



ORDER

OF THE

WEST BENGAL ELECTRICITY REGULATORY COMMISSION

FOR THE YEAR 2020-21 to 2022-23

IN CASE NO.: TP – 95/20-21

**IN REGARD TO THE DETERMINATION OF TARIFF, ARR AND EXPECTED REVENUE
FROM CHARGES FOR THE SEVENTH CONTROL PERIOD CONSISTING OF THE
FINANCIAL YEARS 2020-21 TO 2022-23 OF WEST BENGAL POWER DEVELOPMENT
CORPORATION LIMITED (WBPDC)**

PRESENT :

**SRI SUTIRTHA BHATTACHARYA, CHAIRPERSON
SRI DURGADAS GOSWAMI, MEMBER
SRI PULAK KUMAR TEWARI, MEMBER**

DATE: 08.10.2021



CHAPTER – 1

INTRODUCTION

- 1.1 The West Bengal Electricity Regulatory Commission (hereinafter referred to as the "Commission"), a statutory body under the first proviso to section 82(1) of the Electricity Act, 2003 (hereinafter referred to as the "Act"), has been authorized in terms of the section 86 and section 62(1) of the Act to determine the tariff for a) supply of electricity by a generating company to a distribution licensee, b) transmission of electricity, c) wheeling of electricity and d) retail sale of electricity, as the case may be, within the State of West Bengal.
- 1.2 The West Bengal Power Development Corporation Limited (hereinafter referred to as WBPDCCL), constituted in 1985 and registered under the Companies Act, 1956, is a generating company in terms of section 2(28) of the Act wholly owned by the State Government and is engaged in the business of generation of electricity within the State of West Bengal and the generation tariff of WBPDCCL shall be determined by the Commission.
- 1.3 In terms of definition contained in regulation 1.2.1 (xxx) of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended from time to time (hereinafter referred to as the 'Tariff Regulations'), each control period after third control period shall be normally for a period of five ensuing years or such other period of number of ensuing years as may be decided by the Commission from time to time. The Commission, after careful consideration of all relevant factors, vide its order dated 28.05.2019 in Case No. SM-19/19-20 decided that the seventh control period shall be for three ensuing years consisting of 2020-21, 2021-22 and 2022-23. The Commission vide order dated 01.07.2020 in case No B-11/23(Part) extended the last date of filing tariff petition for the seventh control period upto 31.08.2020 considering repeated prayer of the utilities of the State in view of issuance of third amendment of the Tariff Regulations and continuing lockdown conditions as per direction of the Government to contain spread of COVID-19.
- 1.4 WBPDCCL submitted the petition dated 18.08.2020 for determination of tariff for the seventh control period consisting of the years 2020-21, 2021-22 and 2022-23 on 25.08.2020 pursuant to the order dated 01.07.2020 in case no, B-11/23(Part) of the Commission extending the due date



for submission of tariff petition for the seventh control period upto 31.08.2020. On query, WBPDCCL has submitted additional information/data vide their letter dated 04.12.2020.

- 1.5 The tariff petition dated 18.08.2020 along with the information / data, documents submitted by WBPDCCL vide letter dated 04.12.2020 (collectively called as "tariff application"), were admitted by the Commission in case No.TP-95/2020-21, with the direction to publish the gist of their tariff application, as approved by the Commission, in the newspapers and also in their website as per provisions of the Tariff Regulations. The gist was, accordingly, published simultaneously on 14.01.2021 in the newspapers - (i) 'The Times of India' (English), (ii) The 'Ei Samay' (Bengali), (iii) The 'Aajkaal' (Bengali) and (iv) The 'Sanmarg' (Hindi). The gist along with the tariff application was also posted in the website of WBPDCCL. The publication invited the attention of all interested parties, stakeholders and the members of the public to the application for determination of tariff of WBPDCCL for the seventh control period and requested for submission of suggestions, objections and comments, if any, on the tariff application to the Commission latest by 08.02.2021. Opportunities were also afforded to all to inspect the tariff application and to take copies thereof.
- 1.6 No objection/suggestion/comment has been received from the stakeholders within the stipulated due date i.e., 08.02.2021.
- 1.7 The Commission now determines the tariff in accordance with the Electricity Act, 2003 and the Tariff Regulations framed thereunder.



CHAPTER - 2 THE CASE OF WBPDCCL

- 2.1. WBPDCCL has submitted the plant wise tariff for the five existing generating stations at Kolaghat, Bakreswar, Bandel, Sagardighi and Santaldih for the years 2020-21, 2021-22 and 2022-23 under the seventh control period.
- 2.2. WBPDCCL has submitted that the information furnished in the prescribed formats, along with Accounting Statements, Audited Financial Performance for the period from 2014-15 to 2018-19 along with Cost Accounting Records for FY 2018-19. The projection for the financial years 2020-21, 2021-22 and 2022-23 (ensuing years) are based on the reasonable estimation / projection where the operating norms are not applicable.
- 2.3. **The Submission of WBPDCCL on different issues and against their claim under different heads of accounts are summarized as below:**
- 2.3.1 **Generation Targets from different generating stations of WBPDCCL for 2020-21, 2021-22 and 2022-23:**

WBPDCCL has submitted generation projection from different existing power plants, based on the operating norms specified in Schedule – 9A of the Tariff Regulations, for the financial 2020-21, 2021-22 and 2022-23. In their petition WBPDCCL has shown the actual Plant Availability Factor (PAF) and Plant Load Factor (PLF) since 2015-16 to 2019 – 2020 in respect of all generating stations wherein it is seen that WBPDCCL could not achieve the target normative PAF except for Bakreswar and Santaldih generating stations due to various reasons as specified in the petition.

2.3.2 Auxiliary Consumption, Station Heat Rate etc.:

WBPDCCL has proposed the gross generation, auxiliary consumption and net generation for the year 2019-20 as per unaudited data and same for the years 2020-21, 2021-22 and 2022-23 have been arrived at considering the normative PLF and normative auxiliary consumption as specified in the Tariff Regulations except for Kolaghat generating station as detailed in the petition..

WBPDCCL has considered the Station Heat Rate (SHR) as per norms specified in the Tariff Regulations.



All other parameters viz. specific oil consumption, transit loss, etc. have been considered as per norms specified in the Tariff Regulations.

2.3.3 Cost of Fuel:

The primary fuel cost has been arrived at by estimating the coal consumption based on the technical parameters of each of the generating stations. The fuel mixes are based on the estimated availability of quality and quantity of coal from different sources i.e., CIL subsidiaries and captive coal block of the petitioner. The prices of fuel viz. coal and oil and railways freight have been considered by WBPDCCL based on the latest price notified by the respective authorities. The average coal prices of CIL subsidiaries for the years 2020-21, 2021-22 and 2022-23 are estimated on the basis of latest prices (inclusive of taxes and duties) notified by the Ministry of Coal, Government of India on 08.01.2018.

The coal cost is further added up to include the railway freight charges as per latest notification of the respective authorities for transportation of coal from the coal mines to the generating stations. The freight charge is estimated for the years 2020-21, 2021-22 and 2022-23 on per MT of coal.

The cost of secondary fuel for the year 2019-20 has been claimed as per actual but unaudited data for the year. The cost of secondary fuel for the year 2020-21, 2021-22 and 2022-23 have been estimated on the basis of projected secondary oil consumption for the respective years and the latest price of oil. No escalation has been considered for future years,

2.3.4 Employee Cost:

WBPDCCL has submitted that the components of employee cost including salaries and wages, bonus, contribution to employee funds, employees' welfare expenses are in line with Tariff Regulations. WBPDCCL has projected the employee cost for the years 2020-21, 2021-22 and 2022-23 for all generating stations on the basis of actual employee cost during the year 2020-21 (April 2020 to July 2020) which has further been escalated by 4% for the years 2020-21 and 2021-22. The escalation rate of 4% has been considered based on annual rate of increment @ 3.3% [considering existing 10% Dearness allowance (D.A.)] Recruitment activity alongwith retirement during the periods have been factored into.



2.3.5 Operation and Maintenance Expenses (O&M):

WBPDCCL has projected the Operation and Maintenance Expenses as per actuals during the year 2019-20. An escalation factor of 5.20%, the average CPI inflation rate, has been claimed for the expenses estimated for the years 2020-21, 2021-22 and 2022-23.

2.3.6 Coal and Ash Handling Charges:

The coal and ash handling charges for all the generating stations have been projected as per actuals during the year 2019-20. An escalation factor of 5.20%, the average CPI inflation rate, has been claimed for the expenses estimated for the years 2020-21, 2021-22 and 2022-23.

2.3.7 Water Charges:

The petitioner has estimated the cost of water charges based on actual expenditure incurred during the year 2019-20 for Santaldih generating station only. No water charges have been claimed for other generating stations viz. Kolaghat, Bakreswar, Bandel and Sagardighi TPS as the same has been subsumed in GST.

2.3.8 Insurance Premium:

WBPDCCL has projected generating station wise insurance premium after thorough review of the existing coverage for each generating station. It is submitted that the company has moved from fire policy cover to industrial All Risk / Mega policies where insurance coverage is much higher. WBPDCCL selects the insurance company through transparent process as stipulated in the regulation 5.23.1 of the Tariff Regulations. Insurance premium was based on the coverage of the assets. The reasons for increase in premium has been stated in the petition. It is also submitted that as some plants have become old, the coverage needs to be enhanced to reinstate value to enable replacement of its assets in case of a heavy loss.

2.3.9 Depreciation:

Depreciation has been proposed on the basis of rates of depreciation specified in the Commission's Tariff Regulations. The gross fixed assets are allocated to each of the depreciation



categories and depreciation for the new units or asset additions during the year have been considered only for the period for which these assets have been put in use.

2.3.10 Advance against Depreciation:

WBPDCCL has not proposed advance against depreciation for the years 2020-21, 2021-22 and 2022-23 under the seventh control period. WBPDCCL will claim actual advance against depreciation, if admissible, based on audited accounts of the year through annual performance review.

2.3.11 Interest and Finance Charge:

WBPDCCL has computed the interest charges considering prevailing interest rate. WBPDCCL has submitted the principal and interest against all outstanding loans and scheduled re-payment of such loan for all the years under the seventh control period for each generating station as per format specified in the Tariff Regulations. The finance charges include expenses on account of renewal of all credit facilities as well as processing charges for fresh borrowings along with various bank transaction charges. WBPDCCL has considered the finance charges as per actual expenditure during the year 2019-20 for the years 2020-21, 2021-22 and 2022-23 without any escalation.

2.3.12 Interest on Working Capital:

WBPDCCL has proposed the requirement of working capital for 2020-21, 2021-22 and 2022-23 on normative basis in terms of the Tariff Regulations of the Commission. Based on the working capital requirement on normative basis, interest on working capital is calculated at the State Bank of India prime lending rate of 13.85% per annum as on 01.04.2018.

2.3.13 Interest on Temporary Accommodation:

WBPDCCL has claimed interest on temporary accommodation to be made due to shortfall of recovery of arrears arising out of different tariff orders and FCA orders instalments and non-receipt of orders from the Commission in regard to fuel and fixed cost adjustments since 2014 – 2015 onwards. A detailed computation has been given by WBPDCCL in their petition.



2.3.14 Return on Equity:

The Return on Equity (ROE) for the years 2020-21, 2021-22 and 2022-23 under the seventh control period has been claimed by WBPDCCL as per provision of Tariff Regulations. WBPDCCL has claimed the ROE on pre-tax basis.

2.3.15 Income Tax:

WBPDCCL has not proposed Income Tax (MAT) for the years 2020-21, 2021-22 and 2022-23 under the seventh control period. WBPDCCL will claim actual amount of Income Tax of the concerned year of the control period through annual performance review.

2.3.16 Rent, Rates, Taxes, Licenses & Registration Fees and Filing Fees:

WBPDCCL has proposed rent, rates, taxes based on actual expenditure during 2018 – 2019 escalated by 5.44% for the year 2019 – 2020. Expenditure on account of filing fees has been considered as per the rates specified in the WBERC Fees Regulations, 2013.

2.3.17 ERPC Charges:

WBPDCCL has proposed Eastern Region Power Committee (ERPC) charges based on actual expenditure during 2019-20 with an annual escalation @ 5.20%. ERPC charges for the year 2019 – 2020 has been fixed at Rs. 16.00 lakh and the same has been claimed for the years 2020-21, 2021-22 and 2022. The ERPC charges has been allocated based on sent out generation of the respective generating station.

2.3.18 Income from Other Sources/ Non-Tariff Income:

WBPDCCL has projected income from other sources for the years 2020-21, 2021-22 and 2022-23 at the similar level based on actual non-tariff income during 2019-20 which includes income from sale of scrap, interest on short term deposits with the banks etc. The interest on short term deposits has been allocated on the basis of capacity of each generating station.

2.4 Annual Revenue Requirement:

WBPDCCL has submitted the summarized Annual Revenue Requirement for 2020-21, 2021-22 and 2022-23 and the proposed Tariff for each generating station in the Annexure to their petition.



CHAPTER -3 VARIABLE COST & EXPENDITURE

3.1 Fuel Cost:

3.1.1 An examination of the projected fuel cost claimed by WBPDCCL for the ensuing year 2020-21, 2021-2022 and 2022-23 of the seventh control period under different heads for its power stations presently in operation has been taken up in this chapter. For the purpose of fuel cost calculation and energy charge determination under this chapter, the energy generated from a generating station has been considered as per normative PLF of the generating station. It shall be noted that capacity charge recovery of the generating station shall be on the basis of normative PAF.

3.1.2 Fuel cost for different power stations of WBPDCCL presently in operation as per its projection comes as under:

Rs. in Lakh

Generating	2020-21	2021-22	2022-23
Kolaghat	199821.34	194456.18	194456.18
Bakreswar	132692.70	120627.91	122473.32
Bandel – I	16839.915	16640.029	16640.029
Bandel – II	30155.543	29765.383	29765.383
Santaldih	65396.11	62168.71	62168.71
Sagardighi – I	68532.92	68532.92	68532.92
Sagardighi – II	113089.51	113089.51	113089.51

3.1.3 In the tariff application for the seventh control period, WBPDCCL has proposed fuel cost on the basis of norms of plant load factor, auxiliary consumption rate, oil consumption rate, station heat rate and transit and handling losses of coal as specified in Schedule 9A of the Tariff Regulations. However, while proposing fuel cost for the years 2020-21, 2021-2022 and 2022-23 under the seventh control period, it is stated by WBPDCCL that they have projected the source wise coal consumption for each generating station for the years and have considered the average price of coal for the years 2020-21, 2021-2022 and 2022-23 as per the latest notification by the respective authorities.



