286	21845	22210	22324
11:00-12:00	20959	22843	22727	22523	21945	22393	22558
12:00-13:00	21103	22796	22888	22570	22054	22279	22495
13:00-14:00	21113	22748	22736	22421	21941	22128	22374
14:00-15:00	20882	22624	22642	22325	21761	21969	22224
15:00-16:00	20514	22275	22274	22042	21425	21556	21788
16:00-17:00	20037	21666	21580	21489	20913	20990	21332
17:00-18:00	19675	21218	21062	21034	20476	20541	21590
18:00-19:00	19872	21320	21022	20932	20420	21162	22409
19:00-20:00	20096	21997	21661	21321	21013	21679	22476
20:00-21:00	20122	21957	21684	21247	20970	21553	22114
21:00-22:00	19947	21892	21658	21305	20961	21342	21617
22:00-23:00	19746	21800	21592	21257	20861	21172	21415
23:00-24:00	19705	21729	21589	21293	20855	21135	21251

8. UPPCL has submitted that demand is forecasted on hourly basis considering hourly historical data for each day. To avoid over-procurement based on peak demand for the entire month, demand is considered by adding one Standard Deviation to Average Demand. Considering that there is a significant variation in hourly Average and Peak Demand for a month, balance is to be maintained for minimizing over-procurement, thereby increasing the procurement volume to cover around 70% of the days whose demand varies from Average Demand, thereby being able to meet demand for around 90% of the days of the month, leaving the marginal differential volume for procurement through Spot/Collective Markets. Thereby, the projected Average+1 Sigma demand for overall power procurement requirements for the summer months of FY 2022-23 as below:

Average+1 Sigma RDM for FY-2022-23 (MW)							
Time	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
00:00-01:00	18638	23679	24407	22655	22223	21275	19193
01:00-02:00	18423	23254	24140	22138	22120	21151	18668
02:00-03:00	18007	23027	23667	21893	21395	21057	18396
03:00-04:00	17671	22428	23390	21392	21246	20698	18551
04:00-05:00	18113	22220	23712	21757	21264	20726	19434
05:00-06:00	19086	22912	23725	21974	21943	20084	20806
06:00-07:00	17757	21376	22265	20501	20744	20691	20298
07:00-08:00	15745	19812	20688	19644	19432	19374	19162
08:00-09:00	14827	19145	19889	19135	18682	18512	17797
09:00-10:00	15107	18943	20169	19141	18484	18772	17747
10:00-11:00	15377	19300	20782	19609	18689	19189	17941
11:00-12:00	15644	19420	21303	19943	19004	19341	17551
12:00-13:00	14862	19112	21637	19962	19066	19314	16721
13:00-14:00	14928	19293	21947	20256	19334	19251	17367



Average+1 Sigma RDM for FY-2022-23 (MW)							
Time	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
14:00-15:00	14879	19122	21678	19801	19261	19460	17492
15:00-16:00	15595	19679	22052	19947	19732	19931	17915
16:00-17:00	16138	20147	21893	20153	19970	19993	18533
17:00-18:00	17897	21830	22642	20645	20863	20793	21127
18:00-19:00	19423	22465	22379	21091	21263	21584	21844
19:00-20:00	20839	24463	24702	23028	23270	22555	21583
20:00-21:00	20738	24773	25188	23487	23610	22300	21134
21:00-22:00	20313	24531	25176	23618	23594	22222	20852
22:00-23:00	19605	24305	24737	23228	23126	21737	20118
23:00-24:00	19191	24091	24586	23064	22776	21263	19469

9. Considering the expected demand and availability, the hourly surplus and deficits as proposed by UPPCL are as below:

Demand Supply Gap for FY-2022-23 (MW)							
Time	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
00:00-01:00	766	-2390	-3237	-1737	-1751	-499	1724
01:00-02:00	929	-2098	-3049	-1230	-1704	-668	2029
02:00-03:00	1256	-2016	-2613	-1054	-1048	-820	2246
03:00-04:00	1539	-1512	-2516	-633	-973	-634	2052
04:00-05:00	972	-1320	-2913	-966	-997	-663	1265
05:00-06:00	3	-2154	-3182	-1462	-1929	116	166
06:00-07:00	1576	-538	-1539	53	-562	-267	815
07:00-08:00	3842	1410	391	1269	1201	1519	2030
08:00-09:00	5368	2476	1758	2309	2452	2934	3534
09:00-10:00	5460	3144	1989	2790	3096	3191	4036
10:00-11:00	5480	3315	1790	2677	3156	3022	4382
11:00-12:00	5315	3423	1424	2579	2941	3052	5006
12:00-13:00	6241	3684	1251	2608	2988	2965	5773
13:00-14:00	6185	3455	789	2164	2607	2877	5007
14:00-15:00	6004	3502	964	2523	2500	2509	4732
15:00-16:00	4920	2596	221	2095	1692	1625	3873
16:00-17:00	3899	1519	-313	1335	942	997	2799
17:00-18:00	1778	-612	-1580	389	-387	-252	463
18:00-19:00	449	-1144	-1357	-159	-843	-422	565
19:00-20:00	-743	-2466	-3041	-1707	-2257	-876	893
20:00-21:00	-617	-2816	-3504	-2240	-2640	-747	980
21:00-22:00	-365	-2639	-3518	-2312	-2633	-880	765
22:00-23:00	142	-2505	-3144	-1971	-2265	-566	1298
23:00-24:00	514	-2362	-2997	-1771	-1921	-128	1782



