

**BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION AT
PANCHKULA**

HERC/Petition No. 61 of 2024

**Date of Hearing : 03.12.2024
Date of Order : 09.12.2024**

In the Matter of

Petition under section 86(1)(b) of the Electricity Act, 2003 read with Haryana Electricity Regulatory Commission (Conduct of Business) Regulations, 2019 seeking source approval for purchase of 44.22 MW power from Unit 7&8 (2x700MW) of Rawatbhata Atomic Power Project (RAPP), Rajasthan along with approval of draft Power Purchase Agreement

Petitioner

Haryana Power Purchase Centre, Panchkula (HPPC)

Respondent

Nuclear Power Corporation India Ltd (NPCIL)

Present on behalf of the Petitioner

1. Mr. Vishal Sharma, Advocate
2. Ms. Seema Sidana, Xen, HPPC

Present on behalf of the Respondent

Nil

Quorum

**Shri Nand Lal Sharma
Shri Mukesh Garg**

**Chairman
Member**

ORDER

Brief Background of the case

1. The present petition has been filed by HPPC, a joint forum of Haryana Distribution licensees, seeking the approval of source as well as draft Power Purchase Agreement (PPA), for power procurement of 44.22 MW nuclear power from Unit 7 & 8 (2x700 MW) of Rawatbhata Atomic Power Stations, Rajasthan of NPCIL, for 15 years.
2. **HPPC's submissions: -**
 - 2.1 That NPCIL vide its letter dated 31.3.2010 requested to convey the quantum of power required for the State from the Project. The content of the said letter is reproduced hereunder:-

“NPCIL has undertaken the construction of 7th and 8th units of Rajasthan Atomic Power Project with a capacity of 1400 Mwe(2x700 Mwe).The power stations are expected to be commissioned in the year 2016. With the need to keep sufficient lead time for review, planning and construction of evacuation arrangement from the stations

it would be necessary to firm up the requirement of the beneficiaries in the Northern Region.

Keeping in view the above and the requirement of CEA for taking up the study it is hereby requested that the willingness and requirement for off take of power from the stations may please be communicated.

In order to enable you to take a decision in this regard the project cost and indicative tariff are given below:

<i>Project Rajasthan Atomic Power Project Unit 7&8</i>	
<i>Installed capacity</i>	<i>2x700 Mwe</i>
<i>Sanction Completion cost</i>	<i>Rs.12320 crores</i>
<i>Debt Enquiry Ratio</i>	<i>70:30</i>
<i>Tariff (2016)</i>	
<i>ROE</i>	<i>69 paise /kwh</i>
<i>Interest</i>	<i>87 paise/kwh</i>
<i>Depreciation</i>	<i>59 paise/kwh</i>
<i>Fuel Charges (*)</i>	<i>72 paise/kwh</i>
<i>Heavy Water Charges (*)</i>	<i>25 paise/kwh</i>
<i>O&M cost</i>	<i>37 paise/kwh</i>
<i>Levy</i>	<i>2 paise/kwh</i>
<i>Tariff (2016) Total</i>	<i>351paise/kwh</i>

(*) at the prevailing prices.

You are requested to kindly convey the quantum of power required for the State from the Project at the earliest. Based on your response, it is proposed to communicate to CEA/ Ministry of Power for firm allocation.”

- 2.2 That the NPCIL vide letter dated 31.03.2010 had projected indicative tariff of Rs. 3.51/kWh and Unit-7 & Unit-8 were supposed to be commissioned from the year 2016.
- 2.3 That HPPC vide its letter dated 21.06.2010 intimated NPCIL that Haryana is interested to purchase 300 MW or even more from the Unit 7 & 8 of RAPP on long term basis.
- 2.4 That the Ministry of Power vide letter dated 17.06.2011 allocated 44.22 MW to Haryana. The firm allocation of power by MOP from the Rawatbhata Atomic Power RAPP Unit 7&8 (2x700MW), Rajasthan to the constituent States/Union Territories (UTs) is reproduced as under:

