

HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

Petition No. 28 of 2021
(MA:178/2020 & MA: 207/2021)
Decided on: 03.01.2022

**CORAM: Hon'ble Sh. Devendra Kumar Sharma, Chairman
Hon'ble Sh. Bhanu Pratap Singh, Member
Hon'ble Sh. Yashwant Singh Chogal, Member(Law)**

IN THE MATTER OF:-

Determination of Average Pooled Power Purchase Cost (APPC) for the financial year 2021-22 under REC mechanism.

ORDER

The Distribution Licensee (hereinafter referred as "HPSEB Ltd.") has filed the above Petition for determination of Average Power Purchase Cost (APPC) for the Financial Year 2021-22 under Renewable Energy Certificate Mechanism (REC) as under:-

Power Purchase Cost for FY 2021-22		
Details of power purchase	MUs	Rs. (in Crore)
HPSEBL Stations	1480.97	208.42
BBMB Stations	629.42	38.78
NTPC Stations	1580.53	606.09
NHPC Stations	249.69	60.00
From other Stations	4117.11	1077.35
Free Power and Equity Power of GoHP	528.12	132.03
SHP under REC mechanism	307.67	76.61
IEX Purchase	496.17	162.94
PXIL Purchase	34.95	14.61
Short term Purchase	681.33	212.07
Net Banking Purchase	104.19	0.00
Total	10210.15	2588.89

The APPC rate proposed by the HPSEB Ltd. is 254 paise per unit.

2. The HPSEBL's calculations for determination of APPC rate for FY 2021-22 are based on the following:-

- (i) The arrears pertaining to past periods, which were paid in FY 2020-21, have been excluded as these are not recurring in nature;
- (ii) Unscheduled Interchange (UI) has also not been included in line with the philosophy approved by the Commission in APPC Order for the FY 2012-13;
- (iii) The PGCIL/Transmission Charges/ULDC/Other Charges have also been excluded in line with the philosophy approved by the Commission in APPC Order for the FY 2012-13;

- (iv) The approved rates of Own generating stations have been taken from Multi Year Tariff Order dated 06.06.2020 for 4th Control Period for Distribution Business of HPSEBL;
 - (v) The Forward (inward) Banking at zero cost has been considered as approved by the Commission in previous order;
 - (vi) Methodology laid down in the Commission's Orders dated 16.07.2012.
3. The Commission issued a public notice on 11.8.2021 in the Newspapers, namely "Hindustan Times" and "Amar Ujala", inviting suggestions/objections on the aforesaid proposal from the stakeholders. The complete text of the Petition filed for the approval of the APPC by the HPSEBL was also made available on the Commission's website www.hperc.org as well as on the HPSEBL website www.hpseb.in.
4. The Commission vide letter dated 12.08.2021, requested the major stakeholders, including the Small Hydro Power Associations of the State, State Government, Directorate of Energy and HIMURJA to send their suggestions/objections as per the aforesaid public notice. No comments were received on the matter from any stakeholder.
5. A public hearing in the matter was also held through video conferencing on 14.9.2021. The following representatives of stakeholders were present in the public hearing:-
- a) Er. Manoj Kumar, Superintending Engineer (Electrical), Directorate of Energy, Shanti Bhawan, Phase-III, Sector-6, New Shimla-171009.
 - b) Er. Joginder Singh, Chief Engineer (System Operation) HPSEBL, Vidyut Bhawan, Shimla-171004.
 - c) Er. Tushar Gupta, Superintending Engineer (SERC), HPSEBL, Vidyut Bhawan, Shimla-171004.
6. During the public hearing, the certain queries were raised relating to power purchase cost considered in respect of BBMB Projects, the difference between the power purchase cost of Rampur SOR (State of Region) and Rampur Equity shares and the procurement of power through exchanges instead of procurement of GoHP free power.
7. The HPSEBL furnished its reply by filing MA No. 178/2021 in the matter. Some new facts were also submitted as below:

"Subsequent to filing of the aforementioned petition certain new facts have come into the knowledge, which at the time of filing the aforementioned petition could

not be included and are essential for deciding the aforementioned petition accurately and in true spirit and accordingly this Application is being preferred by the Applicant herein: -

