



ORDER

OF THE

WEST BENGAL ELECTRICITY REGULATORY COMMISSION

FOR THE YEAR 2011 - 2012

IN

CASE NO: TP – 53 / 11 – 12

**IN RE THE DETERMINATION OF WHEELING
CHARGES PAYABLE TO WEST BENGAL STATE ELECTRICITY
DISTRIBUTION COMPANY LIMITED (WBSEDCL) FOR THE USE OF ITS
DISTRIBUTION SYSTEM FOR CONVEYANCE OF ELECTRICITY BY OPEN
ACCESS CUSTOMERS INCLUDING CAPTIVE GENERATING PLANTS
DURING THE FINANCIAL YEAR 2011 – 2012 UNDER SECTION 62(1)(C) OF
THE ELECTRICITY ACT, 2003 .**

DATED: 11.04.2013



CHAPTER – 1 INTRODUCTION

- 1.1 In terms of regulation 2.1.1(iv) of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended (hereinafter referred to as the “Tariff Regulations”), the West Bengal Electricity Regulatory Commission (hereinafter referred to as the “Commission”) is required to determine the wheeling charges payable to the distribution licensees for the use of their distribution system and associated facilities for conveyance of electricity by all open access customers including the captive generating plants. Accordingly, the Commission proceeds to determine such wheeling charges payable to West Bengal State Electricity Distribution Company Limited (in short “WBSEDCL”) by such customers / system users during the year 2011 - 2012.
- 1.2 On prudent analyses and viewing the tariff application made by WBSEDCL, the Commission earlier determined the Aggregate Revenue Requirement (in short “ARR”) of WBSEDCL separately for each year of the third control period comprising the financial years 2011 – 2012, 2012 – 2013 and 2013 – 2014 under the Multi Year Tariff (in short “MYT”) approach. The ARR for the year 2011 – 2012 may be referred to in Annexure – 6A to the Commission’s Tariff Order dated 01.12.2012 in Case No. TP-53/11-12.
- 1.3 The Commission now takes up the matter relating to determination of the rate of distribution wheeling charges for the year 2011 – 2012 in accordance with the principles, terms and conditions laid down in Schedule – 4 to the Tariff Regulations.



CHAPTER – 2 DETERMINATION OF FIXED CHARGES RELATING TO DISTRIBUTION FUNCTION

- 2.1 WBSEDCL is a distribution licensee having certain hydro-power generating stations including Purulia Pump Storage project with the total installed capacity of 900 MW. The admissible charges of WBSEDCL under certain heads of accounts are, therefore, required to be segregated / allocated to generation and distribution functions on some rational basis. Annexure – 6A to the Commission's tariff order dated 01.12.2012 in Case No. TP – 53 / 11 – 12, determining the tariff of WBSEDCL for the year 2011 - 2012, may be referred to in this regard. After prudent analysis of the amounts of ARR for the year 2011 – 2012 and making such segregation / allocations, the gross amount of total fixed charges attributable to the distribution function of WBSEDCL to be considered for determining wheeling charges is found to be Rs. 231647.49 lakh. The amounts of provisions for bad and doubtful debts of Rs. 4.00 lakh as well as an amount of Rs. 3054.00 lakh towards depreciation chargeable on metering assets and Rs. 2870.00 lakh towards interest payable to consumers on their security deposits have not been considered in the above computation. The detailed head-wise break-up of the referred amount is given in Annexure – 2A.
- 2.2 The gross amount of total fixed charges, i.e., Rs. 231647.49 lakh, as shown in Annexure – 2A, is the gross aggregate revenue requirement for distribution wheeling. Paragraph 2.1 of Schedule – 4 to the Tariff Regulations provides for deduction of non-tariff income and income from other business from the gross aggregate revenue requirement attributable to distribution function for ascertaining the wheeling charges payable by the open access customers. The entire amount of Rs. 36266.00 lakh of non-tariff income along with expenses incidental to selling and distribution of energy of Rs. 8258.02 lakh, interest credit of Rs. 612.79 lakh have been deducted from the gross amount of aggregate



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revenue requirement to arrive at the net admissible amount of fixed charges for computation of the rate of wheeling charges.

