

**HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION**  
**Vidyut Aayog Bhawan, Block No, 37, SDA Complex, Kasumpti, Shimla-171009,**  
**Himachal Pradesh**

**In the matter of:** Fixing the rate of sale of Free Power of the Government of Himachal Pradesh to Himachal Pradesh State Electricity Board Limited (HPSEBL) for FY 2022-23.

**Coram:**

Sh. D.K. Sharma,  
Chairman

Sh. Bhanu Pratap Singh  
Member

Sh. Yashwant Singh Chogal  
Member (Law)

**Order**

(Date of Order: 28.03.2022 )

**Background**

1.1 The Government of Himachal Pradesh (hereinafter referred to as “GoHP” or “State Government”) has Free Power entitlement in various generating stations of NTPC, NHPC, SJVNL, PSEB, HPSEBL and IPPs in lieu of project site being used by these generating stations. The detail of free power entitlements from these generating stations is given in Table 1 below:-

**Table 1: Free Power Entitlement of GoHP**

<b>Generating Station</b>	<b>Free Power Share</b>
Koldam	12%
Bairasuil	12%
Chamera I	12%
Chamera II	12%
Chamera III	12%
Parbati III	12%
Rampur	12%
Nathpa Jhakri	12%
Larji	12%
Kashang	12% + 1% LADF
Ghanvi I	12%
Ghanvi II	12%
Baner	12%
Khauli	12%
Gaj	12%
Sach	6% + 1% LADF

Generating Station	Free Power Share
RSD	Fixed
Shanan	Fixed
Malana-I	20%
Baspa II	12%
Chanju-I HEP	16%
Patikari	12%
Toss	15%
Tangling	2%
Sarbari-II	13%
Rukti-II	3% + 1% LADF
Sumez	15%
Kurmi	13%
Nanti	13%
Beas Kund	14%
Upper Joiner	15%
Suman Sarwari	1.5% + 1% LADF
Neogal	15%
Maujhi II	6%
Binwa IV	6% + 1% LADF
Jongini	14%
Jongini II	6% + 1% LADF
Solang	3% + 1% LADF
Aleo II	7.03% + 1% LADF
Shimla	6% + 1% LADF
Kurtha SHP	7.23% + 1% LADF
Baner-II	12%
Baragaon	15%
Baragaon	Previous Royalty
Brua	13.52% + 1% LADF
Neogal II	3% + 1% LADF
Awa II	3%
Baner Snagam	12% + 1% LADF
Raskat	10%
Titang	10%
Manuni HEP	1% LADF
Haripur Nallah	3% + 1% LADF
Shaung	1% LADF
Brahl Top	6% + 1% LADF
Gurahan	1% LADF
Lower Aleo	15% + 1% LADF
Upper Nanti	13.82% + 1% LADF
Sarwari-III	3%
Balargha	15%
Behna	2%

Generating Station	Free Power Share
Gaj Top	7%
Leond	3%
Kotgarh	6%
Kut	1% LADF
Jeori	3%+1% LADF
Kiunr	7%
Serai	3%
Raura	1.80%+1% LADF
Gaj III	1% LADF
Ching	10%
Hysrund	6%+1% LADF
Dehar	10%
Aleo	10%
Kuwarsi II	1.89%+1% LADF
Salun	2.36% + 1% LADF
Rala	1.56% + 1% LADF
Wanger Homte	1% LADF
Chanju-II	1% LADF
Kareri	1% LADF
Sechi	12.00%
Panwi	12%
Siunr	1% LADF

