

BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION AT PANCHKULA

Case No. HERC/Petition No. 51 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/ adoption of tariff read with Haryana Electricity Regulatory Commission (Conduct of Business) Regulations, 2019 seeking approval of source and permission to schedule power for the procurement of up to 472.8 MW power on a medium-term basis from different generators under Shakti B-(V) scheme of Ministry of Power, Government of India at a tariff of Rs. 5.30 Rs/kWh applicable at generator busbar for a period of 5 years.**

**Petitioner**

Haryana Power Purchase Centre, Panchkula (HPPC)

**Present on behalf of the petitioner**

1. Ms. Sonia Madan, Advocate

**Quorum**

**Shri Naresh Sardana**

**Member**

**ORDER**

1. The present petition has been filed by HPPC seeking the source approval for procurement of up to 472.8 MW power on a medium term basis from different generators under Shakti B-(V) scheme of Ministry of Power, Government of India at a tariff of Rs. 5.30 Rs/kWh applicable at generator busbar for a period of 5 years.
2. **HPPC's submissions: -**
  - 1.1 That in the year 2017, the Ministry of Power, Government of India ('MoP') introduced a policy called SHAKTI (Scheme for Harnessing and Allocating Koyala [Coal] Transparently in India). As per the provisions outlined in para B-(V) of the policy, MoP's objective is to procure a cumulative power capacity of 4500 MW for a group of states within a 5-year timeframe. The primary objective of this initiative is to assist states grappling with power shortages and to enable power-generating plants to enhance their production capacities.
  - 1.2 That in accordance with aforesaid para B-(V) of the SHAKTI Policy, Power Finance Corporation Consulting Limited ('PFCCL') has been designated as the nodal agency by the MoP, for the purpose of conducting tariff-based competitive bidding to procure a total of 4500 MW of power for the long and medium-term periods.
  - 1.3 That the PFCCL carried out the bidding process as per standard bidding document issued by MoP under para B-(V) of SHAKTI Policy as per the coal allotted by Coal India Limited ('CIL') to the extent of 24 MMTPA. The tender for power procurement was released on 15.05.2023 and technical & financial bids were opened by PFCCL on 30.06.2023 and 07.06.2023, respectively.

- 1.4 That against the total quantum of 4500 MW, qualified bids for 1560.25 MW was received by the PFCCL. The said quantum of power has been offered to the consenting States including the State of Haryana. After opening of Financial Bids, tariff was discovered in the range of Rs 5.14/kWh to Rs. 5.49/kWh. Further, the weightage average tariff of Bids received was discovered at Rs 5.30/kWh at generator bus-bar.
- 1.5 That the PFCCL vide email dated 18.07.2023 requested the State of Haryana to confirm its consent for a power requirement of 472.8 MW over a duration of 5 years at a discovered weighted average tariff of Rs. 5.30/kWh at generator busbar.
- 1.6 That the said agenda was placed before SCPP in its 69th meeting held on 27.07.2023 and SCPP approved the same on 04.08.2023. In pursuance thereof, the Petitioner vide email dated 28.07.2023 conveyed consent of the State of Haryana for procurement of 472.8 MW power under said scheme for a period of 5 years, subject to the approval of this Hon'ble Commission.
- 1.7 That thereby, the PFCCL has granted the Letter of Award ('LOA') to the State of Haryana and has requested the State of Haryana to finalize a Power Purchase Agreement ('PPA').
- 1.8 That the salient features of the PPA are as under: -
- 1.8.1 Non-Availability due to shortage of fuel (Clause no.12.4)  
If any shortfall in supply of electricity to the utility occurs on account of shortage of fuel, the availability shall be deemed to be reduced to the extent of reduction in generation of electricity, and such reduction shall be deemed as non-availability on account of shortage of Fuel. However, the PPA provides that where the fuel is being supplied under allocated coal linkage, the supplier shall have an option to arrange the Fuel from an alternate source. The utility shall be intimated if the increase in variable charge is greater than 30% (thirty percent). The PPA also specifies that no tariff shall be payable to the supplier for any shortfall in availability occurring on account of shortage of fuel.
- 1.8.2 Transmission Charges  
The utility shall be liable for inter-state transmission charges under applicable laws, while intra-state transmission charges shall be borne by the supplier upto the delivery point. The supplier shall bear transmission losses up to the delivery point, and the utility shall be liable for inter-state transmission losses under applicable laws.
- 1.8.3 SLDC and RLDC charges  
The supplier shall be liable for payment of all the charges, due and payable under applicable laws to the SLDC and RLDC for and in respect of all its supplies to the utility.
- 1.8.4 Tariff structure  
Fixed cost and variable cost are components of the tariff payable by the utility to the supplier for the supply of electricity.