S.No.	Name of States/UT	Allocation of power (MW)
1	Haryana	44.22
2	Himachal Pradesh	26.54
3	Jammu & Kashmir	54.29
4	Punjab	64.55
5	Rajasthan	700.00
6	Uttar Pradesh	161.96
7	Uttarakhand	32.53
8	Chandigarh	04.88
9	Delhi	101.11
10	Unallocated	210.00
	Total	1400.00

- 2.5 That NPCIL vide email dated 18.07.2024 intimated that Rajasthan Atomic Power Project 7&8 (2x700 MW) is in advanced stage of commissioning & Unit-7 (700 MW) shall be commercial by the end of January 2025.
- 2.6 That the petitioner is seeking approval for purchase of 44.22 MW power from RAPS unit 7 & 8 for the period of 15 years in line with the allocation by Ministry of Power along with the approval of draft Power Purchase Agreement.
- 2.7 That the tied-up capacity of the state as on 06.09.2024 is 14943.92 MW and the source wise detail is tabulated below: -

Sr No	Source	Capacity in MW	%age of Total Capacity
1	Hydro (Large) (MW)	3135.47	21.0%
2	Thermal-Coal (MW)	8892.78	59.5%
3	Nuclear (MW)	100.93	0.7%
4	Gas (MW)	569.1	3.8%
5.a	Solar	1202.92	8.0%
5.b	Wind	801.95	5.4%
5.c	Sugarmill	95.2	0.6%
5.d	Biomass	72.37	0.5%
5.e	Small Hydro	73.2	0.5%
5	RE (MW)	2245.64	15.0%
	Total	14943.92	100.0%

- 2.8 That the State of Haryana is having only 101 MW of contracted power from Nuclear Power Plants which is just 0.7% of the total contracted capacity. The details of 101 MW nuclear power are as under:-

Name of the Plant	Allocated Capacity
NAPS Unit 1&2, Uttar Pradesh	28 MW
RAPS Unit 3&4, Rajasthan	48 MW
RAPS Unit 5&6, Rajasthan	25 MW

Govt. of India accorded in-principle approval during Oct. 2009 for setting up the 2800 MW (4x700 MW) Nuclear Power Plant by Nuclear Power Corporation of India Limited (NPCIL), namely, Gorakhpur Haryana Anu Vidyut Pariyojana (GHAVP) in District Fatehabad, Haryana. The first unit of these four reactors is expected to start generation of electricity in the first quarter of the year 2028 and other three units will follow. It is anticipated that MoP will allocate a substantial quantum of power to Haryana being Home State from the said project.

Also, HPPC filed a review petition in the order passed by HERC on 14.05.2024 in PRO-17 of 2024 seeking the source approval and unconditional consent for procurement of 500 MW from Chutka Nuclear Power Project (2x700 MW) to be set up in the State of Madhya Pradesh and 900 MW from Mahi Banswara Nuclear Power Project (4x700

MW) to be set up in the State of Rajasthan by Anushakti Vidyut Nigam Limited (Ashvini), a joint venture of NPCIL and NTPC.

2.9 That as per the demand supply projections projected by HPPC, the average deficit in the upcoming years is tabulated as under-

A. Mode of peak demand (considering all sources)

Month	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
April	1706	1157	1278	861	937
May	-217	-377	-1076	-1643	-1804
June	-465	-722	-1489	-2335	-2577
Jul	-1039	-1250	-2009	-2843	-3071
Aug	-486	-517	-1219	-1992	-2155
Sep	-2743	-3000	-3861	-4503	-4845
Oct	250	423	-14	-194	-40
Nov	2205	2488	2166	2343	2623
Dec	1532	1793	1438	2266	1836
Jan	-159	-49	-565	92	-520
Feb	1273	1523	1157	1974	1532
March	1834	2107	2062	2903	2189