(-) sign indicates deficit

10. UPPCL submitted that to meet the deficits in the peak hours of summer months, power is proposed to be procured through DEEP in two tranches of 1625 MU and 1095 MU respectively, as below:

DEEP Procurement Proposal								
Month	Period	Hrs	Tranche I (MW)	Tranche II (MW)	Total MW	Tranche I MU	Tranche II MU	Total MU
May-22	00:00 - 06:00	6	1100	600	1700	205	111	316
	18:00 - 24:00	6	1200	800	2000	223	149	372
Jun-22	00:00 - 06:00	6	1500	1000	2500	270	180	450
	18:00 - 24:00	6	1500	1000	2500	270	180	450
Jul-22	00:00 - 06:00	6	600	400	1000	112	74	186
	19:00 - 24:00	5	1000	800	1800	155	124	279
Aug-22	00:00 - 06:00	6	700	500	1200	130	93	223
	19:00 - 24:00	5	1000	700	1700	155	109	264
Sep-22	00:00 - 05:00	5	300	300	600	45	45	90
	19:00 - 24:00	5	400	200	600	60	30	90
Total MU's						1625	1095	2720

11. The above projection of Short-term power procurement is based on provision of uninterrupted power supply from 18:00 Hrs to 07:00 Hrs. The above power procurement plan is aggregated requirement of all government owned Discoms.

12. Also, UPPCL has submitted that to meet the Gap between demand and supply, UPPCL is in the process of E-tendering for power procurement through DEEP Portal for the period May 2022 to September 2022, for which power procurement process will have to be initiated in the mid of January 2022. Hence, requested the Commission to consider the submission as mentioned above for approval of short-term power procurement through bilateral arrangements. The short-term power procurement planning is a part of overall power procurement requirements of ARR for FY 2022-23.

Record of Proceedings

13. The Commission, during the hearing held that UPPCL has already made a presentation before the Commission regarding need for short term power procurement and observed that vide its order dated 09.07.2019 in Petition No. 1478/2019 in the matter of approval of long term power procurement plan of UP Discoms for FY 2019-20 to 2029-30 has granted liberty to procure short term



seasonal peak power from power exchanges of GoI DEEP portal or through bilateral banking arrangement with other states' Discoms. The Commission also noted that UPPCL has initiated bidding for Tranche-I based on the Commission's approval during the presentation before the Commission.

Commission's View

14. Keeping in the view the presentation made before the Commission and pursuance of the records available on record, the Commission finds that hydro power is not only the best suited option for peak power management but would also help in fulfilling HPO obligations. UPPCL has already bid for Tranche-I after the Commission's approval. UPPCL shall preferably procure 50% hydro power in Tranche-II and balance power from other sources. **The Commission approves the UPPCL's proposal of the procurement of Short-term Power for the period May 2022 to September 2022 through DEEP portal of Government of India and approve the quantum of short term of Power as part of overall power procurement requirements along with ARR for FY 2022-23.**
15. **The Commission also directs UPPCL to prepare document to come up with a power procurement plan through installation of minimum 100 MW Battery Storage Project located near load centers in the next cycle to meet their short duration peak demand.**
16. Since the power procurement is a part of the ARR & Tariff Determination process for FY 2022-23 and should be studied in detail by all the Stakeholders, **the approval for procurement of power in short term is subject to the following:**
 - i. **Submission of the necessity of the procurement in detail along with the assumptions considered for the proposed procurement in the Power Procurement Plan to be filed along with the ARR & Tariff Petition for FY 2022-23.**
 - ii. **Ensuring that the proposed procurement is at a competitive price considering the market trends and optimal utilisation of the available generation resources with the Distribution Licensees and demonstration of the same in the Tariff Petition for FY 2022-23.**
 - iii. **Adoption of the Tariff discovered through DEEP portal, under section 63 of the Electricity Act, 2003, by the Commission once the bidding is complete.**

Accordingly, the Petition is disposed of.


(Vinod Kumar Srivastava)
Member


(Kaushal Kishore Sharma)
Member


(Raj Pratap Singh)
Chairman

Place: Lucknow

Dated: 11.03.2022

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