

BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION AT PANCHKULA

Case No. HERC/Petition No. 37 of 2023

Date of Hearing : 25.10.2023  
Date of Order : 25.10.2023

In the Matter of

Petition under Section 86(1) (b) and Section 63 of the Electricity Act, 2003 seeking approval of source for the procurement of 760 MW power discovered through tariff based competitive bidding process on a medium-term basis for the period of five years floated through NIT-104/HPPC dated 27.02.2023.

Petitioner

Haryana Power Purchase Centre, Panchkula (HPPC)

Present on behalf of the Petitioner

1. Ms. Sonia Madan, Advocate
2. Shri Gaurav Gupta, Xen, HPPC

Quorum

Shri Naresh Sardana

Member

ORDER

1. The present petition has been filed by HPPC, under Section 63 of the Electricity Act, 2003, seeking source approval for procurement of 760 MW RTC power on medium term basis for a period of five years at a tariff of Rs. 5.79/kWh at Haryana periphery, discovered through competitive bidding (NIT-104).
2. **HPPC's submissions: -**
  - 2.1 That HPPC is currently facing a deficit of power in meeting the demand of the consumers of the State due to non-availability of power from various long term sources. The petitioner is projecting a power deficit of about 1200 MW to 2400 MW during the forthcoming summer months of FY 2023-24. The table depicting current demand-and availability scenario (considering all contracted sources as on 12.05.2023) for the next five years, based on the actual peak demand from the FY 2011-12 to 2021-22 is appended with the petition. Further, Demand-Availability projections (considering all sources except CGPL and FGPP) for next five years based on the actual peak demand from FY 2011-12 to 2021-22, is also annexed with the present petition.
  - 2.2 It has been submitted that the petitioner experienced power deficit during the summer/paddy season of the year 2022, despite having purchased additional 300 MW RTC power in May 2022, 400 MW RTC power in June 2022, 380 MW RTC power in July 2022, 420 MW RTC in August 2022 and 510 MW RTC power in September 2022 and 150 MW RTC Power till 15.10.2022 against NIT-93. Additionally, short term power

of 300 MW was procured from NEEPCO (Kemang Hydro Power Plant) through NVVN, Medium Term power of 150MW thermal power from M/s MB Power Ltd. and also 500 MW unallocated power of Dadri-II (NTPC) Thermal Plant was procured from 1<sup>st</sup> July 2022 to 31<sup>st</sup> October 2022. Apart from this, an additional 172 MW unallocated power from Central Generating Stations was scheduled from 1<sup>st</sup> April 2022 to 30<sup>th</sup> September 2022. Despite all these arrangements, the State of Haryana faced deficit and the balance power was arranged through IEX at higher rates.

- 2.3 That, notwithstanding the above, the petitioner anticipates a power deficit, which may lead to a rise in power costs. As a result of the foregoing, the petitioner released a Notice Inviting Tender ("NIT No. 104"), for procurement of 1000 MW of power for a period of five-years (power supply will commence w.e.f. May,2023) on the National e-bidding portal, DEEP Portal through PFCCL, (a Govt of India, Enterprise) strictly in accordance with the Standard Bidding Documents issued by the Ministry of Power, Government of India. As per the NIT, the deadline for submission of bids, including EMD, was 20.03.2023 which was extended to 17.04.2023.
- 2.4 That the technical bids (RFQ) were opened and eight bidders namely M/s Jindal Power Ltd., M/s DB Power Limited, Adani Enterprises Ltd., M/s PTC India Ltd., M/s Tata Power Trading Company Ltd., M/s GMR Warora Energy Ltd, M/s OPG Power Generation Pvt. Ltd. and Adani Enterprises Ltd. had submitted their bids in response to the NIT-104.
- 2.5 That after the acceptance of the non-financial technical bids, the financial bids (RFP) were opened on 27.04.2023 and the details of the discovered quantum and price after e-reverse auction is as under: -

Name of the bidder	Bid Quantity (MW)	Base fixed cost(Rs per KWH)	Cost of Generation (Rs per KWH)	Cost of transmission charges (Rs per KWH)	Cost of transmission losses (Rs per KWH)	Total
DB Power Limited	100	2.51	2.51	0.55	0.22	5.79
Tata Power Trading Company Limited	110	2.516	2.516	0.548	0.21	5.79
PTC INDIA LIMITED	100	2.51	2.51	0.55	0.22	5.79
OPG POWER GENERATION PVT LTD	160	3.65	3.65	0.75	0.15	8.2
Adani Enterprises Ltd	100	3	3	0.548	0.252	6.8
GMR Warora Energy Limited	150	2.515	2.515	0.55	0.21	5.79
Adani Enterprises Ltd	100	3	3	0.548	0.252	6.8
Jindal Power Limited	300	2.515	2.515	0.55	0.21	5.79