- i) Pursuant to the advisory of Ministry of Power, Government of India vide letter dated 15.05.2020 & corrigendum dated 16.05.2020, rebate has been notified in respect of Central Generating Stations (SJVN, NTPC, NHPC), which has been given by way of credit notes and stand adjusted against the power purchase bills of the respective CPSUs along with deferment of power purchase bills payment by NTPC. The details of the rebates which were paid out to HPSEBL in FY 2020-21 are as follows: -

Table 1: Rebates from various entities

Name of stations	Rebate (in Rs. Cr)
SJVNL	17.14
NTPC	8.50
NHPC	1.56
Total	27.20

On account of above, Rs. 27.20 Crore is to be considered for determination of APPC for FY 22.

- ii) True up surplus of Baspa II Hydro Power Station was approved by HPERC vide Order dated 7.7.2020 and in Review Petition No. 64 of 2020 vide order dated 28.12.2020. On account of above, an amount of Rs.4.00 Cr was paid out to HPSEBL in FY 2020-21 and this amount is also to be considered in determination of APPC for FY 22.
- iii) Tariffs of NPCIL stations (NAPP and RAPP) were revised by Department of Atomic Energy (DAE) vide Notification No. 13/2/(4)/2017-I&M(NFC)/Vol-II/2441 dated 18.02.2020. On account of above, an amount of Rs. 15.64 Cr (in respect of NAPP station) and Rs. 19.38 Cr (in respect of RAPP station) were paid out to HPSEBL. Accordingly, an amount of Rs. 35.02 Crore is also to be considered in determination of APPC for FY 22.
- iv) RLDC Fee refunded by GoHP in respect of GoHP Free power amounting to Rs.0.12 Crore and same has been adjusted against energy bills of GoHP and is also to be considered in determination of APPC for FY 22”

8. Vide the said MA, the HPSEBL submitted the breakup of power purchased from Indian Energy Exchange(IEX)/Power Exchange India Limited (PXIL) and Short term purchase as under:

Particulars	Energy at HP periphery (in MUs)	Rate (₹/kWh)	Remarks
IEX	496.17	3.28	Rates are inclusive of Transmission Charges
PXIL	34.95	4.17	
Short Term purchase	681.33	3.11	

9. In addition to the foregoing new facts, HPSEBL regretted that due to an error, the APPC for FY 21 was inadvertently considered as Rs. 2.49 per unit instead of Rs. 2.35 per unit approved by the Commission for FY 2020-21 and accordingly made correction.

10. The Distribution Licensee revised the Petition No. 28/2021 for approval of Average Power Purchase Cost (APPC) as under:-

Power Purchase Cost for FY 2021-22		
Details	MUs	Rs. (in Crore)
HPSEBL Stations	1480.97	208.42
BBMB Stations	629.42	38.78
NTPC Stations	1580.53	606.09
NHPC Stations	249.69	60.00
From other Stations	4117.11	1077.35
Free Power and Equity Power of GoHP	528.12	132.03
SHP under REC mechanism	307.67	72.30
IEX Purchase	496.17	162.94
PXIL Purchase	34.95	14.61
Short term Purchase	681.33	212.07
Net Banking Purchase	104.19	0.00
Rebate from CPSUs (SJVN, NTPC, NHPC)		-27.20
Rate revision of Baspa power station		-4.00
GoHP free Power RLDC fee refund		-0.12
Rate revision of NAPP		-15.64
Rate revision of RAPP		-19.38
Total	10210.15	2,518.25

The APPC rate proposed by the HPSEB Ltd. is 247 paise per unit.

11. Further, vide letter dated 11.10.2021, the Commission sought the details of the rebate paid to HPSEBL by various CPSUs, namely, SJVN, NTPC and NHPC and the details of the transmission charges included in power purchased from IEX/PXIL and also under Short-term.
12. In response to the HPERC letter dated 11.10.2021, the HPSEBL filed MA No. 207/2021 before the Commission and submitted as under:

a. In FY 2020-21 Transmission charges paid by HPSEBL in the monthly demand note to BBMB.

