

**BEFORE THE HIMACHAL PRADESH ELECTRICITY
REGULATORY COMMISSION SHIMLA**

Petition No: **20 of 2022**
Date of filing: 23.03.2022
Arguments Heard on: 02.04.2022
Decided on: **19.04.2022**

In the matter of:-

The HP State Electricity Board Ltd.
Vidyut Bhawan, Shimla-171004

...Joint Petitioner No.1

And

The HP Power Corporation Ltd.,
HIMFED Building, BCS,
New Shimla-171009.

...Joint Petitioner No.2

CORAM

DEVENDRA KUMAR SHARMA
CHAIRMAN

BHANU PRATAP SINGH
MEMBER

YASHWANT SINGH CHOGAL
MEMBER (Law)

Joint Petition under section 86 (1) (b) of the Electricity Act 2003, read with Regulations 50 and 50-A of the HPERC (Conduct of Business) Regulations, 2005 for approval of the Power Purchase Agreement in respect of Kashang (65 MW) and Sawra Kuddu Hydro Electric Project (111 MW).

Present:-

Sh. Kamlesh Saklani, Authorised Representative for Joint Petitioner No. 1.

Sh. Sangram Singh, DGM of Joint Petitioner No.2.

ORDER

This Joint Petition has been filed under section 86 (1) (b) of the Electricity Act 2003, read with Regulation 50 and 50-A of the Himachal Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 2005 for approval of the Power Purchase Agreement (PPA for short) in respect of Kashang (65 MW) Hydro Electric Project (HEP for short) and Sawra Kuddu (111 MW) HEP for purchase and sale of Power.

2. During the pendency of the Petition, a Miscellaneous Application No. 71 of 2022 was also filed for placing on record the additional submissions that the Joint Petitioner No. 1 is a deemed licensee under Section 14 of the Electricity Act 2003 (Act for short) for distribution and supply of Electricity in the State of HP. It is averred that in the Petition for Annual Revenue Requirement for the FY 2022-23, the total availability of Power with Joint Petitioner No. 1 was shown as 11239.71 Million Units (MUs for short) and the demand of the State at the HPSEBL periphery was shown as 10,837.89 MUs and the net surplus with the HPSEBL periphery was stated to be 401.82 MUs whereas the net surplus with STU periphery was shown as 404.48 MUs. Further, Joint Petitioner No.1 has envisaged to manage month to month surpluses /deficits through banking arrangements and that the net surplus power available within HPSEBL shall be sold outside the State through power exchange i.e. IEX/PXIL. As per Joint Petitioner No. 1, upon the real time system operation analysis of the power demand within the State and based on day to day power scenario assessment, the rise in power demand of 6-8% has been noticed within the State vis-à-vis power availability from various sources from the month of December, 2021 onwards and anticipated power supply position for the FY 2022-23 was studied in HPSEBL based on present power demand scenario within the State. Further, it was observed that if the present trend of power demand within the State persist for the ensuing year, the anticipated power supply position for FY 2022-23 needs to be modified in respect of disposal of summer surplus and arrangement for winter shortage and accordingly anticipated power supply position will be as under:

Description	Summer/ Monsoon	Winter	Total
Total Availability	7852	3415	11267
Requirement	6050	5953	12003
Gross Surplus(+)/Deficit(-) (approx.)	1800	-2537	-737

3. Further in order to meet the anticipated winter power shortages of 737 MUs and on observing the power market trends in India based on the Day Ahead Market rates in the Indian Energy Exchange (IEX for short), average rate per kWh for the period of September, 2021 to March, 2022 are as under:

Description	Sep. 2021	Oct. 2021	Nov. 2021	Dec. 2021	Jan. 2022	Feb. 2022	Mar. 2022
Average rate at IEX Rs./kWh	4.40	8.01	3.08	3.54	3.39	4.44	7.27
Average Rate at HP periphery Rs. / kWh)	4.63	8.37	3.28	3.77	3.62	4.70	7.59

4. Also mentioned in the Application that after exploring the procurement of power purchase from the market, the Joint Petitioner No.1 had floated tenders to the tune of 927.24 MUs RTC normal power through DEEP e-bidding portal to mitigate the power deficits for the period April 2022 and November 2022 to March 2023. After conducting e-Reverse Auction, the rates in the range of Rs. 4.09 to 4.94 and the average rate at Sellers States periphery of Rs. 4.50 per kWh against 900 Million Units were discovered that too for the power from thermal sources. In addition, Interstate Grid Losses in the range of 3.5 % to 4% as applicable were to be loaded. Besides, State Transmission Utilities (STU for short) charges for the Buyer (HP) State periphery were also payable. Thus, it was decided not to go for the purchase of RTC normal power. Further, the power purchase from the market through the DEEP e-bidding portal of other States were Rs. 4.81 to 7.50, 4.92 to 6.25 and Rs. 5.98 to 14.99 in the states of Haryana, Punjab, Delhi (BSES) respectively. Further, the Joint Petitioner No. 1 also exercised the option by the open tendering process for the sale of 150 MUs Renewable Energy (RE) (Night Power) outside the State and the rates received were in the range of Rs/kWh 3.70 to 4.56, which were lower in comparison to