- 2.6 That Clause 5.3 of the Request for Proposal for the agreement of Procurement of Power for Medium Term (hereinafter referred to as "RfP") provides as under: -
- "In the event that the Lowest Bidder withdraws or is not selected for any reason in the first instance or the capacity required is not met by the Lowest Bidder (the "first round of bidding"), the Utility may invite all the remaining Qualified Bidders to revalidate or extend their respective Bid Security, as necessary, and match the Bid of the aforesaid*

Lowest Bidder (the “second round of bidding”). If in the second round of bidding (i.e. L-1 Matching), only one Qualified Bidder matches the Lowest Bidder, it shall be the Selected Bidder. If two or more Qualified Bidders match the said Lowest Bidder in the second round of bidding, then the Bidder whose Bid was lower as compared to other Bidder(s) in the first round of bidding shall be the Selected Bidder”

2.7 That considering the terms and conditions of the RfP, following successful bidders were selected at the lowest tariff at Haryana Periphery, which is Rs. 5.79/kWh. The details of the successful bidders selected to supply a total of 760 MW along with the tentative date of commencement of supply by each successful bidder is tabulated as under: -

Name of the bidder	Bid Quantity (MW)	Base fixed cost (Rs per KWH)	Cost of Generation (Rs per KWH)	Cost of transmission charges (Rs per KWH)	Cost of transmission on losses (Rs per KWH)	Total	Tentative Date of Commencement of supply
DB Power Limited	100	2.51	2.51	0.55	0.22	5.79	Sept,2023
Tata Power Trading Company Limited	110	2.516	2.516	0.548	0.21	5.79	April,2024
PTC INDIA LIMITED	100	2.51	2.51	0.55	0.22	5.79	Sept,2023
GMR Warora Energy Limited	150	2.515	2.515	0.55	0.21	5.79	April,2024
Jindal Power Limited	300	2.515	2.515	0.55	0.21	5.79	Sept,2023

2.8 That HPPC has floated two short term (NIT/102, NIT103) tenders through DEEP Portal for procurement of 750 MW power for a period of six months from May, 2023 to October and rates and quantum discovered in the aforementioned tender is as follows:

Weighted Average Rate against NIT-102 and NIT-103 (750 MW Short term tender through Deep Portal)				
Period	NIT 102 (Final) 01.03.2023 to 15.10.2023		NIT 103 (after E-RA) 01.05.2023 to 15.10.2023	
	Quantum (MW)	Weighted Avg. Rate (Rs./unit)	Quantum (MW)	Weighted Avg. Rate (Rs./unit)
01.03.2023 to 31.03.2023	550	6.47	-	-
01.04.2023 to 30.04.2023	0	0.00	-	-
01.05.2023 to 31.05.2023	0	0.00	100	9.43
01.06.2023 to 30.06.2023	450	7.20	660	8.51
01.07.2023 to 31.07.2023	575	6.76	750	7.46
01.08.2023 to 31.08.2023	625	6.71	750	7.47
01.09.2023 to 30.09.2023	750	6.94	750	8.00
01.10.2023 to 15.10.2023	50	6.12	750	8.01
Weighted Average Rate		6.80		7.90
NIT 103 E-RA rates (after reducing 57 paise transmission charges)				

2.9 That PFCCCL had conducted tariff based competitive bidding on DEEP e-Bidding portal as per Guidelines issued by MoP. Against the quantum of 4500 MW offered, qualified bids for 1170.25 MW have been received. After opening of Financial Bids, Tariff

discovered is in the range of Rs 4.49/kWh to Rs. 5.41/kWh. The weighted average of bids received was Rs 5.17 /kWh at Generator bus-bar and tentative landed tariff of Rs 5.87/Kwh at Haryana Periphery.

- 2.10 That the tariff of power procured through Indian Energy Exchange Limited (“IEX”) during the summer/paddy season in the year 2022 was higher than the corresponding period in years 2020 and 2021. The quantum of power purchased from the exchange during the FY 2022-23 and the cost thereof are tabulated below:

Month	Quantum at Regional Periphery (LU)	Total Cost (Lakhs)	Landed cost at State Periphery (Rs/ Kwh)
April '22	5619.37	62661.02	11.50
May '22	5478.38	43433.84	8.20
June '22	5109.66	36327.65	7.35
July '22	2006.17	12064.33	6.22
August '22	3330.85	20577.17	6.40
September '22	4078.20	28938.93	7.31
October '22	274.60	1193.24	4.49
November '22	607.34	3109.81	5.32
December '22	1809.56	11862.33	6.83
Jan '23	2667.41	22846.18	8.95
Feb '23	3012.94	22362.93	7.72
Mar '23	869.51	4766.54	5.69
<b>Total</b>	<b>34863.98</b>	<b>270143.98</b>	<b>8.02</b>