Based on the monthly accounts supplied by BBMB, the net O&M expenses paid by HPSEBL towards BBMB transmission system in FY 2020-21 are Rs. 13.7712323 crore. Therefore, net O&M expenditure paid by HPSEBL to BBMB in APPC petition data is Rs. 38.7781 crore which includes Rs. 13.7712323 crore towards expenses of transmission system of BBMB.

b. In FY 2020-21 Banking energy input to HPSEBL system at regional periphery.

<i>Banking energy correction in APPC data</i>	<i>Energy (in MUS)</i>
<i>Banking Sale: banked outside the State (at Regional periphery)</i>	<i>1351.629500</i>
<i>Banking Purchase: Received back banked energy (at Regional periphery)</i>	<i>1474.290575</i>
<i>Net banking Energy (Purchase)</i>	<i>122.661075</i>

- c. In FY 2020-21 CTU and STU charges paid by HPSEBL during FY 2020-21 for energy purchased from IEX and PXIL platform to be excluded.*

Energy purchase from IEX and PXIL platform in the APPC petition is at HP periphery. The purchase from IEX/PXIL at regional periphery need to be considered and the same is as per following table:-

Source	Energy Purchased at regional periphery	Energy Purchased at HP periphery	Total amount paid including CTU & STU charges	CTU & STU charges for energy procured from IEX & PXIL	Total amount excluding CTU & STU charges for energy purchased at regional periphery
	(in MU) (i)	(in MU) (ii)	Rs. in Crore (iii)	Rs. in Crore (iv)	Rs. in Crore (iii-iv)
IEX(P)	512.55	496.14	162.94	2.79	160.15
PXIL(P)	36.16	34.95	14.61	0.14	14.46
Total	548.71	531.09	177.55	2.93	174.61

d. In deference to the Ministry of Power, GoI letter dated 15.05.2020 & corrigendum dated 16.05.2020, following rebate is given to the HPSEBL by the Central PSUs.

Sr. No.	Name of CPSU	Amount (in Crore)
1	SJVNL Power purchase Bills (April 2020 to June 2020)	17.41
2	NTPC Power purchase Bills (April 2020 to June 2020)	8.50
3	NHPC Power purchase Bills (April 2020 to June 2020)	1.56
	Total rebate on Power Purchase Bills	27.20

13. In view of the above new facts submitted by the HPSEBL through MA 178/2020 & MA 207/2021 to the Petition, the Commission decided to issue a public notice to invite the objections/suggestions of the stakeholders. Accordingly, a public notice in this regard was issued on 9.11.2021 in the Newspapers, namely “Times of India” and “Dainik Bhasker”. The complete text of the Petition filed for the approval of the APPC along with the Miscellaneous Applications (MA) filed by the HPSEBL was made available on the Commission’s website www.hperc.org as well as on the HPSEBL website www.hpseb.in.

14. The Commission again vide its letter dated 10.11.2021, requested the major stakeholders, including the Small Hydro Power Associations of the State, State Government, Directorate of Energy and HIMURJA to send their suggestions/objections as per the public notice dated 9.11.2021 .

Commission’s Analysis and decisions:-

15. The issue of APPC has been discussed elaborately by the Commission in its previous Orders while determining APPC for FY 2012-13 and FY 2013-14 and while determining the APPC for the FY 2014-15, Commission vide its Order

dated 28.08.2014 in Petition No. 122/ 2014, the Commission followed the principles as under:-

- (i) The average pooled cost of purchase of power has three components relevant to the present context i.e. it has to be weighted average pooled price of power purchased; it has to be of the previous year and further that it has to be from the energy suppliers, both long term and short term;
- (ii) The quantum and rate of power, purchased from the State Govt., out of its free power share shall be taken into account for pooled cost of purchase;
- (iii) The Unscheduled Interchanges (U.I.) (now termed as Deviation Settlement) are not included in the power purchase cost. U.I. (Deviation Settlement) as a system mechanism is not a platform for power purchase or sale but is transaction/system of over-drawl or under-drawl against the power scheduled from the source. The under-drawl is a situation where the purchaser has paid price of power scheduled to him to the suppliers but he has not drawn from the system and if someone-else over-draws, charges will be reimbursed as per the pricing mechanism under U.I. (Deviation Settlement). Similarly, the over-drawl is from the system and is beyond the power purchased from the supplier and so scheduled and therefore, it does not amount to purchase of power on long term or short term basis from energy supplier. It can be argued that quantum of under-drawl should be reduced from the total power purchase which can further lead to issues of pricing of under-drawls as to whether such price should be on the principles of costly power at the margin in the merit order purchase. Therefore, U.I. (Deviation Settlement) over-drawls cannot be treated as power purchase for the purpose of pooled cost of purchase. Similarly, PGCIL/Transmission/ULDC charges etc. are not applicable when power is being supplied to the local Discom at the APPC;
- (iv) Total power purchased is disposed off/utilized by way of sale, within and outside State and by way of banking. Power purchase only is relevant for APPC and disposal/utilization of power is not relevant to the context of determination of the APPC;
- (v) Where the outward banking (banking sale) is from out of power purchased during the year from energy suppliers (long term and short term), its cost is already paid. Therefore, if the same quantum, or part of such quantum, is received as inward banking (contra banking purchase), such quantum and price should not be included over and above the quantum or price already taken into account, out of which such power has been banked. The