- 1.2 The entire Free Power share of the State Government was available to HPSEBL before FY05 at a rate equal to the tariff rate of the lowest slab for domestic consumers i.e. 70 paise per unit.
- 1.3 During FY06, the Free Power was made available by Govt. of H.P. to HPSEBL during the winter months only (November to March) and at a rate equal to the average cost of power purchase of HPSEBL from various sources, which was Rs 1.93 per unit.
- 1.4 Presently the rate of Free Power of Govt. of Himachal Pradesh is being decided by HPERC in accordance with the power conferred under section 86 (1) (b) of the Electricity Act, 2003 and the Electricity [Removal of Difficulty] (Third) Order, 2005 issued by Ministry of Power, Govt. of India which came in to force on June 8, 2005.
- 1.5 From 2007 till 2011, the Commission switched over to the concept of marginal cost of power from Central Sector Generating Stations. On the basis of this new approach the Commission fixed the price of Free Power to be purchased by HPSEBL at Rs. 2.35, Rs. 3.04, Rs. 3.04, Rs. 2.87 and Rs. 3.19 per unit in 2007, 2008, 2009, 2010 and 2011 respectively.

- 1.6 In FY12, the Commission revised its methodology for determination of Free Power rate and determined the Free Power rate by taking into consideration the average cost of power purchased by HPSEBL from all sources (except banking) and the ex-bus bar rate of energy of the stations from which HPSEBL has GoHP Free Power availability. The notional cost of Free Power was determined by considering the maximum of average power purchase rate in FY11 and the ex-bus rate of the respective station in FY11, and then multiplying the higher of the two by the quantum of Free Power received from the respective station. The average rate of Free Power was thus determined as Rs 2.96 per unit for FY12.
- 1.7 The Commission continued with the same methodology for determination of Free Power rate for FY13 & FY14 and fixed the rate of Free Power at Rs 2.90 and Rs. 2.92 per unit respectively.
- 1.8 The Commission while determining the Free Power rate for FY15 decided that it will continue with this methodology for determining the rate of free power during the Third MYT Control Period from FY15 to FY19 because this approach allows best possible rate of power to the State Govt. and simultaneously ensures assured power on consistent, realistic and visible rates to HPSEBL. Accordingly the Commission decided that the cost of free power of GoHP for the  $n^{\text{th}}$  year shall be decided by considering the maximum of the average power purchase rate of HPSEBL as estimated by the Commission for the  $(n-1)^{\text{th}}$  year and the ex-bus rate of the respective station as determined by CERC/ HPERC for  $(n-1)^{\text{th}}$  year and multiplying the same with the quantum of free power projected by HPSEBL to be received from the respective station during the  $n^{\text{th}}$  year. The average cost of power thus derived shall be the rate of GoHP free power to be purchased by HPSEBL during  $n^{\text{th}}$  year.
- 1.9 The Commission continued with the above methodology for determination of Free Power rate for FY15, FY16, FY17, FY18 & FY19 and fixed the rate of Free Power at Rs. 2.87, Rs. 2.80, Rs. 2.92, Rs. 2.63 and Rs. 2.48 per unit respectively.

#### **Determination of the rate of Free Power for FYs 2019-20, 2020-21, 2021-22 & 2022-23**

- 1.10 The Commission while determining the Free Power rate for FY20 decided that it will continue with this methodology for determining the rate of free power during the fourth MYT Control Period from FY20 to FY24 with slight changes as explained hereinafter. The Commission decided that the cost of free power of GoHP for the  $n^{\text{th}}$  year shall be decided by considering the maximum of the average power purchase rate of HPSEBL as estimated by the Commission for the  $(n-1)^{\text{th}}$  year and the ex-bus rate of the respective station as determined by CERC/ HPERC/ Other State Commissions for  $(n-1)^{\text{th}}$  year and multiplying the same with the estimated quantum of free power received by HPSEBL from the respective station during the  $(n-1)^{\text{th}}$  year. In case ex-bus rate of a generating station for  $(n-1)^{\text{th}}$  year is not available then the same shall be taken as Average Power Procurement Cost (APPC) rate of HPSEBL as determined by the Commission for  $(n-1)^{\text{th}}$  year or Power Purchase Agreement (PPA) rate, if available. Thus, the weighted average cost of power derived shall be the rate of GoHP free power to be purchased by HPSEBL during  $n^{\text{th}}$  year. Accordingly, free power rates determined by the Commission for

FY20, FY21 & FY22 were Rs. 2.56, Rs. 2.50 & Rs. 2.49 per unit respectively. The free power rate for FY23 has been determined on same methodology as follows.