the short term power purchase rates from the market and the average price available in the IEX G-DAM. Therefore, it was also not prudent to go for Short-term sale of power outside of the State under the RE tag. However, Joint Petitioner No. 2 will explore the possibility of selling power in IEX G-DAM. Further, the Joint Petitioner No. 2 has made arrangement for the disposal on summer surpluses under banking energy arrangement through open tendering process as under:

- i. HPSEBL floated press tender for Banking of 1715 MUs Power under the following arrangements as follows:
- ii. RTC Vs. RTC 918 MU (Expected Return-1023 MUs)
- iii. RTC Vs. Day 686 MUs (Expected Return-720 MUs)
- iv. Night Vs. Night 111 MUs (Expected Return-111 MUs)

Accordingly, HPSEBL has issued LOIs to the following respective trader under banking arrangements:

Name of Trader	Arrangement	Banked energy outside the State by HPSEBL (MUs)	Receivable banked energy with premium to HPSEBL (MUs)	Remarks
M/s PTC to PSPCL	RTC Vs RTC	896.59	1060.40	Period & Premium as per LOI
M/s PTC to BRPL & BYPL	Night Vs Night	111.47	138.67	
M/s MPL to BRPL & BYPL	RTC Vs Day	651.51	697.76	
Total		1659.57	1896.83	Premium of 14.30%

Accordingly, the net premium on in real time system operations, the return of banked energy will be 237.26 MUs (1896.83-1659.57) subject to actual scheduling.

5. Further mentioned that as per the updated anticipated power supply position for the FY 2022-2023, the Joint Petitioner No.1 is net deficit of 737 MUs and propose to meet the deficit through the purchase of power from Kashang and Sawra Kuddu, Hydro Electric Projects, of Joint petitioner No. 2 and the remaining deficit will be met from the

premium of the banked energy to the tune on 237 MUs under normal banking arrangement. Also averred that the power to be procured from Joint Petitioner No. 2 is around 530 MUs, which include summer quantum availability of 430 MUs and Winter availability of 100 MUs and summer quantum availability will be further banked outside and return of banked energy will be 500 MUs (430+70). Therefore, the net energy quantum of the aforesaid projects (including banking of the summer quantum from these projects) will be 600 MUs (430+70+100). Also the premium of the return of banked energy will be 237.26 MUs and thus, there will be availability of 837.26 MUs against the net deficits of 737 MUs as envisaged in updated Anticipated Power Supply Position (APSP) for the FY 2022-23 and the envisaged surpluses of 100 MUs will be disposed off under the contingent sale in IEX in Day Ahead Market. As per Joint Petitioner No. 1, it is surplus in power in Summer /Monsoon months due to hydro generation peaking which adds to pooled power purchase which is banked outside the State in summer months and received backed with premium in winter months. As per the additional submissions, the ex-bus rates of Rs. 3.40 per kWh has been mutually agreed between the Joint Petitioner No. 1 and Joint petitioner No. 2 in a meeting held on 19.02.2022 with arrangement of charges for STU network. As per the Joint Petitioner No.1, the purchase rate from the projects of Joint Petitioner No. 2 has been worked out as under:-

HPPCL projects Power purchase by HPSEBL in FY2022-23:				
	Kashang HEP (65MW)		Sawra Kuddu HEP (111MW)	Total (Kashang + Sawra Kuddu)
Installed capacity	65		111	
Aux. Consumption	1.2		1.2	
Generation Ex-bus @40% PLF	225.03		384.28	
GoHP Free Energy @ 13%	29.25		49.96	
Saleable Energy @ 87% in MU	195.77		334.32	530.09
Rate (Rs./kWh)	3.40		3.40	
Total Energy charges in lakhs	6656.30		11366.90	18023.20

Kashang-Bhaba 220kV Trans. Line AFC (195 MW) vide Order dated 26.08.2020	753.7	Sawra Kuddu Snail-Hatkoti-Gumma Trans. Line Normative AFC (Line length 78.7 ckm)	2212.78	
Pro-rata Kashang -Bhaba 220kV Trans. Line AFC for 56.55 MW (87%)	218.573	Pro-rata Snail-Hatkoti-Gumma 220kV D/C Trans. Line AFC for 96.57 MW (87%)	1925.12	
Gross payable (including Trans. Line AFC sharing in lakhs)	6874.87		13292.02	20166.89
Average rate (Rs./kWh)	3.51		3.98	3.80