PPA specifies that the fixed charge for availability shall be computed based on the base fixed charge is to be quoted by the supplier and which shall be escalated each year to reflect 20% (twenty per cent) of the variation in WPI.

The variable charge shall be computed based on the cost of fuel/generating cost and the cost of transportation. The cost of Fuel shall be as specified by the supplier in its bid. The total cost of transportation of domestic fuel shall be the cost of transportation as specified by the supplier in its Bid. The variable charge shall be revised in subsequent years in proportion to the revision in price notified by CIL.

- 1.9 That there will be an additional financial implication of Rs 3.5 crores on the Discoms due to the requirement of providing a performance security by the utility at the rate of Rs 15 lakh per MW, amounting to a total of Rs 70.92 crores for the total quantum of 472.8 MW allocated under the SHAKTI scheme. The performance security is expected to remain valid for a period of six months from the date of commencement of supply. The details of the allotment from different generators along with the tariff is tabulated as under: -

Plant Source	Connectivity details	Coal Source	HPPC Quant um (MW)	Base Fixed Charge	*Base variable Charge	Tariff (Rs/k Wh) at Delivery Point	Weighted Tariff (Rs/k Wh) at Delivery Point	Tentative Landed Tariff (Rs/kWh) at Haryana Periphery
Jindal India Thermal Power Limited Aungul, Odisha	400 KV Angul Pooling station,ISTS	Talcher Field	60.61	2.56	2.58	5.14	5.30	
RKMPPPL Uchhpinda 4 * 360 MW coal based project, Chhattisgarh	765/400kV PGCIL Bansia(Kotra) Substation Raigarh district, Chhattisgarh	Talcher Field	90.91	2.745	2.745	5.49		
SKS Power Generation Chhattisgarh Limited	400/765 KV CTU Kotra S/s Chattisgarh	IB Field	30.3	2.24	2.96	5.2		6.00
DB Power Limited, Chhattisgarh	400/765 KV CTU Kotra S/s Chattisgarh	IB Field	30.3	2.6	2.6	5.2		
TRN Energy Private Limited, (Chhattisgarh)	765/400kV PGCIL Raigarh(Tamnar) Pooling Substation Chattisgarh	IB Field	30.3	2.16	3.042	5.202		
1200 MW (2*600 MW) Anuppur Thermal Power Plant, Madhya Pradesh	400/765 KVP GCIL Jabalpur Pooling substation	IB Field	48.56	2.64	2.64	5.28		
RKMPPPL Uchhpinda 4 * 360 MW coal based Power project, Chhattisgarh	765/400kV PGCIL Bansia(Kotra) Substation Raigarh district, Chhattisgarh	IB Field	90.91	2.7	2.7	5.4		
Jindal Power Limited Stg – 2, Raigarh, Chhattisgarh	765/400kV PGCIL Raigarh (Tamnar) Pooling Substation Chattisgarh	IB Field	90.91	2.6	2.62	5.22		

*\*Base variable charge includes the cost of fuel and cost of transportation*

- 1.10 That the State of Haryana has experienced critical power deficit last year. Thermal plants across the country were grappling with a coal shortage as the power demand in

the states increased, and difficulty was experienced in bridging the gap between demand and supply because of insufficient coal stocks at the thermal plants.