- 1.11 HPSEBL in its tariff petition for fourth Control Period has proposed that it will be utilizing only the free power available from generating stations that are currently connected with HPSEBL's system and/or it has power purchase agreements with such generators. Accordingly HPSEBL projected that the Free Power only from Shanan, Ranjeet Sagar Dam, Baspa, Malana, HPSEBL's own generating stations and IPPs connected with its system will be availed by it.
- 1.12 HPSEBL has supplied the details of actual GoHP Free Power availed by it from various stations for the first six months of FY22. The Commission has accordingly estimated the station wise free power availed by HPSEBL for complete FY22.
- 1.13 For own generating stations of HPSEBL, the ex-bus rates as decided by the Commission have been considered.
- 1.14 The ex-bus rates of Ranjeet Sagar Dam and Shanan have been considered the same as determined by PSERC in its tariff order for FY2021-22 dated 28<sup>th</sup> May, 2021.
- 1.15 For private small hydro electric plants the ex-bus rates equivalent to their PPA rates as approved by the Govt. of H.P. / Commission have been considered.
- 1.16 In the absence of any specific tariff for small HEPs, the Commission has considered the ex-bus rate as Rs. 2.49 per unit equal to HPSEBL's average power purchase cost (APPC) for FY22 as determined by the Commission vide order dated 03.01.2022.
- 1.17 The notional cost of Free Power to be received by HPSEBL in FY23 has been determined by considering the maximum of average power purchase rate of Rs 2.45 per unit for FY22 as estimated by the Commission and the ex-bus rate of the respective station or APPC or PPA rates as discussed above, and multiplying the higher of the two by the estimated quantum of Free Power available to HPSEBL from the respective station in FY22.

Therefore, as per the principle/ methodology, the rate of Free Power for FY23 is arrived at Rs 2.49 per unit, as shown in following table:-

**Table 2: Free Power Rate for FY 23**

Generating Station	FY22 Free Power Availability to HPSEBL	FY22 Average Power Purchase Cost estimated by Commission	FY22 Ex-Bus Rate of the Station	Free Power Cost (Max of Avg Purchase Cost & Ex Bus Rate)
	(MU)	(Rupee/unit)	(Rupee/unit)	(Rs Cr)
	A	B	C	$D = A * \text{Max}(B \text{ or } C)$
Larji	66.78	2.45	1.22	16.36
Kashang	26.79	2.45	2.49	6.67
Ghanvi I	11.37	2.45	2.25	2.79
Ghanvi II	5.37	2.45	2.25	1.32
Baner	4.37	2.45	2.18	1.07
Khauri	5.90	2.45	2.25	1.44
Gaj	4.42	2.45	2.88	1.27
RSD	57.65	2.45	2.39	14.12
Shanan	2.65	2.45	0.81	0.65
Malana-I	61.78	2.45	2.39	15.14
Baspa II	154.43	2.45	2.19	37.83
Chanju-I HEP	18.46	2.45	2.49	4.60
Patikari	6.45	2.45	2.25	1.58
Toss	7.38	2.45	2.5	1.85
Tangling	0.26	2.45	2.95	0.08
Sarbari-II	3.73	2.45	2.92	1.09
Rukti-II	0.63	2.45	2.95	0.19
Sumez	7.86	2.45	2.49	1.96
Kurmi	3.39	2.45	3.20	1.09
Nanti	7.13	2.45	2.49	1.78
Beas Kund	5.41	2.45	2.87	1.55
Upper Joiner	4.12	2.45	2.49	1.03
Suman Sarwari	0.53	2.45	2.50	0.13
Neogal	4.24	2.45	2.25	1.04
Maujhi II	0.35	2.45	2.50	0.09
Binwa IV	0.74	2.45	3.35	0.25
Jongini	8.77	2.45	2.49	2.18
Jongini II	2.03	2.45	2.49	0.51
Solang	0.05	2.45	2.50	0.01
Aleo II	1.46	2.45	3.37	0.49
Shimla	0.19	2.45	2.49	0.05
Kurtha SHP	1.80	2.45	3.23	0.58
Baner-II	1.58	2.45	2.49	0.39