- 2.11 That upon evaluation of the power demand, it is submitted that procuring 760 MW power through competitive bidding on a medium-term basis will be feasible and beneficial for the State and will help to meet the power requirement over the next five years.
- 2.12 That the validity of bids submitted against NIT-104 is till 14.10.2023.
- 2.13 In view of the above, following prayers have been made:-
- Grant approval of source for the procurement of power upto 760 MW (500 MW from September 2023 & 260 MW from April,2024) RTC power on medium-term basis for a period of five years
  - Adopt tariff i.e. Rs 5.79/Kwh discovered through competitive bidding (NIT-104) under Section 63 of the Electricity Act, 2003;
  - Pass any other order(s) and or direction(s), which the Hon’ble Commission may deem fit and proper in the facts and circumstances of the case.

### Proceedings in the Case

3. The case was initially heard on 26.07.2023, in the Commission. Upon hearing the petitioner, the Commission, vide its order dated 27.07.2023, issued following directions to HPPC: -
- Review the present proposal of purchasing 760 MW (500 MW from September, 2023 and 260 MW from April, 2024) RTC power on medium term basis for five years at an average rate of Rs. 5.79/kWh. HPPC may submit the revised power demand - supply position, after considering the demand pattern in the ongoing summer months and justifying the sale in the power exchange at a significantly lower price. A logical

justification for contracting the present medium-term power for five years may be provided.

- b) Align the prayer clause and the terms of PPA attached with the present petition including the tariff clause and the dispensation on the consequences of fuel / coal shortage which may defeat the very purpose of contracting expensive medium-term power.
- c) Analyze six months data on the quantum of power sold in the exchange and revenue realized thereto.

**4. In compliance of the interim order of the Commission dated 27.07.2023, HPPC has filed its reply dated 16.08.2023. HPPC has submitted as under: -**

4.1 That the actual power demand data during last year i.e. FY 2022-2023 evince that the actual peak demand had been up to 12687 MW. A tabular chart showing actual demand for all months for the last 5 years is as under –

Actual Peak Demand (in MW)						
Period/Month	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
April	7704	8168	6430	7759	9415	9049
May	8647	8891	8009	8285	10036	10630
June	10106	10473	10368	11370	<b>12687</b>	11641
July	10295	11030	10897	12005	12325	12228
August	9374	10129	10161	11374	12069	
September	9024	10426	10008	9026	12216	
October	7982	7785	8506	8996	8412	
November	6593	6162	6391	6726	7556	
December	6767	7122	7065	7534	8116	
January	7038	7010	7334	7026	8478	
February	6909	7529	7188	7208	8317	
March	6452	6342	7016	7795	7708	

4.2 That after considering the normative availability from all contracted sources including short-term arrangements and the annual maintenance shutdown of thermal power plants of the State, a deficit in the ensuing period is projected as under: -

Demand & Availability Scenario for FY 2023-24 as on 08.08.2023							
Month	Projected Peak Demand (in MW)	Normative Availability as per PLF (in MW)	Normative Availability as per PLF w/o CGPL & FGPP (in MW)	STP Arrangements (NEEPCO/ Cross Border Banking, Dadri-I, Unallocated Power & NIT-102, 103)	Outage due to Maintenance Schedule (in MW)	Tentative Availability including short term arrangements & Maintenance (in MW)	Surplus (+)/ Deficit (-) (in MW)
Aug'23	12742	10700	9951	2521	752	11720	-1023
Sep'23	12865	10094	9345	2360	242	11463	-1402
Oct' 23	9730	9050	8301	1064	213	9152	-578
Nov' 23	7858	9031	8282	285	936	7632	-227
Dec' 23	8441	9031	8282	222	902	7603	-839
Jan' 24	8817	9303	8554	150	689	8015	-802
Feb' 24	8650	9365	8616	150	760	8006	-644
March' 24	8016	9365	8616	76	1015	7677	-339

- 4.3 That there is an average power deficit even during the forthcoming winter season to the tune of 730 MW after considering annual maintenance schedule (approx. 800MW) provided by intra state generating stations.
- 4.4 That in the event of any power found surplus during winter months, the same shall be used for bilateral banking agreements with other states. A summarization of the power banked by the petitioner for last 5 years is tabulated as under: -

Period	Quantum of Power Banked ( in Lus)
FY 2017-18	33131.31
FY 2018-19	41475.62
FY 2019-20	11627.27
FY 2020-21	9500.505
FY 2021-22	11861.93
FY 2022-23	7922.88

