

#### **ORDER**

#### OF THE

# WEST BENGAL ELECTRICITY REGULATORY COMMISSION

### IN CASE NO:

FPPCA - 43 / 10 - 11

IN RE APPLICATION OF THE WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED FOR FUEL & POWER PURCHASE COST ADJUSTMENT (FPPCA) FOR THE FINANCIAL YEAR 2009- 2010 IN ACCORDANCE WITH THE WEST BENGAL ELECTRICITY REGULATORY COMMISSION (TERMS AND CONDITIONS OF TARIFF) REGULATIONS, 2007, AS AMENDED.

DATE: 30.06.2010



# CHAPTER – 1 INTRODUCTION

- 1.1 The West Bengal Electricity Regulatory Commission (hereinafter referred to as the 'Commission') determined the Aggregate Revenue Requirement (In short 'ARR') as well as tariff of the West Bengal State Electricity Distribution Company Limited (in short 'WBSEDCL') for the year 2009 2010 by an Order dated 28 July, 2009, in Case No. TP-41/08-09. In paragraph 3.2.20 of the aforesaid order, it was stipulated that WBSEDCL would be further entitled to additional sums towards enhanced cost of fuel and power purchase, if any, after the date from which the referred tariff order took effect. The fuel and power purchase cost would be subject to adjustments in accordance with the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2007, as amended (hereinafter referred to as the 'Tariff Regulations').
- 1.2 Accordingly, WBSEDCL submitted its application on 1 June, 2010 for ascertaining the Fuel and Power Purchase Cost Adjustment (in short 'FPPCA') for the financial year 2009 2010 along with reports from its statutory auditors certifying the relevant data as would be required for ascertaining the amount of allowable Fuel and Power Purchase Cost (in short "FPPC") for the financial year 2009 2010.
- 1.3 The FPPC during the refrerred adjustment period, i.e., financial year 2009 2010, is to be admitted in terms of the following formula as specified by the Commission in schedule 7 to the Tariff Regulations.

FPPC (In Rs.) = 
$$\left\{ FC + (PPC - C_D) - (\underline{+} A) \right\}$$

Where –

FC (Rs) Fuel Cost of own generation as per normative parameters fixed by the Commission or on actual basis in absence of any norm and UHV range as may be allowed under regulation 4.8 of the Tariff



Regulations, commensurate with actual level of energy sales to own consumers and / or licensees during the adjustment period.

PPC (Rs) Total cost incurred including the cost for fuel for power purchase from different sources commensurate with actual level of energy sales during the adjustment period.

C<sub>D</sub> (Rs) Cost disallowable by the Commission.

A Adjustment, if any, to be made in the current period to account for any excess / shortfall in recovery of fuel and power purchase cost in the past adjustment period based on directions / orders of the Commission.

As it comes out from the FPPCA formula quoted above, the actual cost incurred by the licensee for purchase of power requires to be reduced by the amount of the part of such cost, considered disallowable by the Commission. The computations of such disallowable cost are required to be done with reference to the amount admissible for the purchase of power computed following the methodologies specified in schedule 7 to the Tariff Regulations.

- 1.4 FPPCA formula provides for adjustment of allowable fuel and power purchase cost for the gain sharing in accordance with Schedule 9B to the Tariff Regulations. WBSEDCL has got no coal fired thermal power station to operate. Its own generation of electricity is from Hydro Generating stations and in terms of Part B of the referred schedule, gains accruing to it, if any, due to its actual performance being better than the norms set for any year are to be retained by it without any sharing.
- 1.5 The norm for distribution loss of WBSEDCL for the year 2009 2010 was considered 18.25% in the tariff order. As it comes out from the data as provided by WBSEDCL in its submission, the actual rate of distribution loss experienced



by it on the quanta of sales to consumers and other licensees at radial mode works out as under:

SI. No.	Particulars	Energy (MU)
1	Total Energy purchased including energy swap in (net of CTU loss)	26523.93
2	Energy sent out from own generating stations	1114.19
3	STU Grid loss	1021.04
4	Net UI Energy out	503.99
5	NET Energy Available with WBSEDCL from own generating stations and from purchase of power [(1)+(2) -(3)-(4)]	26113.09
6	Energy sold to persons other than own consumer and licensee including energy swap out	2237.26
7	Pumping energy for Purulia Pumped Storage Project (PPSP) including normative transmission loss	1267.98
8	Energy sold to licensee (excluding supply to DPSC limited at High Voltage)	1748.24
9	Normative transmission loss @ 3.8% on energy sold to licensee & Sikkim [(8)/(1038)]-(8)	69.06
10	Net Energy Available with WBSEDCL for sale to own consumers [(5)-(6)-(7)-(8)-(9)]	20790.55
11	Energy sold to own consumers (including supply to DPSC limited at High Voltage)	15691.46
12	Own consumption	38
13	Distribution loss [(10)-(11)-(12)]	5061.09
14	Distribution loss in %	24.34%

1.6 As it comes out from the above, the actual distribution loss of WBSEDCL (i.e., 24.34%), as a percentage of power available for distribution exceeded the same considered in the tariff order for the concerned year and as such, no gain accrued to it in this respect to share with the consumers.