3.1.4 WBPDCCL has also projected availability of coal from captive mines during the years 2020-21, 2021-2022 and 2022-23. WBPDCCL has claimed the basic price of coal from captive mines at notified price of Coal India Limited for each grade along with other associated costs. WBPDCCL

has submitted that in absence of specific guidelines for pricing of coal from captive mines in Commission's Regulations they have projected the prices of coal as per notified prices of Coal India Limited (CIL) for the respective grades of coal in accordance with the Tariff Regulations of Central Electricity Regulatory Commission (CERC) notified on 07.03.2019. In this regard WBPDCCL has referred to the provision of section 61(a) of the Electricity Act, 2003. CERC has now framed CERC (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2021 notified on 19.02.2021 specifying the regulations for determination of price of coal from integrated coal mine with retrospective effect. Commission considers the price of coal from the Captive mines as per notified price of CIL for respective grades as proposed by WBPDCCL **with the direction that WBPDCCL shall submit all the details in line with the CERC Second Amendment Regulations for determination of price for integrated coal mine in their FPPCA application for the years 2020-21, 2021-2022 and 2022-23. Commission will determine the input price of coal for the allotted coal mines retrospectively as per CERC Second Amendment Regulations in the FPPCA and APR orders of WBPDCCL for the respective years.**

3.1.5 WBPDCCL has also projected the secondary fuel oil cost for the years 2020-21, 2021-22 and 2022-23 based on the estimated oil consumption at latest price of oil which is considered by the Commission.

3.1.6 Commission considers the price of oil for the years 2020-21, 2021-22 and 2022-23 as projected by WBPDCCL for the respective generating stations. No hike in price of oil has been considered for the years 2021-22 and 2022-23. The Commission considered the grade wise price of coal as projected by WBPDCCL for the years 2020-21, 2021-22 and 2022-23. The Commission also does not consider any hike for each grade of coal over the projected price as per notification of CIL to determine weighted average price of coal for the ensuing years 2021-22 and 2022-23. The Commission, however, views that if there is any variation in fuel price in future from the fuel price



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

considered in this order for ensuing years, WBPDCCL should take re-course of Monthly Fuel Cost Adjustment (MFCA) in terms of regulation 5.8.9 and 5.8.10 of the Tariff Regulations.

3.1.7 The Commission has adopted the procedure for calculation of the fuel cost in accordance with regulation 5.8.4 of the Tariff Regulations as amended vide notification No 65/WBERC dated 21.01.2020 and normative parameters applicable to WBPDCCL as specified in the Tariff Regulations. The average price of coal for the years 2020-21, 2021-22 and 2022-23 have been determined on the basis of projected grade mix of coal for the respective years.

3.1.8 Accordingly, the average oil price and the average coal price considered for the generating station of WBPDCCL for the years 2020-21, 2021-2022 and 2022-23 under the seventh control period are shown below:

Generating Station	Average Coal Price in Rs./MT			Average Oil Price in Rs./KL		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Bakreswar	3566.82	3026.10	3103.26	50062.13	50062.13	50062.13
Kolaghat	3809.74	3776.22	3776.22	54007.79	54007.79	54007.79
Bandel – I	3316.62	3449.87	3449.87	51972.86	51972.86	51972.86
Bandel – II	3403.36	3536.43	3536.43	51972.86	51972.86	51972.86
Santaldih	3053.59	3067.34	3067.34	51278.05	51278.05	51278.05
Sagardighi – I	3296.91	3296.91	3296.91	53104.71	53104.71	53104.71
Sagardighi - II	3296.90	3296.91	3296.91	52479.15	52479.15	52479.15

3.1.9 WBPDCCL determined average heat value of coal, based on allocation schedule of different grades of coal. The Heat value of oil and coal as admitted by the Commission for the ensuing years under the seventh control period are shown below:

Generating Station	Heat Value of Coal in kCal/kg			Heat Value of Oil in kCal/Lit		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Bakreswar	5068.00	4747.45	4792.26	9681.24	9681.24	9681.24
Kolaghat	4155.20	4237.36	4237.36	9330.64	9330.64	9330.64
Bandel – I	4335.11	4566.50	4566.50	9135.72	9135.72	9135.72
Bandel – II	4335.11	4566.51	4566.51	9135.72	9135.72	9135.72
Santaldih	4096.52	4334.94	4334.94	9521.13	9521.13	9521.13
Sagardighi – I	4922.84	4922.84	4922.84	9456.96	9456.96	9456.96
Sagardighi - II	4922.84	4922.84	4922.84	9456.96	9456.96	9456.96



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

The computation of average heat value and average price of coal are shown in Annexure – 3A1 to 3A7, 3BC1 to 3C7 and 3E1 to 3E7 for the respective years 2020-21, 2021-2022 and 2022-23.

3.1.10 On the basis of above average price of coal and average price of oil and as per above heat value of fuel and normative parameters as specified in Schedule 9A of the Tariff Regulations, the allowable fuel costs for the respective years 2020-21, 2021-2022 and 2022-23 are shown by detailed computations in the tables at Annexure- 3B, 3D and 3E as annexed to this chapter.

3.1.11 The summarized statement of admitted fuel cost for the power stations of WBPDC for the seventh control period is given hereunder.

Rs.in Lakh

Generating Stations	Total fuel cost as claimed by WBPDC			Fuel Cost as admitted by the Commission		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	199821.34	194456.18	194456.18	199822.40	194457.74	194457.74
Bakreswar	132692.70	120627.91	122473.32	132692.66	120629.71	122472.65
Bandel – I	16839.915	16640.029	16640.029	16839.91	16640.02	16640.02
Bandel – II	30155.543	29765.383	29765.383	30155.53	29765.35	29765.35
Santaldih	65396.11	62168.71	62168.71	65395.93	62168.63	62168.63
Sagardighi – I	68532.92	68532.92	68532.92	68532.95	68532.85	68532.85
Sagardighi – II	113089.51	113089.51	113089.51	110912.76	110913.04	110913.04

3.1.12 Energy Charges of the generating stations of WBPDC for the years 2020-21, 2021-2022 and 2022-23 now stands as follows:

Year: 2020-21

Particulars	Bakreswar	Kolaghat	Bandel I	Bandel II	Santaldih	Sagardighi I	Sagardighi II
Fuel Cost (Rs. in lakh)	132692.66	199822.40	16839.91	30155.53	65395.93	68532.95	110912.76
Ex-bus Generation (MU)	6696.14	6984.59	612.22	1371.12	3188.64	3826.37	6377.28
Energy Charge (Paise/kWh)	198.16	286.09	275.06	219.93	205.09	179.11	173.92



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

Year: 2021-22

Particulars	Bakreswar	Kolaghat	Bandel I	Bandel II	Santalalih	Sagardighi I	Sagardighi II
Fuel Cost (Rs. in lakh)	120629.71	194457.74	16640.02	29765.35	62168.63	68532.85	110913.04
Ex-bus Generation (MU)	6696.14	6984.59	612.22	1371.12	3188.64	3826.37	6377.28
Energy Charge Paise/kWh	180.15	278.41	271.80	217.09	194.97	179.11	173.92

Year: 2022-23

Particulars	Bakreswar	Kolaghat	Bandel I	Bandel II	Santalalih	Sagardighi I	Sagardighi II
Fuel Cost (Rs. in lakh)	122472.65	194457.74	16640.02	29765.35	62168.63	68532.85	110913.04
Ex-bus Generation (MU)	6696.14	6984.59	612.22	1371.12	3188.64	3826.37	6377.28
Energy Charge (Paise/kWh)	182.90	278.41	271.80	217.09	194.97	179.11	173.92



ANNEXURE – 3A 1

YEAR – 2020-21

KOLAGHAT THERMAL POWER STATION:

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	240084.00	4.78%	4556.51	707.13		5263.64	12637.16
	G5	5800 < > 6100	5800	5800	58411	1.16%	4209.94	707.13		4917.07	2872.11
	G6	5500 < > 5800	5500	5500	32675	0.65%	3658.69	707.13		4365.82	1426.53
	G7	5200 < > 5500	5200	5200	32645	0.65%	3145.5	707.13		3852.63	1257.69
BCCL	W-IV		4600	4600	480376.86	9.56%	3577.12	672.9		4250.02	20416.11
	W-V		4300	4300	465544.37	9.26%	3382.67	672.9		4055.57	18880.48
MCL	G12	3700 < > 4000	3700	3700	78927	1.57%	1723.77	1457.01		3180.78	2510.49
	G13	3400 < > 3700	3400	3400	976139.00	19.42%	1637.93	1457.01		3094.94	30210.92
MCL-Washed	G11	4000 < > 4300	4200	4200	1455263	28.95%	2680.33	1192.35		3872.68	56357.68
CCL	W-III		4900	4900	64816	1.29%	3701.2	878.64		4579.84	2968.47
	W-IV		4600	4600	582776	11.59%	3377.75	878.64		4256.39	24805.22
Captive-Barjore	G10	4300 < > 4600	4301	4301	558457.00	11.11%	1959.96	1109.11		3069.07	17139.44
TOTAL				4275.2	5026114.23	99.99%				3809.74	191482.29



ANNEXURE – 3A 2

YEAR – 2020 – 2021

BAKRESWAR THERMAL POWER STATION:

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	1253629.00	34.96%	4556.51	274.1		4830.61	60557.93
	G5	5800 < > 6100	5800	5800	251581.00	7.02%	4209.94	274.1		4484.04	11280.99
	G6	5500 < > 5800	5500	5500	20606.00	0.57%	3658.69	274.1		3932.79	810.39
	G7	5200 < > 5500	5200	5200	12386.00	0.35%	3145.5	274.1		3419.6	423.55
CCL	W-IV		4600	4600	176893.00	4.93%	3377.75	615.79		3993.54	7064.29
Captive-Barjore	G7	5200 < > 5500	5200	5200	384550.00	10.72%	3145.5	399.91		3545.41	13633.87
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	192275.00	5.36%	1776.34	453.13		2229.47	4286.71
Captive-Pachhwara (North)	G9	4600 < > 4900	4600	4600	769101.00	21.45%	2039.13	432.08		2471.21	19006.10
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300	524911.00	14.64%	1959.96	105.19		2065.15	10840.20
TOTAL				5188	3585932.00	100.00%				3566.82	127904.04



ANNEXURE – 3A 3

YEAR – 2020 – 2021

BANDEL THERMAL POWER STATION (I & II):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	84351.00	17.54%	4556.51	672.2		5228.71	4410.47
	G5	5800 < > 6100	5800	5800	5498.00	1.14%	4209.94	672.2		4882.14	268.42
	G6	5500 < > 5800	5500	5500	2877.00	0.60%	3658.69	672.2		4330.89	124.60
	G7	5200 < > 5500	5200	5200	5935.00	1.23%	3145.5	672.2		3817.7	226.58
BCCL	W-IV		4600	4600	55754.00	11.59%	3577.12	725.96		4303.08	2399.14
	W-V		4300	4300	18242.00	3.79%	3382.67	725.96		4108.63	749.50
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	184990.00	38.46%	1776.34	732.564		2508.904	4641.22
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300	123327.00	25.64%	1959.96	579.7575		2539.718	3132.16
TOTAL				4455.11	480974.00	99.99%				3316.61	15952.08



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

ANNEXURE – 3A 4

YEAR – 2020 – 2021

BANDEL THERMAL POWER STATION (V):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	148329.00	17.54%	4556.51	672.2		5228.71	7755.69
	G5	5800 < > 6100	5800	5800	9669.00	1.14%	4209.94	672.2		4882.14	472.05
	G6	5500 < > 5800	5500	5500	5060.00	0.60%	3658.69	672.2		4330.89	219.14
	G7	5200 < > 5500	5200	5200	10437.00	1.23%	3145.5	672.2		3817.7	398.45
BCCL	W-IV		4600	4600	98043.00	11.59%	3577.12	725.96		4303.08	4218.87
	W-V		4300	4300	32078.00	3.79%	3382.67	725.96		4108.63	1317.97
Captive-Barjore(Northern)	G12	3700 < > 4000	3700	3700	325302.00	38.46%	1776.34	732.564		2508.904	8161.51
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300	216868.00	25.64%	1959.96	918.0465		2878.007	6241.48
TOTAL				4455.11	845786.00	99.99%				3403.35	28785.17



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

ANNEXURE – 3A 5

YEAR – 2020 – 2021

SANTALDIH THERMAL POWER STATION:

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	150679.00	7.23%	4556.51	315.85		4872.36	7341.62
	G5	5800 < > 6100	5800	5800	10687.00	0.51%	4209.94	315.85		4525.79	483.67
	G6	5500 < > 5800	5500	5500	11352.00	0.55%	3658.69	315.85		3974.54	451.19
	G7	5200 < > 5500	5200	5200	104985.00	5.04%	3145.5	315.85		3461.35	3633.90
BCCL	W-IV		4600	4600	416752.00	20.01%	3577.12	265.68		3842.8	16014.95
	W-V		4300	4300	231220.00	11.10%	3382.67	265.68		3648.35	8435.71
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	1157093.00	55.56%	1776.34	577.69		2354.03	27238.32
TOTAL				4216.52	2082768.00	100.00%				3053.59	63599.36



ANNEXURE – 3A 6

YEAR – 2020 – 2021

SAGARDIGHI THERMAL POWER STATION (I):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	538395.00	26.77%	4556.51	635.24		5191.75	27952.12
	G5	5800 < > 6100	5800	5800	56610.00	2.82%	4209.94	635.24		4845.18	2742.86
	G6	5500 < > 5800	5500	5500	11114.00	0.55%	3658.69	635.24		4293.93	477.23
	G7	5200 < > 5500	5200	5200	8345.00	0.41%	3145.5	635.24		3780.74	315.50
Captive-Pachhwara (North)	G9	4600 < > 4900	4600	4600	1396508.00	69.44%	2039.13	453.68		2492.81	34812.29
TOTAL				5042.84	2010972.00	99.99%				3296.9	66300.00