Add: HPSLDC charge for FY23

1. HPSLDC charges rate per MW/month for FY2022-23 as per HPSLDC MTR Order dated 12.08.2021	1073.41		1073.41	
2. Annual total power wheeling in MW	678.6		1158.84	
3. Annual HPSLDC charges	7.28		12.44	19.72
4. HPSLDC charges per kWh	0.004		0.004	20186.61
5. Average rate (Rs. /kWh) of power purchase including HPSLDC charges	3.515		3.980	3.808

6. Also averred that Sawra Kuddu Project is commissioned on 21.01.2021 and the energy generation is eligible for Hydro Purchase Obligation (HPO for short) benefits. Further, in the meeting held on 30.03.2022, it has been decided that the Hydro Purchase Obligation benefits shall be with Joint Petitioner No. 2 as the Power is being procured by the Joint Petitioner No. 1 on short term basis for the FY 2022-23.

7. It has been prayed that the proposed power purchase agreement be taken on record and approved.

8. We have heard Sh. Kamlesh Saklani, Authorised Representative for Joint Petitioner No. 1 and Sh. Sangram Singh, DGM, for the Joint Petitioner No. 2.

9. It is evident from the record that in order to tide over the deficit of Power as worked out in APSP for the year 2022-23, the Joint Petitioner No. 1 has agreed to procure the Power from the Kashang (65 MW) HEP and Sawra Kuddu (111 MW) HEP of Joint Petitioner No. 2. It is also evident from the record that the Power is being procured from the above projects of the Joint Petitioner No. 1 on short term basis for FY 2022-23 only on mutually agreed Tariff of Rs.3.40 per unit.

10. The record reveals that the matter of sale/ purchase of power has been deliberated at length by the parties in a meeting held on 19.2.2022 and it has been mutually agreed that in order to mitigate the demand of the State from green energy, HPSEBL shall procure complete power from Sawra Kuddu (111 MW) HEP and Kashang (65 MW) Hydro Electric Projects of Joint Petitioner No. 2 on short term basis for a period of one year i.e. during FY 2022-23 on a mutually agreed rate of Rs.3.40 per unit at Ex-Bus and that for procurement of power beyond one year, deliberations shall continue and decision thereof shall be taken later on.

11. It is also evident from the record that in order to decide the issue of Hydro Power Obligation benefits, a meeting was held on 30.03.2022 between the HPSEBL and the HPPCL authorities and after detailed deliberations, it was decided that the HPO benefits from Sawra Kuddu (111 MW) HEP shall be with HPPCL as the power is being procured by HPSEBL on Short Term Basis for FY 2022-23. Thus, it is evident that the mutually agreed tariff is Rs.3.40 per unit and HPO benefit of Sawra Kuddu (111 MW) HEP will be with the Joint Petitioner No.2 HPPCL.

12. The Commission is vested with the powers to approve Power Purchase Agreements under Section 86 (1)(b) of the Act. Therefore, in view of the powers conferred under Section 86(1)(b) of the Act read with

Regulations 50 & 50-A of the HPERC (Conduct of Business) Regulations, 2005 and the averments made in the Petition and additional submissions of the Joint Petitioner No.1 by way of Miscellaneous Application duly supported by an affidavit, the Petitioners have made out a case for the approval of Short Term PPA. Accordingly, the Petition is allowed and the Short Term PPA, as prayed, is ordered to be approved for the purchase and sale of power in respect of Kashang (65 MW) and Sawra Kuddu (111 MW) HEPs of the Joint Petitioner No.2 by the Joint Petitioner No.1 for the financial year 2022-23 at the rate of Rs. 3.40 per unit at Ex-Bus w.e.f. 01.05.2022 till 31.03.2023 subject to the condition that the Joint Petitioner No.2 shall have the right to avail the benefits of HPO in respect of Sawra Kuddu (111 MW) HEP for the power sold. Further, the rate of Rs. 3.40 per unit worked out by the parties shall depend upon the transmission charges to be determined by the Commission and also on the actual generation of power from these Stations.

13. Necessary additions and alternations in the draft PPA be carried out by the Technical Division as required before the same is sent to the parties. The Petitioners are directed to execute the Power Purchase Agreement accordingly within a period of 10 days from the date of this order. Three copies of the executed Power Purchase Agreement be submitted to the Commission for record.

Announced
19.04.2022

-Sd-
(Yashwant Singh Chogal)
Member(Law)

-Sd-
(Bhanu Pratap Singh)
Member

-Sd-
(Devendra Kumar Sharma)
Chairman