- 4.5 That from the foregoing tabular summarization, it is evident that the quantum of power banked by the petitioner has decreased over the last five years which evince that the surplus power available during winter/ lean season is decreasing.
- 4.6 That the following average deficit scenario for the next five years has been projected, on the basis of mode of peak demand after considering all contracted sources of power except FGPP and CGPL: -

Year	Yearly Average Deficit (in MW)	Average of Deficit (in MW)
2024-25	-400	-1503
2025-26	-847	-1822
2026-27	-1282	-1671
2027-28	-1803	-2260
2028-29	-1414	-2901

*Note 1: Average of deficit means average of monthly deficit during each month of the year without considering months in which there is power surplus.*

*Note 2: Yearly Average deficit means average of monthly deficit and monthly surplus during the year.*

*Note 3: The above deficit scenario does not include any annual maintenance schedule which usually reduces the availability to the tune of 700-800 MW during winter season.*

- 4.7 That the petitioner has sold an average of 635.7 MUs power in the FY 2022-23 in the power exchange at an average rate of Rs. 4.66 per kWh and has purchased an average of 3486.4 MUs power in the last FY 2022-23 in the exchange at a landed average rate of Rs. 8.02 per kWh, as tabulated hereunder: -

Abstract of Sale of Power by HPPC in Power Exchange(s) During FY 2022-23 to FY 2023-24						
Period	2022-2023			2023-2024		
	Total Quantum (LU)	Total Amount (Lakh)	Avg. Rate (Rs/ Kwh)	Total Quantum (LU)	Total Amount (Lakh)	Avg. Rate (Rs/ Kwh)
April	84.80	475.22	5.60	2530.64	8899.35	3.52
May	191.66	578.81	3.02	1341.03	4852.29	3.62
June	241.60	940.59	3.89	2779.14	12808.03	4.61
July	634.16	2860.58	4.51			
August	254.84	1451.42	5.70			
September	1152.07	4095.87	3.56			
October	1220.46	4683.47	3.84			

November	708.79	3810.93	5.38			
December	293.03	1583.72	5.40			
January	201.10	1004.43	4.99			
February	135.52	1040.03	7.67			
March	1239.11	7100.21	5.73			
<b>Total</b>	<b>6357.14</b>	<b>29625.28</b>	<b>4.66</b>	<b>6650.81</b>	<b>26559.68</b>	<b>3.99</b>

4.8 That there has been a decrease in the demand during the current financial year as compared to the last year, due to unprecedented weather variations such as unexpected and excessive rainfall and cyclone 'Biparjoy' which led to increase in the quantum sold in the power exchange in the current financial year. However, this situation is clearly unprecedented and therefore, cannot be a considering factor for adjudication of instant petition.

4.9 That the petitioner has purchased 3486.4 MUs power in the last FY 2022-23 in the exchange at landed average rate of Rs. 8.02 per kWh, tabulated hereunder: -

Period	Abstract of Purchase of Power by HPPC in Power Exchange(s) During FY 2022-23		
	Total Quantum (LU)	Total Amount (Lakh)	Avg. Rate (Rs/ Kwh)
April	5619.37	62661.02	11.50
May	5478.38	43433.84	8.20
June	5109.66	36327.65	7.35
July	2006.17	12064.33	6.22
August	3330.85	20577.17	6.40
September	4078.20	28938.93	7.31
October	274.60	1193.24	4.49
November	607.34	3109.81	5.32
December	1809.56	11862.33	6.83
January	2667.41	22846.18	8.95
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March	869.51	4766.54	5.69
<b>Total</b>	<b>34863.98</b>	<b>270143.98</b>	<b>8.02</b>

4.10 That the foregoing table evince that the proposed medium-term power tariff is significantly lower at Rs. 5.79/kWh as against the average power purchase rate through power exchange i.e. Rs. 8.02/kWh. Further, for the time slots where rates in the power exchange are higher, there is difficulty in clearance of requisite bid quantum.

4.11 That the details of quantum of power bidded for purchase in the power exchange vis-à-vis power allotted to the petitioner during the paddy season for the months May, 2022 to Oct, 2022 is tabulated hereunder: -

	Quantum Bidded (in Lus)	Quantum Cleared (in Lus)	Quantum Not Cleared (in Lus)
May-22	5891.177551	3825.394125	2065.783426
Jun-22	4643.826518	3712.44225	931.384268
Jul-22	2863.599336	2438.149275	425.450061
Aug-22	2135.353518	1755.402475	379.951043
Sep-22	3703.770633	3195.09315	508.677483
Oct-22	168.024493	143.236175	24.788318