ANNEXURE – 3A 7

YEAR – 2020-2021

SAGARDIGHI THERMAL POWER STATION (II):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling,etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	888489.00	26.77%	4556.51	635.24		5191.75	46128.13
	G5	5800 < > 6100	5800	5800	93421.00	2.82%	4209.94	635.24		4845.18	4526.42
	G6	5500 < > 5800	5500	5500	18340.00	0.55%	3658.69	635.24		4293.93	787.51
	G7	5200 < > 5500	5200	5200	13771.00	0.41%	3145.5	635.24		3780.74	520.65
Captive- Pachhwara (North)	G9	4600 < > 4900	4600	4600	2304593.00	69.44%	2039.13	453.68		2492.81	57449.12
TOTAL				5042.84	3318614.00	99.99%				3296.9	109411.82



ANNEXURE – 3B

YEAR – 2020-2021

COMPUTATION OF FUEL COST FOR THE YEAR 2020-21									
Sl. No.	Particular	Unit	Generating Stations						
			Bakreswar	Kolaghat	Bandel (Unit 1 & 2)	Bandel (Unit 5)	Santalidih	Sagardighi (1&2)	Sagardighi (3&4)
1	Generation	MU	7358.40	7726.32	683.28	1506.72	3504.00	4204.80	7008.00
2	Rate of Auxiliary Consumption	%	9.00%	9.60%	10.40%	9.00%	9.00%	9.00%	9.00%
3	Auxiliary consumption	MU	662.26	741.73	71.06	135.60	315.36	378.43	630.72
4	Ex-bus generation (4=1-3)	MU	6696.14	6984.59	612.22	1371.12	3188.64	3826.37	6377.28
5	Station Heat rate	Kcal/KWh	2470	2700	3050	2430	2425	2345	2276
6	Total Heat required (6=1 x 5)	M.Kcal	18175248	20861064	2084004	3661330	8497200	9860256	15950208
7	Heat Value of Oil	Kcal/lit	9681.24	9330.64	9135.72	9135.72	9521.13	9456.96	9456.96
8	Specific Oil Consumption rate	MI/KWh	1.30	2.00	2.50	1.75	1.00	1.00	1.00
9	Oil Consumed (9=1 x 8)	KL	9565.92	15452.64	1708.2	2636.76	3504	4204.8	7008
10	Heat Generated from oil (7 x 9/1000)	M.Kcal	92609.97	144183.02	15605.64	24088.70	33362.04	39764.63	66274.38
11	Heat Generated from Coal (6 - 10)	M.Kcal	18082638.03	20716880.98	2068398.36	3637240.90	8463837.96	9820491.37	15883933.62
12	Heat Value of Coal (considering the provision in regulation)	Kcal/Kg	5068.00	4155.20	4335.11	4335.11	4096.52	4922.84	4922.84



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

	5.8.4(1) of Tariff Regulations)								
13	Coal required [(11/12)x1000]	MT	3568002.77	4985772.28	477127.08	839018.64	2066104.39	1994884.27	3226580.82
14	Coal required at Transit Loss	MT	3585932.43	5025980.12	480974.88	845784.92	2082766.52	2010972.05	3252601.64
15	Average Price of Oil	Rs./KL	50062.13	54007.79	51972.859	51972.859	51278.05	53104.71	52479.15
16	Average Price of coal	Rs./MT	3566.82	3809.74	3316.62	3403.36	3053.59	3296.91	3296.90
17	Cost of oil [(9 x 15)/100000]	Rs. In lac	4788.90	8345.63	887.80	1370.40	1796.78	2232.95	3677.74
18	Cost of Coal [(14x16)/100000]	Rs. In lac	127903.76	191476.78	15952.11	28785.13	63599.15	66300.00	107235.02
19	Total Cost of Fuel (17 + 18)	Rs. In lac	132692.66	199822.40	16839.91	30155.53	65395.93	68532.95	110912.76
20	Fuel cost per unit(21=(20/1)*10 (Ex-bus)	Paise/KwH	198.16	286.09	275.06	219.93	205.09	179.11	173.92



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

ANNEXURE – 3C 1

YEAR – 2021-22

KOLAGHAT THERMAL POWER STATION:

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	467462.00	9.48%	4556.51	707.13		5263.64	24605.52
	G5	5800 < > 6100	5800	5800	113731.00	2.31%	4209.94	707.13		4917.07	5592.23
	G6	5500 < > 5800	5500	5500	63621.00	1.29%	3658.69	707.13		4365.82	2777.58
	G7	5200 < > 5500	5200	5200	63562.00	1.29%	3145.5	707.13		3852.63	2448.81
BCCL	W-IV		4600	4600	287793.32	5.84%	3577.12	809.9		4387.02	12625.55
	W-V		4300	4300	278907.19	5.66%	3382.67	809.9		4192.57	11693.38
MCL	G12	3700 < > 4000	3700	3700	50342.00	1.02%	1723.77	1457.01		3180.78	1601.27
	G13	3400 < > 3700	3400	3400	622615.00	12.63%	1637.93	1457.01		3094.94	19269.56
MCL-Washed	G11	4000 < > 4300	4200	4200	1416751.00	28.75%	2680.33	1192.35		3872.68	54866.23
CCL	W-III		4900	4900	63101.00	1.28%	3701.2	878.64		4579.84	2889.92
	W-IV		4600	4600	567353.00	11.51%	3377.75	878.64		4256.39	24148.76
Captive-Barjore	G12	3700 < > 4000	3700	3700	708376.00	14.37%	1776.34	579.81		2356.15	16690.40
Captive-Gangaramc hawk	G10	4300 < > 4600	4300	4300	224909.00	4.56%	1959.96	1109.11		3069.07	6902.61
TOTAL				4357.36	4928523.51	100.00%				3776.22	186111.82



ANNEXURE – 3C 2

YEAR – 2021 – 2022

BAKRESWAR THERMAL POWER STATION:

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	501853.00	13.11%	4556.51	274.1		4830.61	24242.56
	G5	5800 < > 6100	5800	5800	100713.00	2.63%	4209.94	274.1		4484.04	4516.01
	G6	5500 < > 5800	5500	5500	8249.00	0.22%	3658.69	274.1		3932.79	324.42
	G7	5200 < > 5500	5200	5200	4958.00	0.13%	3145.5	274.1		3419.6	169.54
CCL	W-IV		4600	4600	188837.00	4.93%	3377.75	615.79		3993.54	7541.28
Captive-Barjore	G7	5200 < > 5500	5200	5200	205258.00	5.36%	3145.5	189.91		3335.41	6846.20
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	205258.00	5.36%	1776.34	333.13		2109.47	4329.86
Captive-Pachhwara (North)	G9	4600 < > 4900	4600	4600	821031.00	21.45%	2039.13	432.08		2471.21	20289.40
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300	970869.00	25.36%	1959.96	105.19		2065.15	20049.90
Tara (E & W)	G7	5200 < > 5500	5200	5200	821031.00	21.45%	3145.5	207.8		3353.3	27531.63
TOTAL				4867.45	3828057.00	100.00%				3026.1	115840.80



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

ANNEXURE – 3C 3

YEAR – 2021 – 2022

BANDEL THERMAL POWER STATION (I & II):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	140669.00	30.81%	4556.51	672.2		5228.71	7355.17
	G5	5800 < > 6100	5800	5800	9169.00	2.01%	4209.94	672.2		4882.14	447.64
	G6	5500 < > 5800	5500	5500	4798.00	1.05%	3658.69	672.2		4330.89	207.80
	G7	5200 < > 5500	5200	5200	9898.00	2.17%	3145.5	672.2		3817.7	377.88
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	175241.00	38.38%	1776.34	732.564		2508.904	4396.63
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300	116827.00	25.59%	1959.96	579.76		2539.72	2967.08
TOTAL				4686.5	456602.00	100.00%				3449.87	15752.20



ANNEXURE – 3C 4

YEAR – 2021 – 2022

BANDEL THERMAL POWER STATION (V):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	247364.00	30.81%	4556.51	672.2		5228.71	12933.95
	G5	5800 < > 6100	5800	5800	16124.00	2.01%	4209.94	672.2		4882.14	787.20
	G6	5500 < > 5800	5500	5500	8438.00	1.05%	3658.69	672.2		4330.89	365.44
	G7	5200 < > 5500	5200	5200	17405.00	2.17%	3145.5	672.2		3817.7	664.47
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	308158.00	38.38%	1776.34	732.564		2508.904	7731.39
Captive-Gangaramcha wk	G10	4300 < > 4600	4300	4300	205439.00	25.59%	1959.96	918.05		2878.01	5912.55
TOTAL				4686.51	802928.00	100.00%				3536.43	28395.00



ANNEXURE – 3C 5

YEAR – 2021 – 2022

SANTALDIH THERMAL POWER STATION:

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
BCCL	W-IV		4600	4600	145632.71	7.40%	3577.12	265.68		3842.8	5596.37
	W-V		4300	4300	80799.07	4.11%	3382.67	265.68		3648.35	2947.83
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	870891.00	44.25%	1776.34	577.69		2354.03	20501.04
Tara (E & W)	G7	5200 < > 5500	5200	5200	870891.00	44.25%	3145.5	451.58		3597.08	31326.65
TOTAL				4454.94	1968213.78	100.00%				3067.34	60371.89



ANNEXURE – 3C 6

YEAR – 2021 – 2022

SAGARDIGHI THERMAL POWER STATION (I & II):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	538395.00	26.77%	4556.51	635.24		5191.75	27952.12
	G5	5800 < > 6100	5800	5800	56610.00	2.82%	4209.94	635.24		4845.18	2742.86
	G6	5500 < > 5800	5500	5500	11114.00	0.55%	3658.69	635.24		4293.93	477.23
	G7	5200 < > 5500	5200	5200	8345.00	0.41%	3145.5	635.24		3780.74	315.50
Captive-Pachhwara (North)	G9	4600 < > 4900	4600	4600	1396508.00	69.44%	2039.13	453.68		2492.81	34812.29
TOTAL				5042.84	2010972.00	100.00%				3296.91	66300.00



ANNEXURE – 3C 7

YEAR – 2021 – 2022

SAGARDIGHI THERMAL POWER STATION (III & IV):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	888489.00	26.77%	4556.51	635.24		5191.75	46128.13
	G5	5800 < > 6100	5800	5800	93421.00	2.82%	4209.94	635.24		4845.18	4526.42
	G6	5500 < > 5800	5500	5500	18340.00	0.55%	3658.69	635.24		4293.93	787.51
	G7	5200 < > 5500	5200	5200	13771.00	0.41%	3145.5	635.24		3780.74	520.65
Captive-Pachhwara (North)	G9	4600 < > 4900	4600	4600	2304593.00	69.44%	2039.13	453.68		2492.81	57449.12
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300		0.00%	1959.96			1959.96	0.00
Tara (E & W)	G7	5200 < > 5500	5200	5200		0.00%	3145.5			3145.5	0.00
TOTAL				5042.84	3318614.00	100.00%				3296.91	109411.82



ANNEXURE – 3D

Computation of Fuel Cost for different generating stations of WBPDCCL for the year 2021-2022

COMPUTATION OF FUEL COST FOR THE YEAR 2021-22									
Sl. No.	Particular	Unit	Generating Stations						
			Bakreswar	Kolaghat	Bandel (Unit 1 & 2)	Bandel (Unit 5)	Santalidih	Sagardighi (1&2)	Sagardighi (3&4)
1	Generation	MU	7358.40	7726.32	683.28	1506.72	3504.00	4204.80	7008.00
2	Rate of Auxiliary Consumption	%	9.00%	9.60%	10.40%	9.00%	9.00%	9.00%	9.00%
3	Auxiliary consumption	MU	662.26	741.73	71.06	135.60	315.36	378.43	630.72
4	Ex-bus generation (4=1-3)	MU	6696.14	6984.59	612.22	1371.12	3188.64	3826.37	6377.28
5	Station Heat rate	Kcal/KWh	2470	2700	3050	2430	2425	2345	2276
6	Total Heat required (6=1 x 5)	M.Kcal	18175248	20861064	2084004	3661330	8497200	9860256	15950208
7	Heat Value of Oil	Kcal/lit	9681.24	9330.64	9135.72	9135.72	9521.13	9456.96	9456.96
8	Specific Oil Consumption rate	MI/KWh	1.30	2.00	2.50	1.75	1.00	1.00	1.00
9	Oil Consumed (9=1 x 8)	KL	9565.92	15452.64	1708.2	2636.76	3504	4204.8	7008
10	Heat Generated from oil (7 x 9/1000)	M.Kcal	92609.97	144183.02	15605.64	24088.70	33362.04	39764.63	66274.38



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

11	Heat Generated from Coal (6 - 10)	M.Kcal	18082638.03	20716880.98	2068398.36	3637240.90	8463837.96	9820491.37	15883933.62
12	Heat Value of Coal (considering the provision in regulation 5.8.4(1) of Tariff Regulations)	Kcal/Kg	4747.45	4237.36	4566.50	4566.51	4334.94	4922.84	4922.84
13	Coal required [(11/12)x1000]	MT	3808915.95	4889100.99	452950.48	796503.44	1952469.46	1994883.31	3226579.30
14	Coal required at Transit Loss	MT	3828056.23	4928529.23	456603.31	802926.85	1968215.18	2010971.08	3252600.10
15	Average Price of Oil	Rs./KL	50062.13	54007.79	51972.859	51972.859	51278.05	53104.71	52479.15
16	Average Price of coal	Rs./MT	3026.10	3776.22	3449.87	3536.43	3067.34	3296.91	3296.91
17	Cost of oil [(9 x 15)/100000]	Rs. In lac	4788.90	8345.63	887.80	1370.40	1796.78	2232.95	3677.74
18	Cost of Coal [(14x16)/100000]	Rs. In lac	115840.81	186112.11	15752.22	28394.95	60371.85	66299.91	107235.30
19	Total Cost of Fuel (17 + 18)	Rs. In lac	120629.71	194457.74	16640.02	29765.35	62168.63	68532.85	110913.04
20	Fuel cost per unit(21=(20/1)*10 (Ex-bus)	Paise/KwH	180.15	278.41	271.80	217.09	194.97	179.11	173.92