# CHAPTER – 2 COMPUTATIONS OF THE AMOUNT OF ALLOWABLE FUEL AND POWER PURCHASE COST

- 2.1 In this part of the order, the Commission takes up the determination of fuel and power purchase cost allowable to WBSEDCL on the quantum of power sold by it to the consumers and other licensees during the financial year 2009 2010.
- 2.2 The values of different factors in the FPPCA formula referred to in the earlier chapter are worked out and admitted as under:

#### 2.2.1 **FC (FUEL COST)**:

WBSEDCL has got no coal fired thermal generating station to operate. It only operates a diesel generating station at Rudranagar in Sagar Island to meet up the local demand. The expenditure incurred for oil for operating that station was Rs. 88.43 lakh as certified by the Auditors and the same is admitted.

#### 2.2.2 **PPC (POWER PURCHASE COST):**

- 2.2.2.1 The quanta of power purchased by WBSEDCL from different sources and cost incurred thereon during 2009 2010 have been enumerated in Annexure 2A. As may be seen therein, the quantum of power purchased (net of CTU grid loss) during the year came to 26523.93 MU. The net cost incurred thereon after adjusting the rebate / incentive and the Short Term Open Access (STOA) charge paid for power purchase is Rs. 585581.47 lakh.
- 2.2.2.2 Out of the total purchase (net of CTU grid loss) of 26523.93 MU, WBSEDCL sold energy to persons other than own consumers and licensees to the tune of 1536.49 MU. Besides, 700.82 MU was swapped out by WBSEDCL during the period 2009 2010. The proportionate purchase cost of quantum of sale to persons other than consumers and licensees, comes to Rs. 33921.82 lakh. The



proportionate cost of the swap out energy comes to Rs. 15472.34 lakh. The quantum of purchase relating to distribution to own consumers and licensee and cost thereon come as under:

Particulars	Purchase (MU)	Cost (Rs. in Lakh)
Total Purchase	26523.93	585581.47
Less: Purchase cost of energy that is sold to the persons other than its own consumers & licensees.	1536.49	33921.82
Less: Purchase cost of energy that has been swap out during the year	700.82	15472.34
Quantum for effecting distribution to consumers and licensees	24286.62	536187.31
Average per unit (kwh) cost of power in the distribution system		220.77 paise

#### 2.3 C<sub>D</sub>: Cost Disallowable:

2.3.1 The actual amount of energy put to use for distribution to the consumers and licensees of WBSEDCL is computed as below:

SI. No.	Description	Quantity (MU)
1	Total energy purchased (Net of CTU Grid loss)	26523.93
2	STU Grid Loss	1021.04
3	Net U. I. Energy	503.99
4	Net energy available with WBSEDCL from purchase [1-(2+3)]	24998.90
5	Energy sold to persons other than own consumers and licensees	1536.49
6	Energy Swap Out	700.82
7	Pumping energy for Purulia Pumped Storage Project (PPSP) including normative transmission loss (1219.80/(1-0.038)	1267.98
8	Net purchased energy available with WBSEDCL for distribution to own consumers and licensees [4-(5+6+7)]	21493.61



2.3.2 In accordance with methodologies, as explained in the earlier chapter, the amount of cost disallowable works out as under:

SI. No.	Factor Notation	Nomenclature	Unit	Value
1	E <sub>SC</sub>	Quanta of energy sold to consumers (including sale to DPSC Limited from distribution system)	MU	15691.46
2	Eo	Admitted energy for own consumption	MU	36.00
3	d	Normative distribution loss	%	18.25
4	-	$E_{SC} + E_{O}$ (1 - d x 0.01)	MU	19238.48
5	E <sub>SL</sub>	Energy sold to other licensees (excluding sale to DPSC Limited from distribution system)	MU	1748.24
6	t	Normative T & D loss for E <sub>SL</sub> (5)	%	3.80
7	-	E <sub>SL</sub> (1 – t x 0.01)	MU	1817.30
8	E	Auxiliary consumption in excess of norms	MU	0.00
9	Eg	Energy sent out from own generating station	MU	1114.19
10	E <sub>Adm</sub>	Purchase of energy admitted [(4) + (7) - (8) - (9)]	MU	19941.59
11	E <sub>P</sub>	Total energy purchased for distribution and supply to own consumers and licensees	MU	21493.61
12	E <sub>E</sub>	Excess energy purchased [(11) – (10)]	MU	1552.02
13	EP <sub>Avg</sub>	Average purchase cost	Paise / kwh	220.77
14	C <sub>D</sub>	Cost disallowed [(12) x (13)]	Rs in Lakh	34263.95