- 4.12 That the purchase of power through the power exchange to meet the deficit is a costly and unreliable arrangement. The petitioner is making constant efforts to ensure that the contracted sources of power are reliable and sufficient to meet the power demand of the State effectively. Considering all such factors, the petitioner has been making arrangements to meet the deficit through contracted sources for the short and medium term. The procurement of power through short-term tenders is also an expensive alternative over medium term procurement.
- 4.13 That in the present case, the initial tariff for the base year has been discovered through competitive bidding at Rs. 5.79 per Kwh. The said tariff is a two-part tariff comprising fixed and variable charges. The fixed charge payable to the supplier under the PPA has to be revised annually to reflect 20% of the variation in WPI as per Article 11.3.2 of the PPA (page 138 of the petition). Further, the variable charge shall be increased for every accounting year following the base year to reflect 50% of the variation in WPI as per Article 12.3.2 of the PPA (Page 144 of the petition).
- 4.14 That the terms of the PPA are based on the standard guidelines and based on the same, the proposed tariff has been discovered at the lowest of Rs. 5.79 per kWh. Even after considering the provisions of escalation in base variable charge and base fixed charge, it is estimated that the tariff will increase marginally and will be much lesser than the cost of power available through the power exchange over a period of 5 years as maximum ceiling tariff has touched Rs. 10/kWh in the power exchange as well as for the power procured under short term tenders floated through DEEP Portal. Considering the market trend of the cost of power, the discovered tariff appears to be a more economical and reliable arrangement than the procurement of power through power exchange. Further, considering the uncertainty experienced over the last few years regarding the procurement of power under long-term PPAs, the procurement through medium terms sources appears much more beneficial for the State.
- 4.15 That Hon'ble Commission had raised concern with respect to the consequences of fuel/coal shortage as per the terms of the PPA. In this respect, it is submitted at the outset that the tariff conditions contained in Articles 11 and 12 of the PPA are standard terms, which cannot be altered by the petitioner, more so when the bidding was based on said conditions. However, considering the condition stipulated in Article 11.4.5 read with Article 12.4 of the PPA on merits, the provision only obligates to procurer to compensate for the '*non-availability of fuel due to force majeure condition*' only and not on account of a shortage of fuel for any other reason. The compensation under such an event is also limited to payment for fixed charges considering the deemed availability to the extent of 30% of the non-availability of power. Every Power Purchase Agreement stipulates conditions for compensation on account of the Force Majeure event as the same is not attributable to either party. The said stipulation, once seen in



the overall conspectus of the power generation business, is reasonable and fair as the occurrence of a 'force majeure event' is beyond the control of either party and if the power generation up to its contracted capacity is not possible owing to force majeure event, the seller still has to bear the fixed charges for the plant to ensure its readiness for the resumption of power after the cessation of force majeure event. It is also pertinent here to mention that Article 17.8 of the PPA (Page 161 of the Petition) also provides the remedy to the procurer to terminate the PPA in the event the force majeure condition subsists for 180 days or more within a continuous period of 365 days. Thus, the terms and conditions of the PPA take into account the interest of both parties.

- 4.16 That the petitioner, in light of the observations made in the Order dated 27.07.2023, seeks the kind indulgence of the Hon'ble Commission to consider an amendment in the prayer contained in the present Petition as under –

**“ PRAYER**

*In light of the submissions made hereinabove and in the interest of justice, this Hon'ble Commission may be pleased to:*

- a. *Grant approval of source for the procurement of RTC power upto 760 MW (500 MW with effect from September 2023 and an additional 260 MW with effect from April 2024) on a medium-term basis for five years;*
- b. *Adopt tariff i.e. Rs 5.79/Kwh discovered through competitive bidding (NIT-104) with an escalation in terms of the provisions contained in Article-11 and 12 of the PPA under Section 63 of the Electricity Act, 2003;*
- c. *Pass any such further order(s) or direction(s) that this Hon'ble Commission may deem fit and necessary in the facts and circumstances of the case.”*

5. The case was next heard on 26.09.2023. The Commission observed that the reply submitted by HPPC does not contain the information sought in the interim order dated 27.07.2023 i.e. the demand - supply position is required to be projected after considering the demand pattern in the ongoing summer months. Further, the proposal of HPPC to bank costly power of a rate as high as Rs. 5.79/kWh, needs to be reviewed. Accordingly, HPPC was directed to submit a logical proposal containing the details set out in the interim order dated 27.07.2023. Further, a justification is to be provided for not procuring the power from already tied up source (CGPL, Mundra) @ Rs. 3.71/kWh (benchmark ECR) and instead proposing to buy power at Rs. 5.79/kWh (escalable). HPPC may also re-negotiate the terms of the PPA including supply of 500 MW w.e.f. September, 2023 given the expected softening of power demand as well as escalation clause.

