HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION

<u>Keonthal Commercial Complex, Khalini, Shimla – 171002, Himachal Pradesh</u>

In the matter of:

Fixing the rate for 'Sale of 'free power' of the Government of Himachal Pradesh' to the Himachal Pradesh State Electricity Board Limited (HPSEBL)' for FY 2012-13.

Coram:

Subhash Chander Negi, Chairperson

<u>Order</u> (Date: 23.04.2012)

Background

1.1 In lieu of the use of resources/site of the State by generating stations existing in Himachal Pradesh, the Government of Himachal Pradesh (hereinafter referred to as "the GoHP" or "the State Government") has 'free power' entitlement in the generating stations of NTPC Ltd, NHPC Ltd, SJVNL, PSEB, HPSEB Ltd and IPP stations as shown in following Table 1.

Generating Station	Free Power Share
Bairasiul	12.00%
Chamera-I	12.00%
Chamera –II	12.00%
Shanan Share	Fixed*
Ranjeet Sagar Dam Share	4.60%
Malana	15.00%
Baspa – II	12.00%
Patikari	12.00%
Nathpa Jhakri	12.00%
Ghanvi	12.00%
Baner	12.00%
Gaj	12.00%
Larji	12.00%
Khauli	12.00%
Allain Duhangan	12.00%
Karcham Wangtoo	12.00%
Γoss	15.00%
Sarbari	12.00%
	1 7 000

Table 1: 'free power' Entitlement of GoHP

1.2 Prior to FY 2004-05, the arrangement that existed between the GoHP and the HPSEBL was that the entire 'free power' share of the State Government was available to the Himachal Pradesh State Electricity Board Lt. (hereinafter referred to as "the HPSEBL") at a rate equal to the tariff rate of the lowest slab for the Domestic category of consumers i.e. at the rate of 70 paise per unit.

15.00%

3.00%

Upper Joiner

Tangling

- 1.3 Subsequently, in FY 2005-06, the State Government through a notification withdrew this arrangement with the HPSEBL and the 'free power' from various sources became available to HPSEBL only during the winter months (November to March) at a rate equal to the average cost of power purchase of HPSEBL.
- 1.4 On the basis of this notification, the Commission in the Tariff Order for FY 2005-

06 determined the average rate of HPSEBL's power purchase at Rs. 1.93 per unit and the same was considered for fixing the rate of 'free power' purchased by HPSEBL in FY 2005-06.

- 1.5 Thereafter, the Electricity [Removal of Difficulty] (Third) Order, 2005 came into force on June 8, 2005 and empowered the HPERC to regulate the price at which 'free power' received by the State Government from hydro generating stations was to be sold to the distribution licensee in the State. Clause 2 of the said Order reads as under:
 - "2. Disposal of free electricity received by a State Government from hydro power generating stations:-

The State Government receiving free electricity from hydro power generating stations shall have discretion to dispose of such electricity in the manner it deems fit according to the provisions of the Act:

Provided that if such electricity is sold by the State Government to a distribution licensee, the concerned State Commission shall have powers to regulate the price at which such electricity is procured by the distribution licensee."

- In the Tariff Order of FY 2006-07, the State Commission switched over from the approach of fixing the rate of 'free power' equivalent to the 'average cost of power purchase' by HPSEBL, to the 'marginal cost' of power from Central Sector generating stations. On the basis of this new approach the State Commission fixed the price of 'free power' to be purchased by HPSEBL in FY 2006-07 at the rate of Rs. 2.35 per unit.
- 1.7 The State Commission continued with the same methodology for determination of cost of 'free power' till FY 2010-11. Accordingly, it fixed the price of 'free power' in FY 2007-08 at Rs. 3.04 per unit, in FY 2008-09 at Rs. 3.04 per unit., in FY 2009-10 at Rs. 2.87 per unit and in FY 2010-11 at Rs 3.19 per unit. As this power was routed though PTC, the aforementioned prices fixed also included the Trading Margin of 4 paise per unit.
- 1.8 In FY 2011-12, the Commission revised its methodology for determination of 'free power' rate. For FY 2011-12, the Commission 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 GoHP has 'free power' entitlement.
- 1.9 The notional cost of 'free power' received by HPSEBL in FY 2011-12 was determined by considering the maximum of average power purchase rate in FY 2010-11 and the ex-bus rate of the respective station, 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 FY 2011-12.
- 1.10 The HPSEBL vide MA No. 71/2012 filed on date 5th April, 2012, has sought Review of Methodology for Determination of Sale of GoHP 'free power' to HPSEB Limited and for Review of Methodology for Determination of Average Pooled Power Purchase Rate (APPC Rates). The proposed Methodology by the HPSEBL, in the opinion of the Commission is a deviation from the existing Methodology adopted by the Commission which is based upon maximum of average power purchase rate in FY 2010-11 and the ex-bus rate of the respective station. The Methodology adopted by the Commission needs to be viewed in relation also to purchase of free power in summer months by HPSEBL, which is not to be procured at a rate higher than the prevailing rate of power sold via the PTC route. It is also the opinion of the Commission that the had this 'free power' not been purchased by the HPSEBL at the Commission determined rate, then HPSEBL may have had to purchase this power at higher prices from the market or

conversely, had the GoHP sold this 'free power' in the market and not to the HPSEBL, it may have been able to garner higher prices for this power.