- 1.11 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: -

<b>Actual Peak Demand (in MW)</b>						
<b>Period/Month</b>	<b>FY 2018-19</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>	<b>FY 2022-23</b>	<b>FY 2023-24</b>
April	7704	8168	6430	7759	9415	9049
May	8647	8891	8009	8285	10036	10630
June	10106	10473	10368	11370	12687	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	

- 1.12 That the average deficit scenario for the next five years as projected in the foregoing table 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>	-422	-1536
<b>2025-26</b>	-825	-1786
<b>2026-27</b>	-1259	-1824
<b>2027-28</b>	-1780	-2230
<b>2028-29</b>	-1390	-2855

Note1: Average of deficit means average of monthly deficit during each month of the year without considering months in which there is power surplus.

Note2: 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.

- 1.13 That the MoP vide circular dated 20.02.2023 had issued directions under Section 11 of the Electricity Act, 2003 to all imported coal-based plants for use of blended coal for optimum generation. It has been mentioned therein that during year 2022-2023, India has touched it's all-time highest electricity demand at about 215 GW. It has been forecasted that the peak demand will reach up to 229 GW during April 2023.

- 1.14 That in order to meet the deficit, HPPC has to procure power from the exchange at exorbitant cost. The Petitioner purchased 3486.4 MUs power in the last FY 2022-23 in the exchange at landed average rate of Rs. 8.02 per kW. The details of power purchased through Exchange in the last FY 2022-23 are tabulated hereunder for ready reference of the Hon'ble Commission: -

Month	Month wise Purchase of quantum during 2022-23		
	Qtm (LU)	Landed cost (Rs/ Kwh)	Total Cost (Rs. in Lakh)
Apr	5619.37	11.50	62661.02
May	5478.38	8.20	43433.84
Jun	5109.66	7.35	36327.65
Jul	2006.17	6.22	12064.33
Aug	3330.85	6.40	20577.17
Sept	4078.20	7.31	28938.93
Oct	274.60	4.49	1193.24
Nov	607.34	5.32	3109.81
Dec	1809.56	6.83	11862.33
Jan	2667.41	8.95	22846.18
Feb	3012.94	7.72	22362.93
March	869.51	5.69	4766.54
<b>Total</b>	<b>34863.98</b>	<b>8.02</b>	<b>270143.98</b>

- 1.15 That the petitioner has sold an average of 635.7 MUs power in the last FY 2022-23 in the power exchange at an average rate of Rs. 4.66 per kWh. A tabular chart depicting the sale of power in the Exchange w.e.f. April 2022 till now is as under –

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>

- 1.16 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 which has 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.
- 1.17 That apart from meeting demand of the State, if any surplus is left during the winter months, it will be banked under bilateral banking agreements with other states which further helps to bridge the gap between demand and supply during next summer

months. 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

However, it is evident from the foregoing tabular summarization 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.

- 1.18 That even in the last winter season, the petitioner had to procure power from the power exchange. The detail of day wise quantum purchased from power exchange during last winter season is tabulated hereunder for the reference of the Hon'ble Commission:

Details of Power Purchased from Power Exchange(s)					
Nov-2022		Dec-2022		Jan-2023	
Date	Quantum at NR Periphery (in LU)	Date	Quantum at NR Periphery (in LU)	Date	Quantum at NR Periphery (in LU)
01-11-22	3.00	01-12-22	96.79	01-01-23	0.38
04-11-22	5.50	02-12-22	33.77	02-01-23	9.91
05-11-22	43.95	03-12-22	29.04	03-01-23	22.05
06-11-22	0.75	05-12-22	44.25	04-01-23	40.89
07-11-22	1.37	06-12-22	39.42	05-01-23	68.05
08-11-22	6.95	07-12-22	36.26	06-01-23	137.04
09-11-22	4.25	08-12-22	40.91	07-01-23	136.19
10-11-22	0.75	09-12-22	44.79	08-01-23	74.97
12-11-22	14.75	10-12-22	36.76	09-01-23	102.74
14-11-22	6.47	11-12-22	2.97	10-01-23	170.02
15-11-22	14.60	12-12-22	36.32	11-01-23	202.72
16-11-22	0.75	13-12-22	70.63	12-01-23	114.88
17-11-22	8.04	14-12-22	56.50	13-01-23	109.87
18-11-22	9.32	15-12-22	41.19	14-01-23	90.39
19-11-22	16.94	16-12-22	90.76	15-01-23	14.67
20-11-22	3.88	17-12-22	79.35	16-01-23	96.88
21-11-22	59.10	18-12-22	52.07	17-01-23	95.10
22-11-22	62.77	19-12-22	76.21	18-01-23	103.83
23-11-22	22.34	20-12-22	163.79	19-01-23	90.87
24-11-22	51.21	21-12-22	51.92	20-01-23	113.01
25-11-22	71.67	22-12-22	42.62	21-01-23	138.41
26-11-22	66.21	23-12-22	24.35	22-01-23	50.00
27-11-22	0.82	24-12-22	30.74	23-01-23	110.80
28-11-22	17.32	25-12-22	30.51	24-01-23	167.95
29-11-22	38.51	26-12-22	211.12	25-01-23	162.90
30-11-22	76.11	27-12-22	154.27	26-01-23	3.64
		28-12-22	109.25	27-01-23	47.17
		29-12-22	51.97	28-01-23	71.40
		30-12-22	19.74	29-01-23	10.10
		31-12-22	11.29	30-01-23	70.02
				31-01-23	40.56
<b>Total</b>	<b>607.34</b>	<b>Total</b>	<b>1809.56</b>	<b>Total</b>	<b>2667.41</b>

- 1.19 That it is worthwhile to note that HPPC floated tender for procurement of 750 MW RTC power during the months from 01.03.2023 to 15.10.2023 in which the weighted average rate discovered was Rs. 6.80/kWh and the same was approved by this Hon'ble Commission, vide order dated 17.02.2023.

- 1.20 That HPPC floated another tender for procurement of 750 MW RTC power during the months from 01.05.2023 to 15.10.2023 in which the weighted average rate of Rs. 7.90/kWh (excluding Transmission charges of 57 paisa) was discovered.
- 1.21 That from the above tables of the rate discovered in short term tender, it is anticipated that the rates in upcoming summer season in power exchanges and short term will likely to be on higher side.
- 1.22 That HPPC has filed another petition (No. 37 of 2023) under Section 86(1) (b) and Section 63 of the Electricity Act, 2003 seeking approval of source/ adoption of tariff of Rs 5.79/kWh with an escalation clause for the procurement of 760 MW power discovered through tariff-based competitive bidding process on a medium-term basis for five years floated through NIT-104/HPPC dated 27.02.2023. The said petition is pending adjudication before this Hon'ble Commission.
- 1.23 That the purchase of power through the power exchange to meet the deficit is a costly and unreliable arrangement. Considering all such factors, the petitioner has been making arrangements to meet the deficit through contracted sources for the short and medium term. However, the procurement of power through short-term tenders is also an expensive alternative over medium term procurement.
- 1.24 That the following prayers have been made:-
- a) Grant approval of source for the procurement from different generators under Shakti B-(V) scheme of MoP upto 472.8 MW on a medium-term basis for five years;
  - b) Adopt tariff i.e. Rs 5.30/KwH discovered through weightage average tariff of Bids at generator bus-bar;
  - 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.

### **Proceedings in the Case**

3. The case was heard on 25.10.2023, in the court room of the Commission, wherein the petitioner (HPPC) mainly reiterated the contents of its petition, which for the sake of brevity has not been reproduced.

### **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 the petitioner.
5. At the outset, the Commission observes that HPPC has also relinquished its share in certain central generating power stations (CGPS). Accordingly, HPPC is directed to ensure that the tariff proposed in the present petition for adoption, is not higher than the tariff of the sources surrendered by HPPC.

6. The Commission further observe that 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.
7. 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.
8. 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.
9. 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