6. **In compliance of the interim order of the Commission dated 26.09.2023, HPPC has filed an additional affidavit dated 20.10.2023. HPPC has submitted as under:-**

6.1 That CGPL has entered into a long-term Power Purchase Agreement dated 22.04.2007 ('PPA') with Haryana as well as other distribution licensees in the States of Gujarat, Maharashtra, Rajasthan and Punjab. In terms of the PPA, CGPL has a legal and contractual obligation to operate the power project, generate and supply power at the quoted tariff. However, CGPL stopped supply of power w.e.f. 18.09.2021 on the pretext of financial unviability owing to increase in coal prices. HPPC has disputed the very factum of alteration sought in the terms & conditions of the PPA/tariff discovered through competitive bidding by demand of higher tariff for whatever reasons. Therefore, procurement of power from CGPL at any higher tariff than what has been incorporated in the PPA (levelized quoted tariff i.e Rs.2.26 /kWh) has larger legal repercussions.

6.2 That on 20.02.2023, Ministry of Power issued directions to Imported coal based Generating stations under Section 11 of the Electricity Act, 2003, to generate power to its full capacity from 16.03.2023 to 15.06.2023, further extended upto 31.10.2023 and CERC shall formulate methodology for tariff compensation under Section-11(2). MoP in its above directions also constituted a committee of members of CEA & MoP to determine the ECR tariff for imported coal-based plants on fortnightly basis. Accordingly, CGPL filed a petition with CERC (no. 179/MP/2023) seeking increase of interim/provisional tariff as Rs. 6.25 per unit for the power supplied under directions issued by MoP. In view of the afore stated, there are valid and justified reasons for not procuring power from CGPL, Mundra at this stage. The power sought to be approved in the instant petition is evidently much cheaper than the power from CGPL, Mundra.

DEFICIT FOR PRECEDING MONTHS AND PROCUREMENT OF EXPENSIVE POWER THROUGH EXCHANGE -

6.3 That in the affidavit dated 16.08.2023 filed in the instant petition, the detailed data with respect to sale and purchase of power by HPPC through Exchange was given, which evinced that the proposed medium-term power tariff is significantly lower at Rs. 5.79/kWh as against the average power purchase rate through Exchange i.e. Rs. 8.02/kWh.

6.4 The details of power purchase through the Exchange in the month of August, 2023 and September, 2023 is further depicted hereunder –

**August, 2023 :-**

Date	Quantum Procured (in Lus)	Total Amount (in Rs. )	Landed Tariff (in Rs.)
01.08.2023	19.31	78.16	4.19
02.08.2023	19.09	55.53	3.01
03.08.2023	11.38	52.46	4.77
04.08.2023	0.75	2.43	3.36

05.08.2023	39.66	205.63	5.36
06.08.2023	4.63	23.00	5.15
07.08.2023	13.46	48.38	3.71
08.08.2023	11.82	75.57	6.60
09.08.2023	11.93	101.22	8.77
10.08.2023	36.98	326.37	9.12
11.08.2023	46.93	412.95	9.09
12.08.2023	93.53	722.88	7.99
13.08.2023	77.63	556.60	7.41
14.08.2023	55.26	372.90	6.99
15.08.2023	16.77	153.31	9.47
16.08.2023	34.26	319.69	9.67
17.08.2023	89.33	760.49	8.82
18.08.2023	189.99	1814.09	9.89
19.08.2023	184.94	1688.55	9.46
20.08.2023	112.35	860.86	7.94
21.08.2023	107.71	865.29	8.31
22.08.2023	91.80	859.92	9.68
23.08.2023	94.75	804.80	8.78
24.08.2023	4.15	33.69	8.39
25.08.2023	13.16	122.27	9.60
26.08.2023	14.66	143.72	10.13
27.08.2023	0.94	3.73	4.11
28.08.2023	12.32	114.55	9.61
29.08.2023	18.07	157.85	9.03
30.08.2023	19.83	161.51	8.42
31.08.2023	34.43	345.19	10.36

**September, 2023:** -

<b>Date</b>	<b>Quantum Procured (in Lus)</b>	<b>Total Amount (in Rs. )</b>	<b>Landed Tariff (in Rs.)</b>
01-09-2023	63.73	638.90	10.36
02-09-2023	133.63	1339.58	10.36
03-09-2023	179.72	1650.60	9.49
04-09-2023	319.48	2955.23	9.57
05-09-2023	372.48	3166.07	8.79
06-09-2023	359.61	2645.16	7.61
07-09-2023	338.07	2139.80	6.55
08-09-2023	338.59	1905.52	5.82
09-09-2023	329.05	1916.56	6.03
10-09-2023	112.15	517.03	4.77
11-09-2023	14.85	112.93	7.84
12-09-2023	83.02	631.57	7.84
13-09-2023	184.92	1190.92	6.64
14-09-2023	224.61	1743.88	8.00
15-09-2023	152.78	1249.69	8.43