Determining the rate of 'free power' for FY 2012-13

- 1.11 For determination of 'free power' rate for FY 2012-13, the Commission has analyzed the power purchase data submitted by HPSEBL for FY 2011-12 up to February 2012. The Commission finds merit in continuing with the methodology of determination of 'free power' rate.
- 1.12 Therefore, the notional cost of 'free power' received by HPSEBL in FY 2012-13 has been determined by considering the maximum of average power purchase rate of FY 2011-12 (excluding banking) as per the Commission's estimates i.e. Rs 2.24 per unit, and the ex-bus rate of the respective station, and multiplying the higher of the two by the quantum of 'free power' actually received from the respective station in FY 2011-12 till February 2012.
- 1.13 The ex-bus rate for each Central Generating Station has been determined by taking into account the annual fixed charge for the station as specified in the latest CERC tariff order and the net ex-bus availability of 'free power' to HPSEBL from the station on the basis of the station's design energy, normative auxiliary consumption and GoHP's 'free power' share in that station.
- 1.14 For HPSEBL own stations, the ex-bus rate has been determined in the same manner as described above, with the annual fixed charge being considered as per the Commission's approved AFC for each station in the 2nd MYT Order dated July 19, 2011.
- 1.15 For Allian Duhangan and Karcham Wangtoo stations, the ex-bus rate is the maximum IPP rate as approved by the Commission.
- 1.16 For private SHPs viz. Patikari, Toss, Sarbari, Upper Joiner and Tangling, the exbus rate is equivalent to their PPA rate.
- 1.17 Therefore, the rate of 'free power' for FY 2012-13 has been determined at Rs 2.90 per unit, as shown in Table 2 below:

Table 2: 'free power' Rate for FY 2012-13

Generating Station	FY12 Actual Availability to HPSEBL till Feb 2012	Power Purchase Cost determined by Commission	FY12 Ex- Bus Rate of the Station	Free Power Cost (Max of Avg Purchase Cost & Ex Bus Rate)
	(MU)	(Paise/unit)	(Paise/unit)	(Rs Cr)
Dalas I	A 24.70	B	<i>C</i>	D = A * Max(B or C)
Bairasiul	24.79	224	137	5.55
Chamera-I	73.16	224	177	16.39
Chamera -II	62.39	224	267	16.69
Shanan Share	2.40	224	44	0.54
Ranjeet Sagar Dam Share	80.46	224	565	45.48
Malana	54.13	224	295	15.97
Baspa - II	163.11	224	257	41.92
Nathpa Jhakri	114.93	224	216	25.75
Ghanvi	7.84	224	159	1.76
Baner	5.08	224	151	1.14
Gaj	4.52	224	228	1.03
Larji	79.27	224	296	23.42
Khauli	5.34	224	227	1.21
Allain Duhangan	14.92	224	295	4.40
Karcham	62.47	224	295	18.43

Generating Station	FY12 Actual Availability to HPSEBL till Feb 2012	FY12 Average Power Purchase Cost determined by Commission	FY12 Ex- Bus Rate of the Station	Free Power Cost (Max of Avg Purchase Cost & Ex Bus Rate)
	(MU)	(Paise/unit)	(Paise/unit)	(Rs Cr)
	A	В	C	$D = A * Max(B \ or \ C)$
Wangtoo				
Patikari	6.48	224	225	1.46
Toss	7.33	224	250	1.83
Sarbari	3.86	224	295	1.14
Upper Joiner	3.80	224	223	0.87
Tangling	0.40	224	295	0.12
Total	776.70			225.07
			(D ÷ A)	289.77
Approved Free Power Rate			Paise/unit	290

- 1.18 The Commission, therefore, fixes the price of 'free power' for FY 2012-13 at **Rs 2.90 per unit** for sale to HPSEBL.
- 1.19 This Order shall be effective from April 1, 2012 till March 31, 2013, unless allowed to be continued for further period with such variations and modifications as may be ordered by the Commission.

SHIMLA

DATE: 23 APRIL 2012

SUBHASH CHANDER NEGI, CHAIRPERSON