#### 2.4 A (PRIOR PERIOD ADJUSTMENTS):

2.4.1 WBSEDCL claimed an amount of Rs. 17588.07 lakh being the amount of fuel cost adjustment allowed to West Bengal Power Development Corporation Limited (WBPDCL) for the year 2007 – 2008 and Rs. 1606.37 lakh being the Annual Performance Review (in short "APR") adjustment of WBPDCL for the



year 2007 – 2008 adjusted in the ARR of WBPDCL for 2009 – 2010 and paid by WBSEDCL during 2009 – 2010 in instalments towards power purchase cost. That amount of Rs. 19194.44 lakh (Rs. 17588.07 lakh + Rs. 1606.37 lakh) was booked in the Accounts of WBSEDCL for the year 2008 - 2009 and the said amount of Rs. 19194.44 lakh was claimed by WBSEDCL towards power purchase cost in their FPPCA application for 2008 - 2009 which was not admitted in the FPPCA order for 2008 - 2009, since the amount was neither payable in 2008 - 2009 nor paid in 2008 - 2009. The amount of Rs. 17588.07 lakh being the fuel cost adjustment allowed to WBPDCL for recovery from WBSEDCL in 12 monthly instalments from April, 2009 and paid by WBSEDCL in 2009 – 2010 has now been admitted by the Commission as prior period adjustment. The amount of Rs. 1606.37 lakh being the APR adjustment of WBPDCL for the year 2007 -2008 was adjusted in Aggregate Revenue Requirement (in short "ARR") of WBPDCL for 2009 - 2010 while determining the tariff of WBPDCL for 2009 -2010 resulting in inclusion of the same in the cost of power purchased by WBSEDCL from WBPDCL during 2009 - 2010. Therefore, the amount of Rs. 1606.37 lakh has not been considered further. In view of above, Rs. 17588.07 lakh has now been admitted by the Commission as prior period adjustment.

#### 2.5 Allowable Fuel and Power Purchase Cost:

2.5.1 Putting the value of factors, as discussed and admitted in the foregoing paragraphs, the amount of allowable fuel and power purchase cost to WBSEDCL for the year 2009 – 2010 works out as under:

SI.	Particulars / Factors	As admitted by the	
No.		Commission (Rs. in Lakh	
1	FC: Fuel Cost	88.43	
2.	PPC: Power Purchase Cost	536187.31	
3.	C <sub>D</sub> : Cost Disallowable.	34263.95	
4.	A: Prior Period's Adjustment	17588.07	
5.	FC+(PPC-C <sub>D</sub> )+A	519599.86	



## ANNEXURE – 2A ACTUAL POWER PURCHASE FOR 2009 – 2010

SI. No.	Sources	Quantum	Cost
31. NO.		(MU)	(Rs. in Lakh)
1	NTPC LIMITED	3251.62	86864.77
2	PTC	1933.59	34326.43
3	NHPC	708.20	12795.42
4	DVC	681.76	33785.17
5	DPL	679.06	18235.66
6	WBPDCL	18419.35	363999.09*
7	DPSC	190.43	7969.26
8	SIKKIM	0.18	6.97
9	CESC	54.16	2267.92
10	WBREDA	0.65	23.63
11	NVVNL	12.12	588.24
12	TPTCL(SHORT TERM)	158.53	10758.07
13	PTC (Short term)	77.90	2941.52
14	NEORA HYDRO LTD	6.73	242.19
15	ELECTRO STEEL CASTINGS LTD	33.11	837.68
16	NIPPON POWER LTD	11.37	354.61
17	OTHER GREEN POWER	295.01	9640.04
18	THROUGH ENERGY EXCHANGE (IEX & PXIL)	23.06	1348.94
19	Swap in	176.50	3903.79
20	STOA CHARGE ON POWER PURCHASE		1471.53
21	TOTAL (1 TO 20)	26713.33	592360.93
22	LESS: CTU LOSS	189.40	0.00
23	GROSS QUANTA & COST OF POWER PURCHASE (21 – 22)	26523.93	592360.93
24	LESS: Rebate for timely payment	0.00	6779.46
25	NET POWER PURCHASE COST & QUANTA OF ENERGY PURCHASED	26523.93	585581.47

\*Note: Cost of power purchased from WBPDCL includes the capacity charges amounting to Rs. 38845.32 lakh in respect of new units of WBPDCL.



## CHAPTER – 3 ORDER

- 3.1 The analyses in the earlier chapter show that the aggregate amount of fuel and power purchase cost that can be allowed to WBSEDCL for the year 2009 2010 comes to Rs. 519599.86 lakh.
- 3.2 The Commission decides, in terms of regulation 2.8.7.1 of the Tariff Regulations, to consider this amount of Rs. 519599.86 lakh allowable towards fuel and power purchase cost along with the Annual Performance Review for the year 2009 2010 and to give effect of that while ascertaining the amount recoverable through tariff during the ensuing year 2011 2012.
- 3.3 WBSEDCL is to take note of this Order.

Sd/- 30.06.2010 (R.P. SAMADDAR) MEMBER Sd/- 30.06.2010 (PURNENDU GUPTA) MEMBER Sd/- 30.06.2010 (PRASAD RANJAN RAY) CHAIRPERSON

DATED: 30.06.2010