16-09-2023	40.40	256.58	6.55
17-09-2023	23.28	111.07	4.92
18-09-2023	4.13	18.47	4.67
19-09-2023	1.11	3.62	3.39
21-09-2023	13.57	81.35	6.25
22-09-2023	41.09	322.83	8.19
23-09-2023	7.60	32.35	4.44
29-09-2023	0.81	3.16	4.03
G/ Total	<b>3338.69</b>	<b>24632.87</b>	<b>7.63</b>

6.5 That the average rate for various days for the month of October, 2023 is depicted hereunder, a perusal of which evince that the rates in the exchange are higher than the tariff sought to be adopted in the instant petition –

Date	Average Rate in Indian Energy Exchange (in Rs. Per Unit)
1-10-2023	3.78
2-10-2023	3.49
3-10-2023	4.10
4-10-2023	4.06
5-10-2023	6.51
6-10-2023	7.61
7-10-2023	8.33
8-10-2023	8.15
9-10-2023	9.13
11-10-2023	10.00
12-10-2023	10.00
13-10-2023	10.00
14-10-2023	9.02
15-10-2023	7.06
16-10-2023	8.68
17-10-2023	8.97

6.6 The foregoing data establishes that the landed average rate for power procured through Exchange is much higher than the tariff sought to be adopted in the instant petition (even with escalation). Further, for the time slots where rates in the power exchange are higher, there is difficulty in clearance of requisite bid quantum during September, 2023, which shall substantiate the averments of the petitioner with respect to the feasibility of procurement of power sought to be approved in the instant petition.

6.7 Thus, the purchase of power through the exchange to meet the deficit is thus, a costly and unreliable arrangement.

## SHORTAGE OF COAL AND INCREASING COAL PRICES -

- 6.8 That the power sector has witnessed hike in coal prices over the years coupled with coal deficit. It is pertinent here to refer to the letter of CLP dated 17.10.2023 wherein it was intimated that the coal availability for the plant is only enough to last 6 days. Furthermore, even the State generating plants are experiencing coal deficit, as depicted hereunder –

Sr. No.	Name of Plant with capacity	Daily Coal Requirement (MT)	Coal Stock (in MT)		
			02.10.2023 /No. of Days	08.10.2023 /No. of Days	15.10.2023 /No. of Days
1	PTPS, Panipat (2x250+1x210=710MW)	10,000	77000/8	71000/7	69000/11
2	DCRTPP, YNR (2x300=600MW)	9,000	100000/11	40000/4	52000/6
3	RGTPP, Hisar (2x600=1200MW)	18,000	254000/14	200000/11	140000/8
4	JPL, Jhajjar (2x660=1320MW)	19,000	299000/16	235000/12	140000/7
5	Aravali, NTPC, Jhajjar (3x500=1500MW)	23,400	139000/6	142000/6	79000/3

- 6.9 All the foregoing reasons are worth a consideration for procurement of power through medium term Power Purchase Agreements to ensure availability of power.

## NEGOTIATION WITH BIDDERS –

- 6.10 That the Hon'ble Commission, vide order dated 26.09.2023 had directed petitioner to negotiate the terms of PPA including supply of power w.e.f. September, 2023 given the expected softening of power demand as well as escalation clause. In compliance with the said direction of the Hon'ble Commission, the petitioner had negotiated with the bidders. Out of 5 selected bidders, 3 bidders were to supply power w.e.f. September, 2023, as detailed hereunder –

Name of the Bidder	Bid Quantity (MW)
DB Power Limited	100
PTC India Limited	100
Jindal Power Limited	300

Out of the above-mentioned bidders, Jindal Power Limited offering 300 MW has refused to extend its offer post the bid validity dated 15.10.2023 and DB Power Ltd. offering 100 MW has also refused to extend its offer post the bid validity i.e. 15.11.2023 and did not consented for change the supply period from Sept 2023 to April,2024. However, PTC India Ltd. offering 100 MW has agreed for extension of offer and confirmed commencement of supply w.e.f. April, 2024. Furthermore, no other alteration in PPA terms have been agreed to as the bids have been invited based on standard terms & conditions of RfP. Considering the negotiations held, it is evident that out of

760 MW, bidders offering power upto 360 MW are agreeable to commence power supply w.e.f. April, 2024 for a period of 5 years.