B. Mode of peak demand (considering all sources excluding Baglihar, CGPL & FGPP)

Month	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
April	990	440	561	144	220
May	-1099	-1259	-1957	-2525	-2685
June	-1436	-1693	-2460	-3306	-3548
Jul	-2011	-2221	-2980	-3814	-4042
Aug	-1457	-1488	-2190	-2963	-3126
Sep	-3625	-3881	-4743	-5385	-5727
Oct	-440	-267	-705	-885	-731
Nov	1534	1817	1495	1672	1952
Dec	861	1122	767	1595	1165
Jan	-830	-720	-1236	-579	-1191
Feb	602	852	486	1303	861
March	1163	1436	1391	2232	1518

2.10 That the projected power demand vis-à-vis actual availability shows that there is deficit in summer months in the ensuing years. Copy of the projected power demand supply scenario for next 10 years is attached.

2.11 That the Petitioner-HPPC is making constant efforts to arrange a reliable and feasible power supply. Considering the position of power scenario in the State, growing requirement of power, HPPC considers that the addition of 44.22 MW Nuclear power from Unit 7&8 (2x700MW) of Rawatbhata Atomic Power Project (RAPP), Rajasthan will be in the overall interest of all concerned including consumer of Discom's.

2.12 That the following prayers have been made:-

a. Grant source approval for the procurement of 44.22 MW Nuclear power from Unit 7&8 (2x700MW) of Rawatbhata Atomic Power Project (RAPP), Rajasthan, for a period of 15 years from the date of signing of the PPA.

- b. Approve the draft PPA as placed as Annexure P-1, to be signed between HPPC and NPCIL.
- c. Pass any such further orders or direction that this Hon'ble Commission may deem fit and necessary in the facts and circumstances of the case.

Proceedings in the Case

3. The case was heard on 03.12.2024, in the court room of the Commission, wherein the petitioner mainly reiterated the contents of its written submissions, which for the sake of brevity has not been reproduced here.

Commission's Order

4. The Commission heard the arguments of the petitioner at length as well as perused the written submissions placed on record by them. The Commission has considered the letter from NPCIL dated 31.03.2010 wherein the indicative tariff has been projected at Rs. 3.51/kWh with the expected commissioning in the year 2016. The Commission has further perused the submissions of HPPC that Rajasthan Atomic Power Project 7&8 (2x700 MW) is in the advanced stage of commissioning & Unit-7 (700 MW) shall be commissioned by the end of January 2025.
5. The Commission has observed that against the request of HPPC for allotment of 300 MW from the Unit 7 & 8 of RAPP on long term basis, Ministry of Power vide letter dated 17.06.2011 has allocated only 44.22 MW power to Haryana, for a period of 15 years. HPPC has further submitted that power from the instant source has been allocated to eight other states as well. The terms and conditions of the draft PPA to be signed with the NPCIL, are uniform for all the States. Accordingly, modification of the same for one beneficiary is not permissible.
6. The Commission observes that share of Haryana out of NPCIL's 1400 MW Unit 7 & 8 at Rawatbhata, Rajasthan is 44.22 MW and the remaining power is being sold by NPCIL to Discoms of other States. Nuclear power is a clean source of energy and is available to Haryana Discoms at a very competitive tariff of Rs. 3.51/kWh (year 2016). The share of Nuclear power to the total power tied up by HPPC, as on 06.09.2024, is only 0.7% (100.93 MW out of 14943.92 MW). The proposed source is expected to provide reliable and cost effective source to meet the envisaged power deficit for the coming years starting from the FY 2025-26. The HPPC (Discoms), have projected an average power deficit of 1557 MW in the FY 2025-26 surging to 4423 MW in the FY 2034-35.
7. In view of the above, the Commission grants approval of source for the procurement of 44.22 MW power from Rajasthan Atomic Power Station Unit 7 & 8 at Rawatbhata, Rajasthan, for a period of 15 years from the date of signing of PPA, as proposed in the

present petition. Further, the Commission approves the draft PPA to be executed between the parties herein. The petitioner is directed to file the copy of the signed PPA in the Commission, within two weeks from the date of signing of the PPA.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 09.12.2024.

Date: 09.12.2024
Place: Panchkula

(Mukesh Garg)
Member

(Nand Lal Sharma)
Chairman

HERC