Commission had taken cost of banking power, whether purchase or sale, as zero, because, in the absence of firm cost of such power, any notional cost leads to distorted results in profit/loss in the balance sheet. Banking arrangement, as a practice in the State, is rolling arrangement involving contra, forward and return banking with various Discoms in the region. There is no criteria for determination of rate and as a prudent practice, the Commission had taken such banking sale and purchase at zero cost. Therefore, any quantum of energy received during the year in excess of purchased energy banked in the same year, under banking arrangement, shall be treated as additional quantum of power purchase, but at zero cost. Hence, only the quantum of inward/forward banking (banking purchase) in excess of quantum of contra-banking, in the previous year will be taken as additional power purchase at zero cost;

- (vi) The arrears pertaining to past periods will be excluded as these are not recurring in nature;
- (vii) The PGCIL/Transmission charges/ULDC/other charges will not be included;
- (viii) Purchases under REC framework on the APPC will be included.

The APPC rates have been worked out for the previous financial years as per the above principles.

16. The principles and methodologies applied in calculating the APPC for years 2012-13 and 2013-14 have attained finality, and therefore, the Commission finds it appropriate to apply the same for computation of the APPC under this Order also.
17. (a) As per the above methodology adopted for the determination of APPC, the arrears pertaining to past periods (since these are not recurring in nature), PGCIL/Transmission/RLDC/Other charges which were paid in FY 2020-21, are not considered. Hence, the net power purchase has been considered after excluding the above charges:
 - (i) The True up surplus of Baspa-II Hydro Power Station, amounting to Rs. 4.00 Crore paid to the HPSEBL in FY 2020-21, as per the HPERC Order dated 7.7.2020 in Petition No.06/2020 and order dated 28.12.2020 in Review Petition No.64/2020 is not considered.

- (ii) Similarly, amount of Rs. 15.64 Crore, in respect of Narora Atomic Power Plant (NAPP) and Rs.19.38 Crore, in respect of Rajasthan Atomic Power Project (RAPP) paid to the HPSEBL for the period FY 2009-10 to FY 2019-20 is not considered.
- (iii) The amount of Rs. 2.79 Crore and Rs. 0.14 Crore have been paid towards Central Transmission Utility (CTU) and State Transmission Utility (STU) charges respectively by the HPSEBL during FY 2020-21 at regional periphery for the power purchase from Indian Energy Exchange (IEX) and Power Exchange India Ltd. (PXIL).

Thus, the Commission decides to consider Rs. 160.15 Crore and Rs. 14.46 Crore as power procurement cost from IEX and PXIL in the calculation of APPC after excluding CTU & STU charges as detailed in the table given below:

Source	Energy Purchased at regional periphery	Energy Purchased at HP periphery	Total amount paid including CTU & STU charges	CTU & STU charges for energy procured from IEX & PXIL	Total amount excluding CTU & STU charges for energy purchased at regional periphery
	(in MU) (i)	(in MU) (ii)	Rs. in Crore (iii)	Rs. in Crore (iv)	Rs. in Crore (iii-iv)
IEX(P)	512.55	496.14	162.94	2.79	160.15
PXIL(P)	36.16	34.95	14.61	0.14	14.46