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

ANNEXURE – 3E 1

YEAR – 2022-23

KOLAGHAT THERMAL POWER STATION:

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kca/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	467462.00	9.48%	4556.51	707.13		5263.64	24605.52
	G5	5800 < > 6100	5800	5800	113731.00	2.31%	4209.94	707.13		4917.07	5592.23
	G6	5500 < > 5800	5500	5500	63621.00	1.29%	3658.69	707.13		4365.82	2777.58
	G7	5200 < > 5500	5200	5200	63562.00	1.29%	3145.5	707.13		3852.63	2448.81
BCCL	W-IV		4600	4600	287793.32	5.84%	3577.12	809.9		4387.02	12625.55
	W-V		4300	4300	278907.19	5.66%	3382.67	809.9		4192.57	11693.38
MCL MCL-Washed	G12	3700 < > 4000	3700	3700	50342.00	1.02%	1723.77	1457.01		3180.78	1601.27
	G13	3400 < > 3700	3400	3400	622615.00	12.63%	1637.93	1457.01		3094.94	19269.56
	G11	4000 < > 4300	4200	4200	1416751.00	28.75%	2680.33	1192.35		3872.68	54866.23
CCL	W-III		4900	4900	63101.00	1.28%	3701.2	878.64		4579.84	2889.92
	W-IV		4600	4600	567353.00	11.51%	3377.75	878.64		4256.39	24148.76
Captive-Barjore	G12	3700 < > 4000	3700	3700	708376.00	14.37%	1776.34	579.81		2356.15	16690.40
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300	224909.00	4.56%	1959.96	1109.11		3069.07	6902.61
TOTAL				4357.36	4928523.51	100.00%				3776.22	186111.82



ANNEXURE – 3E 2

YEAR – 2022-23

BAKRESWAR THERMAL POWER STATION:

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	662881.00	17.48%	4556.51	274.1		4830.61	32021.20
	G5	5800 < > 6100	5800	5800	133028.00	3.51%	4209.94	274.1		4484.04	5965.03
	G6	5500 < > 5800	5500	5500	10896.00	0.29%	3658.69	274.1		3932.79	428.52
	G7	5200 < > 5500	5200	5200	6549.00	0.17%	3145.5	274.1		3419.6	223.95
CCL	W-IV		4600	4600	187071.00	4.93%	3377.75	615.79		3993.54	7470.76
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	203339.00	5.36%	1776.34	357.13		2133.47	4338.18
Captive-Pachhwara (North)	G9	4600 < > 4900	4600	4600	813354.00	21.45%	2039.13	432.08		2471.21	20099.69
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300	961791.00	25.36%	1959.96	105.19		2065.15	19862.43
Tara (E & W)	G7	5200 < > 5500	5200	5200	813354.00	21.45%	3145.5	207.8		3353.3	27274.20
TOTAL				4912.26	3792263.00	100.00%				3103.26	117683.93



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

ANNEXURE – 3E 3

YEAR – 2022-23

BANDEL THERMAL POWER STATION (I & II):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	140669.00	30.81%	4556.51	672.2		5228.71	7355.17
	G5	5800 < > 6100	5800	5800	9169.00	2.01%	4209.94	672.2		4882.14	447.64
	G6	5500 < > 5800	5500	5500	4798.00	1.05%	3658.69	672.2		4330.89	207.80
	G7	5200 < > 5500	5200	5200	9898.00	2.17%	3145.5	672.2		3817.7	377.88
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	175241.00	38.38%	1776.34	732.564		2508.904	4396.63
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300	116827.00	25.59%	1959.96	579.76		2539.72	2967.08
TOTAL				4686.5	456602.00	100.00%				3449.87	15752.20



ANNEXURE – 3E 4

YEAR – 2022-23

BANDEL THERMAL POWER STATION (V):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	247364.00	30.81%	4556.51	672.2		5228.71	12933.95
	G5	5800 < > 6100	5800	5800	16124.00	2.01%	4209.94	672.2		4882.14	787.20
	G6	5500 < > 5800	5500	5500	8438.00	1.05%	3658.69	672.2		4330.89	365.44
	G7	5200 < > 5500	5200	5200	17405.00	2.17%	3145.5	672.2		3817.7	664.47
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	308158.00	38.38%	1776.34	732.564		2508.904	7731.39
Captive-Gangaramchawk	G10	4300 < > 4600	4300	4300	205439.00	25.59%	1959.96	918.05		2878.01	5912.55
TOTAL				4686.51	802928.00	100.00%				3536.43	28395.00



ANNEXURE – 3E 5

YEAR – 2022-23

SANTALDIH THERMAL POWER STATION:

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
BCCL	W-IV		4600	4600	145632.71	7.40%	3577.12	265.68		3842.8	5596.37
	W-V		4300	4300	80799.07	4.11%	3382.67	265.68		3648.35	2947.83
Captive-Barjore	G7	5200 < > 5500	5200	5200	870891.00	44.25%	3145.5	451.58		3597.08	31326.65
Captive-Barjore(North)	G12	3700 < > 4000	3700	3700	870891.00	44.25%	1776.34	577.69		2354.03	20501.04
TOTAL				4454.94	1968213.78	100.00%				3067.34	60371.89



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

ANNEXURE – 3E 6

YEAR – 2022-23

SAGARDIGHI THERMAL POWER STATION (I – II):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling, etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	538395.00	26.77%	4556.51	635.24		5191.75	27952.12
	G5	5800 < > 6100	5800	5800	56610.00	2.82%	4209.94	635.24		4845.18	2742.86
	G6	5500 < > 5800	5500	5500	11114.00	0.55%	3658.69	635.24		4293.93	477.23
	G7	5200 < > 5500	5200	5200	8345.00	0.41%	3145.5	635.24		3780.74	315.50
Captive-Pachhwara (North)	G9	4600 < > 4900	4600	4600	1396508.00	69.44%	2039.13	453.68		2492.81	34812.29
TOTAL				5042.84	2010972.00	100.00%				3296.91	66300.00



ANNEXURE – 3E 7

YEAR – 2022-23

SAGARDIGHI THERMAL POWER STATION (III-IV):

Source	Grade	CIL notification	GCV as billed	GCV as received	Quantity	proposed coal mix	Amount charged by coal company	Transportation cost	Handling, sampling,etc	Landed cost	Total Amount
		GCV range	A	B	C	D	E	F	G	H	I
		Kcal/kg	Kcal/kg	Kcal/kg	MT	%	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs. lakh
ECL	G4	6100 < > 6400	6100	6100	888489.00	26.77%	4556.51	635.24		5191.75	46128.13
	G5	5800 < > 6100	5800	5800	93421.00	2.82%	4209.94	635.24		4845.18	4526.42
	G6	5500 < > 5800	5500	5500	18340.00	0.55%	3658.69	635.24		4293.93	787.51
	G7	5200 < > 5500	5200	5200	13771.00	0.41%	3145.5	635.24		3780.74	520.65
Captive-Pachhwara (North)	G9	4600 < > 4900	4600	4600	2304593.00	69.44%	2039.13	453.68		2492.81	57449.12
TOTAL				5042.84	3318614.00	100.00%				3296.91	109411.82



ANNEXURE – 3F

Computation of Fuel Cost for different generating stations of WBPDC for the year 2022-23

COMPUTATION OF FUEL COST FOR THE YEAR 2022-23									
Sl. No.	Particular	Unit	Generating Stations						
			Bakreswar	Kolaghat	Bandel (Unit 1 & 2)	Bandel (Unit 5)	Santaldih	Sagardighi (1&2)	Sagardighi (3&4)
1	Generation	MU	7358.40	7726.32	683.28	1506.72	3504.00	4204.80	7008.00
2	Rate of Auxiliary Consumption	%	9.00%	9.60%	10.40%	9.00%	9.00%	9.00%	9.00%
3	Auxiliary consumption	MU	662.26	741.73	71.06	135.60	315.36	378.43	630.72
4	Ex-bus generation (4=1-3)	MU	6696.14	6984.59	612.22	1371.12	3188.64	3826.37	6377.28
5	Station Heat rate	Kcal/KWh	2470	2700	3050	2430	2425	2345	2276
6	Total Heat required (6=1 x 5)	M.Kcal	18175248	20861064	2084004	3661330	8497200	9860256	15950208
7	Heat Value of Oil	Kcal/lit	9681.24	9330.64	9135.72	9135.72	9521.13	9456.96	9456.96
8	Specific Oil Consumption rate	MI/KWh	1.30	2.00	2.50	1.75	1.00	1.00	1.00
9	Oil Consumed (9=1 x 8)	KL	9565.92	15452.64	1708.2	2636.76	3504	4204.8	7008



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10	Heat Generated from oil (7 x 9/1000)	M.Kcal	92609.97	144183.02	15605.64	24088.70	33362.04	39764.63	66274.38
11	Heat Generated from Coal (6 - 10)	M.Kcal	18082638	20716881	2068398	3637241	8463838	9820491	15883934
12	Heat Value of Coal (considering the provision in regulation 5.8.4(1) of Tariff Regulations)	Kcal/Kg	4792.26	4237.36	4566.50	4566.51	4334.94	4922.84	4922.84
13	Coal required [(11/12)x1000]	MT	3773300.70	4889100.99	452950.48	796503.44	1952469.46	1994883.31	3226579.30
14	Coal required at Transit Loss	MT	3792262.01	4928529.23	456603.31	802926.85	1968215.18	2010971.08	3252600.10
15	Average Price of Oil	Rs./KL	50062.13	54007.79	51972.859	51972.859	51278.05	53104.71	52479.15
16	Average Price of coal	Rs./MT	3103.26	3776.22	3449.87	3536.43	3067.34	3296.91	3296.91
17	Cost of oil [(9 x 15)/100000]	Rs. In lac	4788.90	8345.63	887.80	1370.40	1796.78	2232.95	3677.74
18	Cost of Coal [(14x16)/100000]	Rs. In lac	117683.75	186112.11	15752.22	28394.95	60371.85	66299.91	107235.30
19	Total Cost of Fuel (17 + 18)	Rs. In lac	122472.65	194457.74	16640.02	29765.35	62168.63	68532.85	110913.04
20	Fuel cost per unit(21=(20/1)*10 (Ex-bus)	Paise/KwH	182.90	278.41	271.80	217.09	194.97	179.11	173.92



CHAPTER - 4 FIXED CHARGES

- 4.1 The Commission has taken up prudent analysis of the charges claimed under different heads with reference to reasonableness for its generating stations in this chapter.
- 4.2 The WBPDCCL has projected the expenses under different heads of fixed charges on the basis of actual expenditure during the year 2020-21 (part). The latest annual report and accounts submitted along with the application as available at the time of submission are for the year 2018-19. The projected expenses for the years 2020-21, 2021-23 and 2022-23 have been analyzed with the actual expenditure (unaudited as submitted) during the base year 2019-20 and the amount admitted in the Tariff order for 2019-20. WBPDCCL has calculated the escalation rate for the projected cost under the respective heads for the years 2020-21, 2021-22 and 2022-23 in light of the inflationary trend and wherever the rate of annual increase considered in the projected expenditure being below the average inflation rate, the Commission has accepted such rate of annual increase in general.
- 4.3 **Projected cost of Units III & IV of Sagardighi and Bandel Generating Stations**
- 4.3.1 Two units of Sagardighi generating station (Phase – II) were put in commercial operation during 2016-17. The Commission accorded 'in – principle -clearance' to its investment proposal for construction of two units of 500 MW each under Sagardighi Phase – II package vide order dated 25.11.2010 in case no. WBERC/OA-49/08-09 at the estimated project cost of Rs. 5340.38 crore. Date of commercial operation of unit III and Unit IV of the generating station are 01.07.2016 and 20.12.2016 respectively.
- 4.3.2 WBPDCCL has not submitted the required report as per regulation 2.8.1.4.13 of the Tariff Regulations. Accordingly, project cost has not been determined by the Commission. The Commission accordingly decided to reduce the submitted project cost of Rs. 6029.50 crore by 5% for the purpose of tariff determination.
- 4.3.3 WBPDCCL had taken up implementation of the Energy Efficient Renovation & Modernization (EERM) of unit no. V of Bandel generating station of 215 MW capacity with the financial assistance of World Bank. The Commission accorded investment approval for a total amount



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of Rs. 652.20 crore vide order dated 14.02.2013 in case no. OA-132/11-12. The unit was commissioned after the EERM works with full load operation on and from 24.11.2015.

- 4.3.4 WBPDCCL has not submitted the required report as per regulation 2.8.1.4.13 of the Tariff Regulations. Accordingly, project cost has not been determined by the Commission. The Commission accordingly decided to reduce the submitted project cost of Rs. 652.20 crore by 5% for the purpose of tariff determination.
- 4.3.5 The Commission during earlier MYT orders had allowed advance against depreciation on full provisional project cost as submitted by WBPDCCL and interest on outstanding borrowed capital in order to facilitate repayment of loan and payment of interest to financial institutions. WBPDCCL is yet to submit the final project cost in respect of Sagardighi TPS and EERM works at BTPS II (Unit 5). The Commission had decided not to service any capital cost beyond 95% of the provisional project cost during 2018-19 & 2019-20. The Commission continues with the same decision and accordingly proceeds for determination of Tariff for the seventh control period. Reduction of 5% of the submitted project cost shall have effect on different fixed charge components viz., depreciation, interest, return on equity in this case. Proportionate reduction has been made from the allocation under the head interest on borrowed capital, depreciation and return on equity.
- 4.3.6 In the tariff order dated 30.12.2011 in respect of new generating plants of WBPDCCL at Bakreswar (units 4 and 5), Santaldih (unit 5) and Sagardighi (units 1 and 2) the Commission decided to withhold 5% of the project cost so determined. Accordingly, the Commission in the order dated 30.12.2011 admitted the project cost for those units @95% of the determined project cost for tariff determination purpose. The Debt and equity have been admitted at a reduced level accordingly. Interest, depreciation and RoE were admitted on reduced debt and equity. This methodology was also continued in the subsequent orders. WBPDCCL has not yet submitted the Final Project Cost along with related documents as required in terms of Tariff Regulations. Commission has taken a serious note of it and decides to continue with the reduced debt and RoE as considered in the earlier tariff orders for those units. WBPDCCL has also not submitted the Unit wise Capital Cost considered for estimation of the expenses. In absence of such details the Commission proceeds to determine the tariff by withholding proportionate amount of 5% under the head interest on



borrowed capital, depreciation and return on equity for these Units also. Any adjustments in this regard will be made in the APR for the respective years based on documents to be submitted by WBPDCCL.