- 2.3 Based on the foregoing analyses, the amount of fixed charges attributable to the distribution function of WBSEDCL for the year 2011 - 2012 for determination of rate of wheeling charges payable by the open access customers including the captive generating plants comes as under:

	Rs. in Lakh
(a) Gross amount of fixed charges relating to distribution wheeling (Annexure 2A)	231647.49
(b) Less:	
i) Non-tariff income related to Distribution function	36266.00
ii) Expenses incidental to selling & distribution of energy, viz. billing, collection, consumer complaints, etc.	8258.02
iii) Interest credit	612.79
iv) Total [sum of (i) to (iii)]	45136.81
(c) Net admissible amount of fixed charges relating to distribution wheeling [(a)+(b)]	186510.68

- 2.4 The total quantum of sale of electricity during the year 2011 – 2012 has been estimated as under:

	Million Units
(a) Sales to own consumers	18790.60
(b) Sale to other licensees	1117.91
(c) Sale to Licensee below EHV	267.87
(d) Energy wheeled	11.72
Total	20188.10



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- 2.5 Accordingly, the average rate of recoverable wheeling charges comes to **92.39 paise per unit (kWh)** taking sale of energy (including energy wheeled) of 20188.10 MU as shown in paragraph 2.4 above.
- 2.6 The avoided cost as computed in terms of the formula provided in regulation 14.3.10 of the West Bengal Electricity Regulatory Commission (Open Access) Regulations, 2007 in case of WBSEDCL works out as under:
- A. Total power purchase cost of WBSEDCL during the year 2011-12 as shown in Annexure 4B of the Tariff Order of WBSEDCL for the year 2011 – 2012 is Rs. 966503.52 lakh. The power purchase cost includes the cost of power from West Bengal Power Development Corporation Limited (WBPDC). This power purchase cost includes both capacity charges and variable charges. The Tariff Order of WBPDC dated 01.12.2012 for the years 2011 – 2012 and 2012 – 2013 may be referred to in this regard.

The total annual capacity charges of five generating stations of WBPDC as allowed in the said tariff order for the year 2011 – 2012 are as follows:

Generating Station	2011 – 2012
	Annual capacity charge in Rs. lakh
Kolaghat	59713.19
Bakreswar (Units I to V)	75554.98
Bandel	15666.10
Santalidih (Units V & VI)	44456.84
Sagardighi	46897.43
Total	242288.54

Thus the power purchase cost of WBSEDCL excluding the capacity charges payable is Rs. 724214.98 lakh (Rs. 966503.52 lakh – Rs. 242288.54 lakh). Since the segregation of the cost of power purchase from other agencies are not available, total cost of power purchase from other agencies has been considered in the computation of avoided cost.



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B. Total Fuel Cost of WBSEDCL during 2011 – 2012 is Rs.73.00 lakh.

C. Total Fuel and Power Purchase variable cost of WBSEDCL thus comes to Rs. 724287.98 lakh (Rs. 724214.98 lakh + Rs. 73.00 lakh).

D. Computation of avoided cost:

(a)	Total Fuel and Power Purchase Variable Cost	=	Rs. 724287.98 Lakh
(b)	Quanta of energy pooled in the distribution system		
	(i) Sent-out energy from own generation	1180.74 MU	
	(ii) Purchase of Energy	30296.82 MU	30167.66 MU
	(iii) CTU Grid loss and STU loss	Less: (-)1309.90 MU	
(c)	Weighted average unit cost of pooled energy [(a) / (b)]		240.09 paise / kWh
(d)	Distribution Loss allowed for the year		17.75%
(e)	Avoided cost will be -		
	$\frac{240.09 \text{ paise / kWh}}{(100-17.75) \times 0.01}$	+	Wheeling charges per unit applicable to the relevant open access case.
	= 291.90 paise / kWh + Wheeling charges per unit as applicable		