Generating Station	FY22 Free Power Availability to HPSEBL	FY22 Average Power Purchase Cost estimated by Commission	FY22 Ex-Bus Rate of the Station	Free Power Cost (Max of Avg Purchase Cost & Ex Bus Rate)
	(MU)	(Rupee/unit)	(Rupee/unit)	(Rs Cr)
	A	B	C	$D = A * \text{Max}(B \text{ or } C)$
Baragaon	2.05	2.45	2.49	0.51
Baragaon	11.64	2.45	2.49	2.90
Brua	6.41	2.45	2.93	1.88
Neogal II	0.07	2.45	2.49	0.02
Awa II	0.13	2.45	2.49	0.03
Baner Snagam	2.04	2.45	2.49	0.51
Raskat	0.23	2.45	2.50	0.06
Manuni HEP	0.10	2.45	2.49	0.03
Haripur Nallah	0.28	2.45	2.50	0.07
Shaung	0.16	2.45	3.00	0.05
Brahl Top	1.43	2.45	2.49	0.36
Gurahan	0.04	2.45	2.49	0.01
Lower Aleo	1.45	2.45	2.49	0.36
Upper Nanti	6.07	2.45	2.49	1.51
Sarwari-III	0.19	2.45	3.17	0.06
Balargha	9.54	2.45	2.49	2.38
Behna	0.45	2.45	3.08	0.14
Gaj Top	0.52	2.45	3.21	0.17
Leond	0.23	2.45	3.17	0.07
Kotgarh	0.88	2.45	2.49	0.22
Kut	1.17	2.45	2.49	0.29
Jeori	1.24	2.45	3.50	0.44
Kiunr	0.18	2.45	2.49	0.05
Serai	0.15	2.45	3.17	0.05
Raura	1.17	2.45	2.49	0.29
Gaj III	0.12	2.45	3.27	0.04
Ching	0.22	2.45	2.5	0.05
Hysrund	0.51	2.45	2.49	0.13
Dehar	2.52	2.45	2.50	0.63
Aleo	1.36	2.45	2.50	0.34
Kuwarni II	1.10	2.45	2.49	0.27
Salun	0.89	2.45	2.49	0.22
Rala	2.13	2.45	2.49	0.53
Wanger Homte	0.96	2.45	2.49	0.24
Chanju-II	0.22	2.45	2.49	0.05

Generating Station	FY22 Free Power Availability to HPSEBL (MU) A	FY22 Average Power Purchase Cost estimated by Commission (Rupee/unit) B	FY22 Ex-Bus Rate of the Station (Rupee/unit) C	Free Power Cost (Max of Avg Purchase Cost & Ex Bus Rate) (Rs Cr) $D = A * \text{Max}(B \text{ or } C)$
Kareri	0.02	2.45	2.49	0.01
Sechi	0.09	2.45	2.49	0.02
Panwi	0.12	2.45	2.49	0.03
Siunr	0.00	2.45	2.95	0.00
<b>Total</b>	546.19			136.17
<b>Approved Free Power Cost</b>	<b>D/A</b>		Rupee/Unit	2.49

1.18 The Commission, therefore, determines the price of GoHP Free Power for FY23 at **Rs. 2.49 per unit** for purchase by HPSEBL.

1.19 This Order shall be effective for the financial year 2022-23 i.e. till March 31, 2023, unless allowed to be continued for further period with such variations and modifications as may be ordered by the Commission.

Yashwant Singh Chogal  
Member (Law)

Bhanu Pratap Singh  
Member

D.K. Sharma  
Chairman

Shimla  
Date: 28.03.2022