4.3.7 WBPDCCL is directed to submit the final project cost in respect of the above generating stations in accordance with the provisions of Tariff Regulations within six months from the date of this order.

4.4 Inflation Index

WBPDCCL has referred to the average inflation rate of 5.44% for projection of expenditure under different heads for the year 2019-20. Commission finds no merit in considering such inflation rate for estimate purpose. The Commission instead of considering the rate of 5.44% in general for projection purpose decides to proceed in a further rational manner by following a methodology that considers the sensitivity parameter as was determined in the previous tariff order and increasing it by applying the average inflation rate for 2019 – 2020 giving 60:40 weightage to WPI:CPI as detailed below:

TREND OF INFLATION RATE FOR THE PERIOD APRIL 2019 TO MARCH 2020	
Average inflation rate as per CPI for 2019 – 2020	7.54
Average inflation rate as per WPI for 2019 – 2020	1.67
Average inflation rate as per WPI + CPI (60:40) 2019 – 2020	4.02

4.5 Employee Cost

4.5.1 WBPDCCL has projected the employee cost which includes salaries and wages, bonus, pension, contribution to employee funds, effects of actuarial valuation, employee welfare expenses and Director's Fees.

4.5.2 WBPDCCL has projected the employee cost for the years under the control period on the basis of actual employee cost during the year 2020 (April 2020 to July 2020) after giving effect of the Revision of the Pay and Allowances which has been further escalated by 4% for the years 2021-22 and 2022-23 for each generating station. The escalation factor of 4% has been considered by WBPDCCL based on annual increment of 3.3% considering existing DA



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@ 10% of basic pay. Recruitments during 2020-21 and 2021-22 alongwith retirement benefits during the period have been factored. WBPDCCL has not claimed any arrear against wage revision.

4.5.3 WBPDCCL has projected the number of employees in data forms submitted along with their application. It is observed from the number of employees as projected and the Man/ MW ratio computed for each generating station that the number of employees for each generating station is well within the limit of Man/ MW ratio as stipulated in the Tariff Regulations.

4.5.4 The Commission proceeds to admit the employee cost for the respective years by applying the following principles :

- The basic pay as allowed in tariff order for the year 2019-20 has been increased with the component of annual increment @ 3% and extrapolated considering per employee cost (including impact of pay revision) as claimed to arrive at the employees' basic pay for the year 2020-21, 2021-22 and 2022-23. The same is limited to the amount of claim.
- DA @ 10% of basic pay as claimed has been considered. HRA has been computed in the same proportion to that of the claimed amount of basic pay.
- Contribution to funds, bonus and other welfare expenses have been considered in the same proportion to that of the claimed amount to the salary and wages.

4.5.5 The Commission, thus, admits the employee cost including terminal benefits for each generating station for the year 2020-21, 2021-2022 and 2022-23 as given in the following table:

Rs. in Lakh

Generating Station	As claimed by WBPDCCL			As admitted by the Commission		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	14996.38	15543.70	16112.90	14612.58	15051.12	15502.72
Bakreswar	17381.17	17943.35	18528.00	16935.08	17443.14	17966.43
Bandel – I	2451.77	2544.23	2640.37	2375.54	2446.81	2520.21
Bandel – II	4392.79	4558.42	4730.68	4252.33	4379.89	4511.30
Santalidih	12570.32	13002.21	13451.35	12516.23	12891.73	13278.47
Sagardighi – I	6660.08	6878.62	7105.87	6580.86	6778.29	6981.62
Sagardighi – II	11100.14	11464.35	11843.11	10420.43	10733.02	11055.04



Head wise summarized details are given in Annexure - 4A

4.6 Coal & Ash Handling Expenses

4.6.1 WBPDCCL has projected the Coal & Ash handling expenses for its power stations presently in operation.

4.6.2 WBPDCCL has projected the coal and ash handling charges for the years under the control period as per expenses incurred during 2019-20 with an annual escalation @ 5.20%. The amount of expenditure under this head of account is related to the scale of operation of the generating plants. The Commission has, however, considered to operate the plants at the normative level of PLF of the respective generating stations of WBPDCCL. In this regard the Commission has taken the following considerations:

- a) Since there is variation in actual generation compared to generation at normative level during 2017-18, the Commission decides to bring the admitted expenditure for 2019-20 at normative generation level in the Tariff order for 2019-20.
- b) Since the item of cost is predominantly sensitive to inflation, the Commission decides to consider average inflation rate of 7.54% being the CPI for 2019-20 as mentioned in table under paragraph 4.4 annually for the related period.

The coal and ash handling charges on the basis of actual charges incurred during 2019-20 pro-rated for normative generation for 2019-20 have been compared with the admitted amount for 2019-20 and found at higher side for all the generating stations except for Santaldih and Sagardighi generating stations where WBPDCCL has projected the coal and ash handling charges for all the ensuing years under the seventh control period at a lower level. Thus, the coal and ash handling charges for Santaldih and Sagardighi generating station are considered as projected by WBPDCCL. The computations are given in annexure 4B. The coal and ash handling charges thus admitted by the Commission are as follows:



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

Generating Stations	Rs in Lakh					
	Coal and Ash handling cost as claimed by WBPDCCL			Coal and Ash handling cost as admitted by Commission		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
KTPS	3134.52	3297.51	3468.98	2363.82	2542.05	2733.72
BkTPS	2508.23	2638.66	2775.87	2121.02	2280.94	2452.92
BTPS -I (unit #1 and #2)	137.04	144.17	151.67	95.50	102.70	110.44
BTPS -II (Unit 5)	245.53	258.30	271.73	225.40	242.40	260.68
STPS	697.97	734.26	772.45	697.97	734.26	772.45
SgTPS -I	212.52	223.57	235.19	212.52	223.57	235.19
SgTPS -II	354.20	372.61	391.99	354.20	372.61	391.99

4.7 Water Charges / Cess:

4.7.1 Water requirement of Santaldih generating station is met from DVC sources of water. WBPDCCL has projected water charges for Rs 848.13 lakh for all the three years 2020-21, 2021-22 and 2022-23 for purchase of water from DVC by Santaldih Thermal Power Station on the basis of expense already incurred during 2019-20 at the power station without any escalation. The Commission in the Tariff order for 2018-19 and 2019-20 admitted Rs 433.95 lakh for the year 2019-20 considering the actual but unaudited water charges expenses for 2018-19 with an escalation @ 5.44% for projected expenses for 2019-20 as claimed by WBPDCCL. The Commission now considers the admitted amount of Rs 433.95 lakh for 2019-20 with an annual escalation of 4.02% for water expenses for the years 2020-21, 2021-22 and 2022-23.

4.7.2 No water charges, however, for Kolaghat, Bakreswar, Bandel and Sagardighi generating station have been charged by WBPDCCL as the same has already been subsumed in GST.

4.7.3 The water charges, thus, admitted for Santaldih generating station is as under:

Rs in Lakh

Generating Station	As claimed by WBPDCCL			As admitted by the Commission		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Santaldih	848.13	848.13	848.13	451.39	469.54	488.42



The water charges as admitted above for 2020-21, 2021-2022 and 2022-23 corresponds to normative generation of Santaldih generating stations during the respective year. Any shortfall in actual generation of Santaldih generating station during any year will be looked into in admitting the water charges of the generating station in APR for the concerned year.

4.8 Operation & Maintenance Expenses

4.8.1 As per regulation 5.7 of the Tariff Regulation the component of Operation and Maintenance (O&M) expenses are as follows:

- i) Repair & Maintenance Expenses (R & M)
- ii) Administrative and General Expenses which are composed of following items:
 - rent and lease charges;
 - Legal charges, Auditor's expenses, which include auditor's fees, auditor's expenses and payment to auditors in any other capacity or for any work which is necessary to be got done from them and audited;
 - Consultancy charges for work which cannot be done in-house or is uneconomical in doing in-house or is essential to be done from outside sources except payment to Auditors and
 - Other expenses necessary and arising from and ancillary or incidental to the business of electricity except penalty etc. levied under this Act or any other Act.

Considering these heads, the Commission has set the norms in the Tariff Regulations.

4.8.2 WBPDC has projected the O&M expenses for the years 2020-21, 2021-22 and 2022-23 for each generating station based on the actual expenditure of last available completed year i.e. 2019-20 with an escalation of average CPI inflation rate of 5.20% (April 2020 to June 2020) as published by the Director of Labour Bureau, Govt of West Bengal.

4.8.3 The Commission vide paragraph B of Schedule 9A of the Tariff Regulations has recommended the annual norms of operation and maintenance up to the year 2016-17. In



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

terms of Regulation 2.8.6.1 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff)(Amendment) Regulations, 2013 the norms of Operation & Maintenance (O&M) Expenses for a Coal Fired Thermal Generating Station and for the hydro generating power station which are under operation and/or under Construction is to be provided in the tariff order of the 1st ensuing year of any control period applying average inflation rate of last control period on the basis of actual expenditure of the last available completed year of that last control period. This tariff order is for the seventh control period. The last control period was the sixth control period consisting of FY 2018-19 and 2019-20. In the Tariff order for 2018-19 and 2019-20 the Commission had proceeded to finalize the norms by applying the average inflation rate of 3.01%, 4.72% and 4.02% for the respective years 2017-18, 2018-19 and 2019-20 giving 60:40 weightage to WPI:CPI as derived in paragraph 4.4 above on the norms specified in Schedule 9A of the Tariff Regulations and applicable for 2016-17. Accordingly, the Commission considers the average inflation rate of 4.02% annually over the norms specified for 2019-20 in the tariff order for the sixth control period to arrive at the norms for 2020-21, 2021-22 and 2022-23 under the seventh control period. The norms thus admitted by the Commission for the years 2020-21, 2021-22 and 2022-23 are depicted below:

Sl. No	Generating Station	Installed Capacity (MW)	Norms of 2019-20 (Rs Lakh/MW)	Rate for 2020-21 considering inflation 4.02% (Rs Lakh/MW)	Rate for 2021-22 (Rs Lakh/MW)	Rate for 2022-23 (Rs Lakh/MW)
[1]	[2]	[3]	[4]	[5] = [4] x 1.0402	[6] = [5] x 1.0402	[7] = [6] x 1.0402
1	KTPS	1260	16.77	17.44	18.14	18.87
2	BkTPS	1050	13.49	14.03	14.59	15.18
3	BTPS -I	120	18.38	19.12	19.89	20.69
4	BTPS -II	215	16.55	17.22	17.91	18.63
5	STPS -I	500	10.44	10.86	11.30	11.75
6	SgTPS -I	600	8.89	9.25	9.62	10.01
7	SgTPS -II	1000	6.56	6.82	7.09	7.38



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

4.8.4 The Commission admits operation and maintenance expenses for each of the generating stations in operation following the above rate set out for the years 2020-21, 2021-22 and 2022-23 subject to the projected expenses for the respective years based on actual expenditure during 2019-20 as under:

Rs.in Lakh

O & M expenses for generation as proposed and admitted by the Commission											
Sl No	Generating Station	Installed Capacity (MW)	O&M cost in Rs Lakh/MW as admitted			O&M Expenses as proposed by WBPDCCL			O&M Expenses as admitted by Commission		
			2020-21	2021-22	2022-23	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]=[3]x[4]	[11]=[3]x[5]	[12]=[3]x[6]
1	KTPS	1260	17.44	18.14	18.87	13122.53	13804.90	14522.76	13122.53	13804.90	14522.76
2	BkTPS	1050	14.03	14.59	15.18	14084.40	14816.79	15587.26	14084.40	14816.79	15587.26
3	BTPS -I	120	19.12	19.89	20.69	3648.34	3838.05	4037.63	2294.40	2386.80	2482.80
4	BTPS -II	215	17.22	17.91	18.63	6536.61	6876.51	7234.09	3702.30	3850.65	4005.45
5	STPS -I	500	10.86	11.30	11.75	7754.46	8157.70	8581.90	5430.00	5650.00	5875.00
6	SgTPS -I	600	9.25	9.62	10.01	5056.82	5319.77	5596.40	5056.82	5319.77	5596.40
7	SgTPS -II	1000	6.82	7.09	7.38	8593.21	9040.06	9510.14	6820.00	7090.00	7380.00

4.9 Insurance:

4.9.1 WBPDCCL in their written submission of tariff petition has stated that they select the Insurance company through transparent process as stipulated in regulation 5.23.1 of the Tariff Regulations. WBPDCCL has not submitted any documents regarding selection of insurance company through transparent process. They have not submitted any copy of the policy document. However, WBPDCCL has submitted copies of the circulars issued by the insurance company, representation by the power producers, decisions of the Delhi High court, valuation report etc. The insurance premium was based on the coverage of asset. WBPDCCL has stated that insurance premium for coverage of assets of WBPDCCL has been increased significantly due to the facts that a) WBPDCCL has moved from the existing fire policy coverage to industrial all risks / mega policies for their large plants at Sagardighi, Bakreswar, Santaldih and Kolaghat where insurance coverage is much wider; b) WBPDCCL has enhanced the value of coverage moving from coverage of book value of assts to



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

reinstatement value of the assets based on valuation exercise carried out by approved surveyors; and c) with effect from 1st March, 2019 the insurance premium for the power sector and seven other sectors moved from a discount based pricing to a tariff based regime.