ANNEXURE – 2A
HEAD WISE BREAKUP OF THE AMOUNT OF
NET FIXED CHARGES ATTRIBUTABLE TO
DISTRIBUTION FUNCTION

Sl. No.	Head of Charges	Amount (Rs. in Lakh)
1	Employee cost	85719.00
2	Cost of Outsourcing	16135.12
3	Operation & Maintenance Expenses	24850.89
4	Rates & Taxes	97.42
5	Insurance	59.43
6	Interest on Loan	24389.18
7	Interest on Bonds for Pension Fund	11742.00
8	Other Finance Charges	523.00
9	Depreciation (net of depreciation on metering asset)	23002.85
10	Reserve for Unforeseen Exigencies	0.00
11	Taxes under Income Tax Act	2915.00
12	Return on equity	42213.60
13	Total Fixed Charges	231647.49



CHAPTER – 3 ORDER

- 3.1 The average rate of distribution wheeling charges of WBSEDCL for the year 2011 – 2012 comes to 92.39 paise per unit (kWh) as shown in the preceding chapter and the same is recoverable from the long term open access customers. In terms of the provisions contained in regulation 14.3.2 of the West Bengal Electricity Regulatory Commission (Open Access) Regulations, 2007, as amended (hereinafter referred to as the “Open Access Regulations”), the Commission is fixing the rate of wheeling charges and the same is to be recovered by WBSEDCL during the year 2011 – 2012 from different categories of open access customers as mentioned in the said regulation including captive generators for conveyance of electricity through its distribution system for long term open access. For short term open access, the wheeling charge shall be realized as per Open Access Regulations. For short term open access, the wheeling charge shall be realized as per Open Access Regulations. However, for conveyance of electricity from cogeneration and renewable energy sources, the wheeling charge shall be realized by WBSEDCL from such open access customer as per regulation framed by the Commission on Cogeneration and Generation of Electricity from Renewable Sources of Energy.
- 3.2 In terms of the provisions contained in regulation 14.3.10 of the Open Access Regulations, the open access customers, other than those carrying the electricity generated in captive generating plant to the destination and for the extent of their own use, are to pay cross-subsidy surcharge in addition to the charges for using the distribution system of the licensees. Such cross-subsidy surcharge will be the difference between the tariff applicable for the category of the customers being allowed open access and the cost avoided (per unit) by the licensee in this regard.



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- 3.3 WBSEDCL will determine the avoided cost for the concerned open access customers at the rate of 291.90 paise per kWh plus wheeling charges per unit as applicable to the relevant open access case as shown in chapter 2 of this order and will recover cross-subsidy surcharge with reference to the tariff applicable for that category of consumers.
- 3.4 The rate of wheeling charge and cross subsidy surcharge as per this order shall be effective from 1 April, 2011. The adjustments, if any, for over-recovery / under recovery for the period from 01. 04. 2011 to 31.03.2012 shall be in 6 (six) equal monthly instalments starting from the billing month of April, 2013.
- 3.5 To discourage VAr drawals by the Open Access Customers, the Open Access Customer shall pay to the concerned licensee for drawal of reactive energy at the drawal point if the voltage at the point of drawal is below 97% of normal voltage and injection of reactive energy at injection point when the voltage is higher than 103% of normal voltage at the existing rate of 10 paise per KVArh.
- 3.6 WBSEDCL shall submit to the Commission a gist of this order within three working days from the date of receipt of this order for approval of the Commission and on receipt of the approval shall publish the approved gist, in those newspapers in which the gist of the tariff order for 2011 – 2012 and 2012 – 2013 was published, within four working days from the date of receipt of the approval of the Commission.

Sd/-

**(SUJIT DASGUPTA)
MEMBER**

Sd/-

**(PRASADRANJAN RAY)
CHAIRPERSON**

DATE: 11.04.2013