**IMPACT OF ESCALATION IN TARIFF UNDER INSTANT PPA -**

6.11 That even after considering the provisions of escalation in base variable charge and base fixed charge, it is estimated that the tariff will increase marginally and will be much lesser than the cost of power available through exchange over a period of 5 years. The petitioner had further considered the indices of the 2022-2023 to estimate prospective escalation in the variable cost. As per the past year coal indices, the percentage variation in variable cost is nearly 4%. World Price Indices (WPI) and the Coal notified prices over last 10 years are depicted hereunder for ready reference –

<b>WPI (Base Year 2011-12) and G-11 coal notified prices -Last 10 Years</b>					
<b>Sr. No.</b>	<b>Year</b>	<b>WPI</b>	<b>% increase</b>	<b>G-11 coal notified price</b>	<b>% increase</b>
0	2012	100		640	
1	2013	108	8	700	9.38
2	2014	113.6	5.19	700	0.00
3	2015	110.8	-2.46	700	0.00
4	2016	108	-2.53	810	15.71
5	2017	112.6	4.26	810	0.00
6	2018	116	3.02	955	17.90
7	2019	119.2	2.76	955	0.00
8	2020	123.4	3.52	955	0.00
9	2021	126.5	2.51	955	0.00
10	2022	143.8	13.68	955	0.00

The foregoing data evince that the average % increase for WPI Indices and Coal notified prices over last 10 years is 4.083 and 3.699 respectively. As per Clause 12.3.2 of the PPA, the generating component of the variable charge shall be increased for every accounting year following the base year to reflect 50% of the variation in WPI. Meaning thereby the net increase will be nearly 2%. Considering the market trend of the cost of power, the discovered tariff appears to be economical and reliable.

6.12 That after considering the normative availability from all contracted sources including short-term arrangements and the annual maintenance shutdown of thermal plants of the State, the Petitioner foresees an average deficit of 1600-2600 MW in the upcoming years. The average deficit scenario for the next five years has been prepared on the basis of Mode of Peak Demand after considering all contracted sources of power except FGPP and CGPL. A tabular summarization of projected deficit is as under -

<b>Year</b>	<b>Yearly Average Deficit (in MW)</b>	<b>Average of Deficit (in MW)</b>
<b>2024-25</b>	-509	-1653
<b>2025-26</b>	-971	-1714
<b>2026-27</b>	-1442	-1833
<b>2027-28</b>	-1961	-2421
<b>2028-29</b>	-1572	-2693

*Note 1: Average of deficit means average of monthly deficit during each month of the year without considering months in which there is power surplus.*

*Note 2: Yearly Average deficit means average of monthly deficit and monthly surplus during the year.*

*Note 3: The above deficit scenario does not include any annual maintenance schedule which usually reduces the availability to the tune of 700-800 MW during winter season.*

### **Commission's Order**

7. The Commission has considered the submission and justification of the petitioner for procurement of 360 MW power w.e.f. April, 2024 for a period of 5 years at the tariff discovered through competitive bidding (NIT-103) under Section 63 of the Electricity Act, 2003. Further, the apprehension of the petitioner regarding the shortage of coal in and consequent unavoidable obligation of HPPC to procure power at higher rates from the power exchange, cannot be ruled out. The supply of RLNG Administered Pricing Mechanism (APM) is expected to remain constrained in the coming years as well leading to unavailability of power from tied up source from Faridabad Gas Power Plant (FGPP). Similarly, power from Coastal Gujarat Power Limited (CGPL), is also expected to be unavailable, due to ongoing contractual litigations between the parties.
8. The surge in the electricity demand, which is unprecedented, is likely to adversely impact energy balance putting upward pressure on the short-term power purchase. The Commission has noted with concern the fact of costly power purchase by HPPC from power exchange, at a rate as high as Rs.10.36/kWh, as against the APPC of Rs. 4.24/kWh, approved by the Commission in its order dated 15.02.2023. Due to grim availability of power and adverse power market scenario in the coming period, power prices are expected to soar up in the power exchange. The Commission, however, observes that power procurement ought to be meticulously planned well in advance in order to avoid expensive short-term purchase as well as sale of surplus power in certain slots at a rate lower than the cost of procurement of such power.
9. Notwithstanding the above, the Commission, in larger interest of the electricity consumers, so that they get un-interrupted supply of power, in view of the deficit projected by the Discoms/HPPC, has considered it appropriate to accord source approval as prayed for by the petitioner, and the tariff discovered under Section 63 of the Electricity Act, 2003, is adopted. The petitioner is directed to file the copy of the signed PPA in the Commission, within 15 days from the date of this order.
10. The present petition brought before the Commission is disposed of in terms of the above order.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 25.10.2023.

Date: 25.10.2023  
Place: Panchkula

(Naresh Sardana)  
Member