4.9.2 The Commission has noted that projected insurance charges for all the power stations was increased by more than 200% during the year 2017-18 due to change in the policy coverage since 2017-18. WBPDCCL has claimed the insurance premium expenses for the years 2020-21, 2021-22 and 2022-23 at a much higher value than the estimated value for the year 2019-20 on actual basis in respect of Bandel, Santaldih and Sagardighi generating stations. The projected expenditure for Kolaghat and Bakreswar generating station is however lower than the estimated expenditure for the year 2019 – 2020. WBPDCCL has projected the insurance expenses for 2021-22 and 2022-23 with an escalation @ 5.0% over the projected expenses for 2020-21 for all the generating stations. Insurance premium is an uncontrollable factor for tariff determination, but admissibility is to be determined through prudent check as per regulation 5.23.1 of the Tariff Regulations.

4.9.3 The Commission, thus, decides to determine insurance premium based on the admitted expenditure for 2019-20 in the tariff order for sixth control period with an annual escalation @ 4.02% for the years 2020-21, 2021-22 and 2022-23. Admitted insurance premium for the years 2020-21, 2021-22 and 2022-23 are as below:

Rs in Lakh

Power station	Insurance Premium claimed			Insurance Premium admitted		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	870.74	914.27	959.99	340.04	353.71	367.93
Bakreswar	945.44	992.71	1042.35	492.72	512.53	533.13
Bandel (I)	105.30	110.56	116.09	10.31	10.72	11.15
Bandel (II)	188.66	198.09	208.00	18.47	19.21	19.98
Santaldih	515.96	541.75	568.84	134.87	140.29	145.93
Sagardighi (I)	526.15	552.45	580.08	186.09	193.57	201.35
Sagardighi (II)	876.91	920.76	966.80	261.06	271.55	282.47

4.9.4 In terms of the Tariff Regulations, insurance premium is to be paid after selection of the insurance company through a transparent process. Insurance premium paid being uncontrollable is required to be adjusted under APR where WBPDCCL would also be required



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

to confirm that the provisions of the Tariff Regulations are complied with. WBPDCCL is directed to submit copies of all policy documents and certificate of valuation of assets duly signed by the registered valuer along with its APR Petition.

4.10 Depreciation:

4.10.1 In their projection the gross fixed assets for the year 2020-21 in respect of the existing units has been considered by WBPDCCL on the basis of closing gross fixed assets in the un-audited accounts for 2019-20. Capital addition to the fixed assets during the years 2017-18, 2018 – 2019 and 2019 – 2020 has been considered by WBPDCCL.

4.10.2 As stated in their application, the depreciation rates and useful life of assets have been considered by WBPDCCL as prescribed in Schedule A of the Tariff Regulations.

4.10.3 The Commission thus, considers the submission of WBPDCCL and admits the depreciation of each generating station for the year 2020-21, 2020-22 and 2022-23, as follows. Proportionate withholding of amount from the allocation of depreciation in respect of generating stations has been made as decided in paragraph 4.3.5 and 4.3.6 of this order.

Rs in lakh

Power station	Depreciation claimed			Admitted Depreciation		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	1879.14	2041.37	2195.46	1879.14	2041.37	2195.46
Bakreswar	18155.07	18231.63	18314.83	17359.70	17434.73	17516.27
Bandel (I)	169.84	171.18	172.52	169.84	171.18	172.52
Bandel (II)	2644.82	2703.81	2721.94	2512.58	2568.62	2585.84
Santaldih	11628.58	11685.60	11896.97	10128.88	10183.05	10383.85
Sagardighi (I)	11438.93	11478.56	11621.55	10866.98	10904.63	11040.47
Sagardighi (II)	22037.23	22101.00	22197.98	20935.37	20995.95	21088.08

4.10.4 The claimed amounts on depreciation in respect of Bakreswar transmission system and Santaldih transmission system for Rs. 441.09 lakh and Rs. 966.60 lakh respectively for the years 2020-21, 2021-2022 and 2022-23 are, however, excluded in the above admitted amount of depreciation. Treatment of the depreciation related to transmission asset in the Aggregate Revenue Requirement are dealt with in subsequent paragraphs.

4.11 Advance against Depreciation:



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

4.11.1 WBPDC has not projected the requirement of advance against depreciation for the year 2018 – 2019 and 2019 – 2020 in respect of any of the generating stations. WBPDC has stated that following the directives of the Commission in paragraph 5.9.2 of the tariff order for third control period in case no. TP-54/12-13 dated 01.12.2012, they will submit detailed statement of repayment of loan, actual depreciation in the Annual Performance Review application for the concerned years of seventh control period. Thus, no amount is being considered by the Commission under this head for 2020-21, 2021-22 and 2022-23.

4.12 Interest on borrowed Capital

4.12.1 WBPDC has projected the interest payable on the borrowed capital during the year 2020-21, 2021-22 and 2022-23. The Commission has taken up examination of such projection separately for generating stations at Bakreswar, Bandel II, Santaldih and Sagardighi. No term loan has been received by WBPDC in capital accounts for Kolaghat and Bandel generating stations and hence no interest has been claimed by WBPDC for those generating stations. WBPDC has given the details of the interest on borrowed capital in Form C in Annexure – 1 of their application for the respective generating stations. The Commission has examined the outstanding balance loan at the end of 2019-20 and rate of interest as per Tariff Order for the sixth control period, calculation of interest (taking into consideration project cost admitted against the respective generating stations) and admits the interest on borrowed capital for generating stations after withholding amount equivalent to 5% as decided in paragraph 4.3.5 and 4.3.6 of this order as shown below. The detailed computation of allowable interest on borrowed capital is given in Annexure -4C

Rs in Lakh

Power station	Claimed interest on borrowed capital			Admitted interest on borrowed capital		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	0.00	0.00	0.00	0.00	0.00	0.00
Bakreswar	10016.79	8855.43	7694.06	8761.01	7730.29	6699.58
Bandel (I)	0.00	0.00	0.00	0.00	0.00	0.00
Bandel (II)	969.46	969.46	969.46	920.99	920.99	920.99
Santaldih	7431.39	6144.03	4856.68	6120.15	5015.67	3914.10
Sagardighi (I)	3818.65	2596.68	1374.71	3627.72	2452.74	1226.47
Sagardighi (II)	39156.99	35843.06	32529.13	36345.26	32618.48	29567.42



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

4.12.2 It is noted that WBPDCCL has not claimed any interest on borrowed capital in respect of Bakreswar transmission system in their tariff petition but has claimed interest on borrowed capital for Santaldih transmission system for Rs. 462.77 lakh, Rs 380.76 lakh and Rs 295.31 lakh respectively for the years 2020-21, 2021-2022 and 2022-23. The proportionate chargeable amount of interest related to transmission system of Santaldih TPS for the years 2020-21, 2021-2022 and 2022-23 has been worked out at Rs 427.82 lakh, Rs 348.81 lakh and Rs 266.74 lakh respectively in the same ratio to total amount as claimed by WBPDCCL. These amounts are, however, excluded in the above admitted amount of chargeable interest on borrowed capital. Treatment of interest on borrowed capital related to transmission asset are dealt with in subsequent paragraphs.

4.13 Finance Charges:

4.13.1 WBPDCCL has claimed other finance charges for all the generating stations during the years 2020-21, 2021-22 and 2022-23 at the same level as per expenditure during 2019-20. The finance charges includes expenses on account of renewal of all credit facilities as well as processing charges and discounting charges arising out of fresh borrowings and purchase bill discounting along with various bank transaction charges. The Commission admits projected finance charge against the generating stations, as below:

Rs in Lakh

Power station	Claimed Finance Charge			Admitted Finance Charge		
	2021-22	2021-22	2022-23	2021-22	2021-22	2022-23
Kolaghat	246.19	246.19	246.19	246.19	246.19	246.19
Bakreswar	602.67	602.67	602.67	602.67	602.67	602.67
Bandel I	25.50	25.50	25.50	25.50	25.50	25.50
Bandel II	45.68	45.68	45.68	45.68	45.68	45.68
Santaldih	336.82	336.82	336.82	336.82	336.82	336.82
Sagardighi I	221.43	221.43	221.43	221.43	221.43	221.43
Sagardighi II	369.05	369.05	369.05	369.05	369.05	369.05

4.13.2 The Commission noted that there are major increase in expenditure under 'other finance charges' in the projected expenditure for Bakreswar, Santaldih and Sagardighi TPS for the years 2020-21, 2021-22 and 2022-23 compared to projected and admitted expenditure for 2019-20 in the Tariff Order for sixth control period. WBPDCCL has not given any details in



their petition in this regard. The Commission considers the finance charges as projected by WBPDCCL in respect of all the generating stations. WBPDCCL is directed to submit details of expenditure under 'other finance charges' in the APR petition for 2020-21, 2021-22 and 2022-23.

4.14 Interest on Temporary accommodation:

4.14.1 WBPDCCL has submitted that the orders issued by the Commission since 2008-09 on various accounts with the direction for recovery of the arrear sums over a period of 18 to 72 months and this prolonged recovery period has actually forced them to continue with borrowing leading to increase in cost of generation. Further, it has been submitted that requirement of fund as temporary accommodation has again increased due to non-receipt of orders on fuel cost and fixed cost adjustments since 2014-15 as well as abnormal delay in recovery of Monthly Fuel Cost Adjustment (MFCA) from the DISCOM.

4.14.2 With the above submission WBPDCCL has claimed interest on temporary accommodation for 2020-21, 2021-22 and 2022-23 in the same pattern to the interest paid by them during 2019-20 at actual (pre-actual).

4.14.3 The Commission does not consider any interest on temporary accommodation at the tariff determination stage and directs WBPDCCL to submit details of drawal of loan, interest paid in the APR for 2020-21, 2021-22 and 2022-23. The Commission will examine necessity of such loan based on tariff gap during the year and will decide accordingly as per regulatory provision.

4.15 Return on Equity:

4.15.1 WBPDCCL has claimed return on equity for each generating station on the basis of admissible equity base at the beginning of the year. The basis of determination of such admissible equity base has not, however, been explained in their submission. No addition or withdrawal of equity has been considered by WBPDCCL during the year.

4.15.2 The Commission redetermined admissible equity base for the purpose of return in the APR order dated 24.08.2017 for 2013 – 2014 in case No. WBERC/45/14-15 in pursuance of the decisions of the Commission conveyed through an order dated 18.11.2014 in case no. WBERC/AT/411.



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Based on the methodology adopted in the APR order of WBPDC for the year 2013 – 2014, admissibility of free reserve has been determined as on 31.03.2018 in Annexure – 5A attached to the tariff order for 2017-18.

4.15.3 The Commission determined admissible equity base as on 31.03.2019, and 31.03.2020 in the tariff order for sixth control period considering opening admissible equity base as on 01.04.2018, actual addition to its equity, availability of free reserve at the beginning of 2018 –2019 and 2019 – 2020 and actual addition to fixed assets during these two years. The Commission following the same principle proceeds to determine the admissible equity base by considering availability of free reserve at the beginning 2020-21 and actual addition to fixed assets during the years 2020-21, 2021-22 and 2022-23. The closing balance of admissible equity base at the end of year 2019-20 has been considered as the opening balance at the beginning of the year 2020-21. The Commission has considered addition to equity base from free reserves and fixed assets during 2020-21, 2021-22 and 2022-23 as projected by WBPDC to determine the admissible equity base and return on equity for the years 2020-21, 2021-22 and 2022-23. Generating station wise computed return on equity is given in Annexure – 4D attached to this order. For Sagardighi (Units III & IV), WBPDC considered their submitted project cost and actual equity sanctioned by the Government of West Bengal for the purpose of computation of return. The Commission admits the same.

4.15.4 Necessary effect has, however, been given for reduction of project cost by 5% as decided in paragraph 4.3.5 & 4.3.6 of this order in respect of generating stations for which requisite documents are yet to be submitted by WBPDC.

Admitted return on equity for the generating stations is given below:

Rs. in lakh

Power station	Claimed RoE			Admitted RoE		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	14879.31	15003.74	15193.80	14206.00	14330.00	14520.00
Bakreswar	20773.26	20839.56	20928.49	19640.84	19706.14	19792.95
Bandel (I)	305.37	305.86	306.34	331.00	332.00	332.00
Bandel (II)	3216.53	3299.79	3346.80	3045.70	3124.55	3169.20
Santalidih	11723.97	11810.52	11977.36	9514.18	9593.87	9754.81
Sagardighi (I)	14222.61	14258.00	14368.15	11917.75	11951.00	12055.50
Sagardighi (II)	28535.72	28594.70	28684.98	26691.20	26747.25	26832.75



This admitted amount of Equity would be reviewed at the time of APR in line with the methodology adopted in the APR order of WBPDCCL for the year 2013 – 2014 in pursuance of the decisions of the Commission conveyed through an order dated 18.11.2014 in case no. WBERC/AT/411 and mentioned at Paragraph 4.15.2.

4.15.5 WBPDCCL has claimed return on equity of Rs 1412.63 lakh, 1412.20 lakh and Rs 1412.80 lakh for the years 2020-21, 2021-2022 and 2022-23 respectively related to transmission asset in respect of Bakreswar TPS. WBPDCCL has also claimed RoE of Rs 730.08 lakh, Rs 731.92 lakh and Rs 728.28 lakh for the years 2020-21, 2021-2022 and 2022-23 respectively related to transmission asset in respect of Santaldih TPS. The chargeable amounts of return on equity for generation and transmission has been apportioned in the same ratio as claimed by WBPDCCL in respect of Bakreswar transmission system and Santaldih transmission system which are, however, excluded in the above admitted amount of such return on equity.

4.15.6 The proportionate chargeable amounts of return on equity in respect of Bakreswar transmission system and Santaldih transmission system are as follows:

Year	Amount in Rs. lakh	
	Bakreswar	Santaldih
2020-2021	1462.32	665.07
2021-2022	1461.70	667.19
2022-2023	1462.11	664.78

Return on equity related to transmission asset in the Aggregate Revenue Requirement are dealt with in subsequent paragraphs.

4.16 Income Tax:

4.16.1 It is submitted by WBPDCCL in their application that they have been paying Minimum Alternate Tax (MAT) since long. No claim on account of income tax for the year 2020-21, 2021-22 and 2022 – 23 has been projected by WBPDCCL in their tariff application. WBPDCCL has submitted that actual income Tax to be paid for the concerned year shall be claimed in APR for the related year.



Thus, no amount under this head is admitted by the Commission for the year 2020-21, 2021-22 and 2022 – 23.