- (iv) Rs. 13.77 Crore has been paid by the HPSEBL against O&M expenses towards the BBMB transmission system in FY 2020-21. Accordingly, the Commission decides to consider the net cost of power purchase from the BBMB as Rs. 25.01 Crore in the calculation of APPC by excluding above referred amount of Rs. 13.77 Crore.
- (v) The Govt. of HP has refunded the Regional Load Despatch Centre (RLDC) Fee amounting to Rs 0.12 Crore, in respect of Free power. So, the Commission decides not to consider this fee in the calculation of APPC determination for FY 2021-22.
- (b) (i) The rebate amounting to Rs. 27.20 Crore have been given by the SJVNL, NTPC, NHPC in pursuance to the advisory of Ministry of Power, Government of India to provide such rebates to the Discoms for passing on to the end consumers for the lockdown period on account of Covid-19 pandemic. On scrutiny of the documents submitted by the Petitioner, the

rebate amount paid on to the HPSEBL is segregated between past period and financial year 2020-21 as under:

Particulars	Rebate for the period 25.03.2020 to 31.03.2020 (in Crores)	Rebate for the period 01.04.2020 to 17.05.2020 (in Crores)	Total Rebate (in Crores)
	(i)	(ii)	(i)+(ii)
Nathpa Jhakri SOR	0.09	0.93	1.02
Nathpa Jhakri Equity	1.03	8.35	9.38
Rampur HEP SOR	0.07	0.58	0.64
Rampur HEP Equity	0.59	5.51	6.10
Total	1.78	15.37	17.14

The rebate amounting to Rs. 15.37 Crore is considered in the calculations of APPC by excluding the amount of Rs. 1.78 Crore pertaining to past years.

- (ii) As per the submissions, the rebate amounting to Rs. 8.50 Crore and Rs. 1.56 Crore has been received from NTPC and NHPC respectively in FY 2020-21 without any segregation with regard to the period of such rebate.

Thus, the Commission decides to consider the total rebate of Rs. 25.43 Crore in the calculation of APPC as detailed in the table below:

Name of stations	Rebate (in Rs. Cr)	Power procurement cost considered in petition (in Rs. Cr)	Power procurement cost after considering rebate (in Rs. Cr)
	(i)	(ii)	(ii)-(i)
SJVNL	15.37	675.37 (SOR+Equity)	660.01
NTPC	8.50	606.09	597.59
NHPC	1.56	60.00	58.44

- (c) Further, the banking energy input to the HPSEBL system at regional periphery for FY 2020-21 has been revised from 104.19 MUs to 122.66 MUs. The Commission decides to consider the banking energy input to the HPSEBL system at regional periphery as 122.66 MUs at Zero cost.
- (d) Besides the above, instead of APPC rate of Rs. 2.49 per unit considered in the Petition for energy purchase of projects upto 25 MW, the APPC rate of Rs. 2.35 per unit as determined for the FY 2020-21 by Commission is considered for calculation of APPC.

18. Accordingly, the Commission, after duly considering the submissions made by the HPSEBL, discussions held during the public hearing and taking into account the eligible power purchase expenses of the licensee for FY 2020-21, determines the rate of APPC for FY 2021-22 as under:-

Power Purchase Cost for FY 2021-22		
Details of power purchase	MUs	Rs. (in Crore)
HPSEBL Stations	1480.97	208.42
BBMB Stations	629.42	25.01
NTPC Stations	1580.53	597.59
NHPC Stations	249.69	58.44
From other Stations (by deducting the rebate of SJVNL Projects)	4117.11	1061.98
Free Power and Equity Power of GoHP	528.12	132.03
SHP under REC mechanism	307.67	72.30
IEX Purchase	496.17	160.15
PXIL Purchase	34.95	14.46
Short term Purchase	681.33	212.07
Net Banking Purchase	122.66	0.00
Total	10228.62	2542.45

Based on the above, the APPC rate for FY 2021-22 shall be 248.56 paise per unit, say Rs. 2.49 per unit. This rate is firm and final and shall not be trued up.

19. This Order shall be applicable for the FY 2021-22 and shall continue for further period with such variation or modification as may be ordered by the Commission for the next financial year.

This Petition is disposed of in terms of the above.

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

Sd/-
(Bhanu Partap Singh)
Member

Sd/-
(Devendra Kumar Sharma)
Chairman