4.16.2 WBPDCCL is, however, directed to submit a comprehensive statement incorporating the amounts of (i) income tax provided in the annual reports and accounts, (ii) income tax assessed, (iii) income tax paid and (iv) income tax refunded, if any, supported by documentary evidences vide assessment orders, copies of challans, copies of refund orders year wise from the year 2007 – 2008 till date with their APR application for the years 2020-21, if not submitted earlier. In this respect, the provisions in the regulations 5.13.1 and 5.13.2 of the Tariff Regulations are referred to.

4.17 Interest on Working Capital:

4.17.1 WBPDCCL has claimed interest on working capital for all the generating stations for the years 2020-21, 2021-22 and 2022-23 on normative basis in terms of regulation 5.6.5.1 of the Tariff Regulations.

4.17.2 The claims for the amounts of interest on working capital are in terms of Tariff Regulations. WBPDCCL has also projected the amount of borrowing towards working capital for each of the operating generating stations in their details of borrowings mentioning the interest to be paid on such borrowings. The Commission examined the borrowings for working capital, as submitted in Form – C by WBPDCCL, with an interest rate ranging from 7.0% to 10.50%. WBPDCCL has claimed the interest on working capital @ 13.85%, the SBI PLR as on 01.04.2018 which is higher than the interest rates projected in Form – C.

4.17.3 The normative requirement of working capital has been computed as per provisions of the Tariff Regulations. The interest on working capital is considered at Marginal Cost of Fund Based Lending Rate (MCLR) which came as a replacement of PLR w.e.f. 01.04.2016. The one year MCLR of SBI as on 01.04.2019, 01.04.2020 and 01.04.2021 as notified by RBI was 8.55%, 7.75% and 7.00% respectively. . The Commission considers these rates for computation of interest on working capital for 2020-21, 2021-2022 and 2022-23 respectively. The computation of working capital requirement for each generating station is given in Annexure – 4E.

4.17.4 However, the actual interest on borrowing for working capital for each generating station will be viewed as per provisions of the Tariff Regulations during Annual Performance Review for the concerned year. The Commission admits the interest on working capital as follows:



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Rs. in lakh

Power station	Claimed interest on working capital			Admitted interest on working capital		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	4751.20	4364.27	4173.13	1949.00	1735.00	1577.00
Bakreswar	4554.99	4184.03	4000.79	1474.00	1246.00	1141.00
Bandel I	483.28	443.92	424.48	182.00	165.00	150.00
Bandel II	865.87	795.35	760.52	331.00	300.00	273.00
Santalidih	2169.04	1992.40	1905.14	770.00	670.00	602.00
Sagardighi I	2602.85	2390.88	2286.16	714.00	642.00	575.00
Sagardighi II	4516.85	4149.00	3967.29	1400.00	1245.00	1108.00

4.18 Rent Rates & Taxes and Filing Fees:

4.18.1 In terms of provisions of Tariff Regulations, rates and taxes are recognized as separate item of cost and categorized the same as uncontrollable. WBPDC, in their tariff petition, has claimed rates and taxes for each generating station based on the actual expenditure for 2019-20 with an annual escalation of 5.20% for the years 2020-21, 2021-22 and 2022-23. Commission consider the claim on account of rates and taxes as a statutory item but with an annual escalation of 4.02%.

4.18.2 WBPDC has also claimed 'filing fees' as separate items of cost. In their petition WBPDC has projected the fees required for filing their tariff petition for the seventh control period as per WBERC (Fees) Regulations, 2013 and the same is considered by the Commission under the head 'filing fees'.

4.18.3 Station wise breakup of the admitted cost under 'rates and taxes' and 'Filing Fees' are given in the table below:



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Rates and Taxes

Rs. in lakh

Power station	Claimed amount of Rates and Taxes			Admitted amount of Rates and Taxes		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	1.66	1.75	1.84	1.64	1.71	1.78
Bakreswar	11.06	11.64	12.25	10.94	11.38	11.84
Bandel (I)	14.63	15.39	16.19	14.47	15.05	15.66
Bandel (II)	45.68	45.68	45.68	25.91	26.95	28.04
Santaldih	0.19	0.20	0.21	0.19	0.19	0.20
Sagardighi (I)	2.38	2.50	2.63	2.35	2.45	2.54
Sagardighi (II)	3.97	4.17	4.39	3.92	4.08	4.24

Tariff Filing Fees

Rs in Lakh

Power station	Claimed amount of Filing Fees			Admitted amount of Filing Fees		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	1.27	1.33	1.40	1.27	1.33	1.40
Bakreswar	0.72	0.76	0.80	0.72	0.76	0.80
Bandel (I)	0.01	0.02	0.02	0.01	0.02	0.02
Bandel (II)	0.03	0.03	0.03	0.03	0.03	0.03
Santaldih	0.18	0.19	0.20	0.18	0.19	0.20
Sagardighi (I)	0.14	0.15	0.15	0.14	0.15	0.15
Sagardighi (II)	0.23	0.24	0.26	0.23	0.24	0.26

4.19 Maintenance Charge to PGCIL:

4.19.1 WBPDC has claimed an amount of Rs. 308.17 lakh, Rs 319.00 and Rs 330.18 lakh for the years 2020-21, 2021-22 and 2022-23 respectively payable to PGCIL based on CERC rates for maintenance charges for 400 KV Sagardighi transmission system. WBPDC has submitted the executed agreement with PGCIL in this regard for the years 2019-20 and 2020-21 along with their petition. The Commission admits the claim of WBPDC as maintenance charge to PGCIL and is allocated to Sagardighi I (Units I & II) generating station.



4.20 ERPC Charges:

4.20.1 WBPDCCL has claimed ERPC charges in their tariff petition for the years 2020-21, 2021-22 and 2022-23 based on actual expenditure during the Year for 2019-20. ERPC Charges is fixed at Rs 16.00 lakh for each year. WBPDCCL has allocated Rs 16.00 altogether for all their generating stations based on their sent out generation for all the power station. The Commission admits the claimed amount against each of the generating stations based on the same principle stated by WBPDCCL i.e on admitted sent out generation for the years 2020-21, 2021-2022 and 2022-23 as given in the table below:

Rs. in lakh

Generating Stations	Claimed amount of ERPC Charges			Admitted amount of ERPC Charges		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	2.10	2.10	2.10	3.85	3.85	3.85
Bakreswar	5.60	5.60	5.60	3.69	3.69	3.69
Bandel (I)	0.24	0.24	0.24	0.34	0.34	0.34
Bandel (II)	0.42	0.42	0.42	0.76	0.76	0.76
Santaldih	2.98	2.98	2.98	1.76	1.76	1.76
Sagardighi (I)	2.01	2.01	2.01	2.10	2.10	2.10
Sagardighi (II)	3.36	3.36	3.36	3.50	3.50	3.50

4.21 License & Registration Fees :

WBPDCCL has claimed license and Registration fees for all the generating stations based on actual expenses incurred during 2020-20 escalated @ 5.20% on year to year basis for the years 2020-21, 2021-22 and 2022-23 stating that all these expenses are statutory in nature. These license includes the boiler license, factory license etc which WBPDCCL has to maintain etc to run their plant. All these expenses should be included in administrative and general expenses under the head 'Operation and Maintenance' and shall not be considered separately as claimed by WBPDCCL. Thus WBPDCCL's claim in this regard is not considered by the Commission.

4.22 Interest on Normative Loan:

4.22.1 WBPDCCL has submitted that the Government of West Bengal has contributed towards equity for construction of the units at Bakreswar, Santaldoh and Sagardighi Thermal Power Stations. The Commission has not considered the full amount of equity contribution made by the State



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Government, part of which has been considered as normative debt by the Commission in the Tariff Orders for the years 2008-09 and 2009-10. However, in the APR orders for the years 2010-11, 2011-12, 2012-13 and 2013-14 Commission has not considered the said interest on normative debt as allowed in tariff orders for 2008-09 and 2009-10.

4.22.2 WBPDCCL has now requested to allow the amount of interest on normative debt disallowed in APR orders for 2010-11 and onwards. WBPDCCL has submitted the year wise interest claimed on normative loan for the period from 2010-11 to 2018-19.

4.22.3 WBPDCCL has prayed to allow the interest on normative loan for past period disallowed in APR orders for the respective years in this tariff petition which cannot be acceded to.

4.23 Interest Credit :

It is seen that in case of Bakreswar TPS the depreciation allowed for all the three years exceeds the loan repayment scheduled for the respective years. Thus interest credit is considered for the stations as per provision of Tariff Regulations as below:

BkTPS		Rs Lakh	
Item	2020-21	2021-22	2022-23
Repayment of loan Due	10187.43	10187.43	10187.43
Depreciation allowed	17800.79	17875.82	17957.36
Excess depreciation allowed	7613.36	7688.39	7769.93
Interest Credit @ 10.65%	810.82	818.81	827.50

4.24 Income from other sources / Non-Tariff Income:

4.24.1 WBPDCCL has submitted that the income from other sources includes income from sale of scrap, interest on short term deposits with the Banks etc. The interest on short term deposits etc. has been allocated on the basis of capacity of each power station for three years. The non-tariff income has been projected in the similar level based on actual non-tariff income during the year 2019-20 and the same is admitted by the Commission in this tariff determination stage. The non-tariff income will be trued up on actual basis based on audited data in the APR orders for the respective years.

4.24.2 The plant wise income to be derived from other non-tariff sources, as projected by WBPDCCL and admitted by the Commission are as under:



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Rs. in lakh

Power station	Non- Tariff income as projected by WBPDCCL			Non- Tariff income as admitted by the Commission		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Kolaghat	2582.53	2582.53	2582.53	2582.53	2582.53	2582.53
Bakreswar	2460.57	2460.57	2460.57	2460.57	2460.57	2460.57
Bandel I	337.09	337.09	337.09	337.09	337.09	337.09
Bandel II	603.95	603.95	603.95	603.95	603.95	603.95
Santaldih	988.04	988.04	988.04	988.04	988.04	988.04
Sagardighi I	1211.92	1211.92	1211.92	1211.92	1211.92	1211.92
Sagardighi II	1702.74	1702.74	1702.74	1702.74	1702.74	1702.74

4.25 Fixed cost related to Transmission Systems at Bakreswar, Sagardighi and Santaldih:

4.25.1 The fixed costs related to transmission systems at Bakreswar and Santaldih will not form part of the fixed charges for Bakreswar and Santaldih generating stations and are not considered in the computation of fixed charges for those generating stations. The proportionate chargeable amounts in respect of the transmission systems at Bakreswar and Santaldih, have been determined in paragraphs 4.10.4, 4.12.2 and 4.15.6 above. It is decided in paragraph 4.3.6 for withholding of 5% in interest, depreciation and return on equity in respect of Bakreswar TPS (Unit 4 &5) and Santaldih TPS. Since no part of the transmission assets related to Bakreswar TPS is included in the project cost of Bakreswar TPS (units 4 and 5) 5% withholding on depreciation, interest and return on equity have not been considered for transmission asset related to Bakreswar TPS. However 5% withholding for transmission asset related to Santaldih TPS has been considered now to arrive at the admissible amount. The admissible amount of depreciation, interest and return on equity are given below.

Rs Lakh

Generating station	2020-21			
	Interest	Depreciation	Return on Equity	Total
Bakreswar	0.00	441.09	1462.32	1903.41
Santaldih	462.77	966.60	665.07	2094.44



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Rs Lakh

Generating station	2021-22			
	Interest	Depreciation	Return on Equity	Total
Bakreswar	0.00	441.09	1461.70	1902.79
Santaldih	380.76	966.60	667.19	2014.55

Rs Lakh

Generating station	2022-23			
	Interest	Depreciation	Return on Equity	Total
Bakreswar	0.00	441.09	1462.11	1903.20
Santaldih	295.31	966.60	664.78	1926.69

4.25.2 The transmission system constructed by WBPDCCL for Bakreswar and Santaldih is an integral part of the transmission system being operated by the West Bengal State Electricity Transmission Company Limited (in short 'WBSETCL'). The annual charges in respect of the transmission assets of Bakreswar being operated by WBSETCL as mentioned above works out at Rs. 1903.41 lakh, Rs. 1902.79 lakh and Rs 1903.20 for the years 2020-21, 2021-22 and 2022-23 respectively comprising depreciation and return on equity only. No interest on loan relating to Bakreswar transmission system has been considered as proposed by WBPDCCL. The depreciation and return on equity relating to Bakreswar transmission system are not considered under the respective cost heads of Bakreswar generating station as mentioned in paragraphs 4.10.4 and 4.15.6 above and those amounts stand recoverable from WBSETCL as the same are being recovered by WBSETCL through their tariff.

4.25.3 The Commission in its order dated 16.01.2009 in Case No. OA-48/08-09, allowed WBPDCCL an additional recovery of an amount of Rs. 17691.49 lakh against fixed charges comprising depreciations, interest/finance charges and returns on equity for the period from 2001 – 2002 to 2005 – 2006 in respect of Bakreswar transmission system. The Commission also decided that the aforesaid additional fixed cost amounting to Rs. 17691.49 lakh shall be recovered by



WBSETCL through tariff and pay the aforesaid amount to WBPDCCL in 120 (one hundred and twenty) equal monthly instalments @ Rs. 147.429 lakh per month starting from the billing month of / pertaining to August, 2009. The recovery in installments had to be completed by July 2019. Thus no additional recovery on account of instalment payment in terms of order dated 16.01.2009 is considered in addition to recovery of fixed charges as mentioned in paragraph 4.22.2 above, as made in the tariff orders for earlier years. Thus the recovery of fixed charges in respect of Bakreswar Transmission system from WBSETCL shall be Rs 1903.41 lakh, Rs 1902.79 lakh and Rs 1903.20 lakh respectively for the years 2020-21, 2021-2022 and 2022-23.

4.25.4 In paragraph 2.21.4 of the APR order dated 21.07.2014 in case no. APR-39/13-14, the Commission observed that only two line bays at Bishnupur end of Santaldih Thermal Power Station – Bishnupur 220 kV Double Circuit line had been handed over to WBSETCL on 11.10.2010 and also observed that the remaining part of the transmission system was not handed over to WBSETCL as those were not ready at that time. It was also observed that the evacuation of power generated by units V & VI at Santaldih generating station were made through the existing system of units I to IV. WBPDCCL has not confirmed whether the remaining portion of the transmission system has been completed and put into operation. Since the transmission system of Santaldih generating station related to Units V and VI is yet to come into operation, the fixed cost related to Santaldih transmission system are not recoverable by WBPDCCL. The fixed cost relating to Santaldih transmission system shall be recoverable by WBPDCCL only after completion of the work to bring the asset in operation for evacuation of power from Santaldih generating stations (Units V & VI) through that transmission system. Thus the Commission does not consider to admit any amount on account of transmission asset related to Santaldih TPS.

4.25.5 Regarding Sagardighi transmission system, the Commission observed in the APR order dated 21.07.2014 in case no. APR-39/13-14 that the Sagardighi – Gokarna 220 kV Double Circuit transmission line asset, a part of the transmission systems, had already been handed over to WBSETCL on 02.06.2009. The other two parts i.e., Farakka – Subhasgram 400 kV Single Circuit line LILO at Sagardighi and Sagardighi – Parulia 400 kV Double Circuit line are however being maintained by PGCIL. WBPDCCL entered into an agreement with PGCIL for operation and maintenance of those lines and associated bays at Parulia (Durgapur) and Subhasgram on payment basis. WBPDCCL has submitted a copy of the agreement executed for the year 2019-20



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

and 2020-21 along with their petition. Copy of the agreement for the year 2021-22 and 2022-23 are yet to be executed at the time of submission of Tariff petition. WBPDCCL has claimed an amount of Rs. 308.17 lakh for the year 2020-21 on CERC rate and projected Rs 319.00 lakh for the year 2021-22 and Rs 330.18 lakh for the year 2022-23 on account of service charges payable to PGCIL on this score in their application. WBPDCCL has not also given the details of the transmission asset of Sagardighi – Gokarna 220 kV double circuit line being maintained by WBSETCL. The Commission does not consider any amount on account of fixed cost related to transmission assets of Sagardighi transmission system being maintained by WBSETCL separately. WBPDCCL is directed to give details of the transmission assets of Sagardighi transmission systems handed over to WBSETCL with documentary evidence in their APR for 2020-21. The service charges payable to PGCIL for operation and maintenance of the 400 kV transmission systems during the year 2020-21, 2021-22 and 2022-23 as claimed by WBPDCCL is admitted by the Commission.



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

Annexure – 4A
(Figures in Rs. Lakh)

Particulars	KTPS		BkTPS		BTPS -I		BTPS -II		STPS	
2020-21	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted	Claimed	Admitted
Salary & Wages	9625.80	9379.44	8458.68	8241.57	1719.67	1666.20	3081.07	2982.55	7348.45	7316.83
Contribution to Funds	3099.20	3019.88	7312.54	7124.85	360.56	349.35	646.03	625.37	4009.21	3991.96
Bonus & Welfare Esp	2270.90	2212.78	1608.73	1567.44	371.49	359.94	665.6	644.32	1212.01	1206.79
Directors' Fees	0.48	0.48	1.22	1.22	0.05	0.05	0.09	0.09	0.65	0.65
Total for 2020-21	14996.38	14612.58	17381.17	16935.08	2451.77	2375.54	4392.79	4252.33	12570.32	12516.23
2021-22										
Salary & Wages	9977.00	9660.82	8732.26	8488.81	1784.51	1716.18	3197.26	3072.04	7600.92	7536.33
Contribution to Funds	3212.20	3110.40	7549.05	7338.59	374.17	359.84	670.38	644.12	4146.96	4111.72
Bonus & Welfare Esp	2354.00	2279.40	1660.77	1614.47	385.5	370.74	690.68	663.63	1253.65	1243
Directors' Fees	0.50	0.50	1.27	1.27	0.05	0.05	0.10	0.10	0.68	0.68
Total for 2021-22	15543.70	15051.12	17943.35	17443.14	2544.23	2446.81	4558.42	4379.89	13002.21	12891.73
2022-23										
Salary & Wages	10342.30	9950.64	9016.78	8743.47	1851.94	1767.66	3318.08	3164.20	7863.48	7762.41
Contribution to Funds	3330.00	3203.89	7795.03	7558.75	388.3	370.63	695.71	663.45	4290.21	4235.07
Bonus & Welfare Esp	2440.10	2347.69	1714.87	1662.89	400.07	381.86	716.79	683.55	1296.95	1280.28
Directors' Fees	0.50	0.50	1.32	1.32	0.06	0.06	0.10	0.10	0.71	0.71
Total for 2022-23	16112.90	15502.72	18528.00	17966.43	2640.37	2520.21	4730.68	4511.30	13451.35	13278.47
Grand Total	46652.98	45166.42	53852.52	52344.65	7636.37	7342.55	13681.89	13143.52	39023.88	38686.43



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Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Particulars	SgTPS -I		SgTPS -II	
	Claimed	Admitted	Claimed	Admitted
2020-21				
Salary & Wages	3464.2	3422.99	5773.67	5420.10
Contribution to Funds	2694.32	2662.27	4490.54	4215.55
Bonus & Welfare Esp	501.12	495.16	835.2	784.05
Directors' Fees	0.44	0.44	0.73	0.73
Total for 2020-21	6660.08	6580.86	11100.14	10420.43
2021-22				
Salary & Wages	3577.87	3525.68	5963.12	5582.70
Contribution to Funds	2782.72	2742.13	4637.87	4341.99
Bonus & Welfare Esp	517.57	510.02	862.6	807.57
Directors' Fees	0.46	0.46	0.76	0.76
Total for 2021-22	6878.62	6778.29	11464.35	10733.02
2022-23				
Salary & Wages	3696.08	3631.45	6160.13	5750.19
Contribution to Funds	2874.65	2824.38	4791.1	4472.27
Bonus & Welfare Esp	534.66	525.31	891.09	831.79
Directors' Fees	0.48	0.48	0.79	0.79
Total for 2022-23	7105.87	6981.62	11843.11	11055.04
Grand Total	20644.57	20340.77	34407.60	32208.49



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Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Annexure – 4B

Details of Coal and Ash Handling

Generating station	Normative generation in 2019-20	Normative generation in 2020-21	Actual generation in 2019-20	Expenditure admitted on normative generation in Tariff	Actual expenditure in 2019-20	Actual expenditure at normative generation level in 2019-20	Normative generation with escalation of 7.54 % over expenditure	Expenditure during 2021-22 with escalation of 47.54% over 2020-21	Expenditure during 2022-23 with escalation of 7.54% over 2021-22	As claimed by WBPDC			Admitted Coal and Ash Handling Charges		
										2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
	(MU)	(MU)	(MU)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)	(Rs. in lakh)
KTPS	7747.49	7726.32	2871.67	2204.11	2979.58	8038.62	2363.82	2542.05	2733.72	3134.52	3297.51	3468.98	2363.82	2542.05	2733.72
BkTPS	7378.56	7358.40	6996.73	1977.71	2384.25	2514.36	2121.02	2280.94	2452.92	2508.23	2638.66	2775.87	2121.02	2280.94	2452.92
BTPS -I (unit #1 and #2)	685.15	683.28	312.92	89.05	130.27	285.23	95.50	102.7	110.44	137.04	144.17	151.67	95.50	102.70	110.44
BTPS -II (Unit 5)	1510.85	1506.72	547.44	210.17	233.4	644.15	225.40	242.4	260.68	245.53	258.30	271.73	225.40	242.40	260.68
STPS	3513.60	3504.00	3675.00	1712.36	663.47	634.33	1836.44	1974.91	2123.82	697.97	734.26	772.45	697.97	734.26	772.45
SgTPS -I	4216.32	4204.80	2703.72	403.44	202.01	315.02	432.67	465.29	500.37	212.52	223.57	235.19	212.52	223.57	235.19
SgTPS -II	7027.20	7008.00	3991.56	398.90	336.69	592.75	427.80	460.06	494.75	354.20	372.61	391.99	354.20	372.61	391.99



Tariff Order of WBPDCL for the years 2020-21, 2021-22 and 2022-23

Annexure 4C

Interest on Capital borrowings 2020-21								Rs in Lakh
Sl. No.	Borrowing Particulars	Kolaghat	Bakreswar	Bandel-I	Bandel-II	Santaldihi	Sagardighi I	Sagardighi II
1	Outstanding Balance at the beginning of the year	0	91686.32		36069.14	70336.94	40160.42	344312.47
2	Add: Drawal of loan on capital account	0	0	0	0	0	0	0
3	Sub-Total (1 + 2)	0	91686.32	0	36069.14	70336.94	40160.42	344312.47
4	Less: Repayment of existing loan during the year	0	10187.43			11658.36	11473.87	39080.49
5	Outstanding balance at the end of the year (3 - 4)	0	81498.89	0	36069.14	58678.58	28686.55	305231.98
6	Rate of interest		10.65%		10.65%	10.65%	11.25%	11.78%
7	Interest Claimed	0	10016.79		969.46	7431.39	3818.65	39156.99
8	Gross interest computed on capital account for the year	0	9222.11	0.00	3841.36	6870.08	3872.64	38258.17
9	Less: Interest capitalized during the year	0	0	0	0	0	0	0
10	Net interest on capital account[Minimum of (7) and (8-9) [5% deduction made for BTPS II, SgTPS I and SgTPS II]	0.00	9222.11	0.00	920.99	6870.08	3627.72	36345.26
	Projected interest for Transmission asset		0			462.77		
	Proportionate interest for Transmission asset		0			427.82		
	Interest on Generation asset for BkTPS and STPS after 5% deduction		8761.01			6120.15		



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Interest on Capital borrowings 2021-22								
Rs in Lakh								
Sl. No.	Borrowing Particulars	Kolaghat	Bakreswar	Bandel-I	Bandel-II	Santaldihi	Sagardighi I	Sagardighi II
1	Outstanding Balance at the beginning of the year	0	81498.89	0	36069.14	58678.58	28686.55	305231.98
2	Add: Drawal of loan on capital account	0	0	0	0	0	0	0
3	Sub-Total (1 + 2)	0	81498.89	0	36069.14	58678.58	28686.55	305231.98
4	Less: Repayment of existing loan during the year	0	10187.43			11658.36	11473.87	27275.12
5	Outstanding balance at the end of the year (3 - 4)	0	71311.46	0	36069.14	47020.22	17212.68	277956.86
6	Rate of interest		10.65%		10.65%	10.65%	11.25%	11.78%
7	Interest Claimed	0	8855.43		969.46	6144.03	2596.68	35843.06
8	Gross interest computed on capital account for the year	0	8137.15	0	3841.36	5628.46	2581.83	34335.24
9	Less: Interest capitalized during the year	0	0	0	0	0	0	0
10	Net interest on capital account[Minimum of (7) and (8-9) [5% deduction made for BTPS II SgTPS I and SgTPS II]	0.00	8137.15	0.00	920.99	5628.46	2452.74	32618.48
	Projected Interest for Transmission asset		0			380.76		
	Proportionate Interest for Transmission asset		0			348.81		
	Interest on Generation asset for BkTPS and STPS after 5% deduction		7730.29			5015.67		



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Interest on Capital borrowings 2022-23							Rs in Lakh	
Sl. No.	Borrowing Particulars	Kolaghat	Bakreswar	Bandel-I	Bandel-II	Santalidhi	Sagardighi I	Sagardighi II
1	Outstanding Balance at the beginning of the year	0	71311.46	0	36069.14	47020.22	17212.68	277956.86
2	Add: Drawal of loan on capital account	0	0	0	0	0	0	0
3	Sub-Total (1 + 2)	0	71311.46	0	36069.14	47020.22	17212.68	277956.86
4	Less: Repayment of existing loan during the year	0	10187.43			11658.36	11473.87	27275.12
5	Outstanding balance at the end of the year (3 - 4)	0	61124.03	0	36069.14	35361.86	5738.81	250681.74
6	Rate of interest		10.65%		10.65%	10.65%	11.25%	11.78%
7	Interest Claimed	0	7694.06		969.46	4856.68	1374.71	32529.13
8	Gross interest computed on capital account for the year	0	7052.19	0	3841.36	4386.85	1291.02	31123.60
9	Less: Interest capitalized during the year	0	0	0	0	0	0	0
10	Net interest on capital account[Minimum of (7) and (8-9) [5% deduction made for BTPS II SgTPS I and SgTPS II]	0.00	7052.19	0.00	920.99	4386.85	1226.47	29567.42
	Projected Interest for Transmission asset		0			295.31		
	Proportionate Interest for Transmission asset		0			266.74		
	Interest on Generation asset for BkTPS and STPS after 5% deduction		6699.58			3914.10		



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Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Annexure – 4D

Return on Equity for 2020-21								
		Rs. In Lakh						
Sl. No.	Particulars	Generating Stations						
		Kolaghat	Bakreswar	Bandel- I	Bandel- II	Santaldihi	Sagardighi- I	Sagardighi II
1	Actual Equity base at the beginning of the year	108359.66	140666.89	3881.23	20854.94	74557.53	82739.15	181115.87
2	Opening balance of admissible equity base at the beginning of the year	91478.16	138584.92	2134.67	20383.67	68559.01	80844.67	181104.45
3	Addition / withdrawal to / from equity base during the year	345.38	299.93	3.13	600.71	683.56	176.75	316.76
4	Actual Equity base at the end of the year – computed [(1)+(3)]	108705.04	140966.82	3884.36	21455.65	75241.09	82915.90	181432.63
5	Net addition to the original cost of fixed assets	1151.27	999.76	10.44	2002.38	2278.54	589.16	1055.88
6	Normative addition to Fixed Assets @ 30%	345.00	300.00	3.00	601.00	684.00	177.00	317.00
7	Normative addition to Equity Base [lower of (3) and (6)]	345.00	299.93	3.00	600.71	683.56	177.00	316.76
8	Admissible Equity base at the end of the year [(2)+(7)]	91823.16	138884.85	2137.67	20984.38	69242.57	81021.67	181421.21
9	Average equity base for the year [(2)+(8)]/2	91651.00	138735.00	2136.00	20684.00	68901.00	80933.00	181263.00
10	Rate of return	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
11	Allowable return after deduction of 5% in case of BTPS II, SgTPS I and SgTPS II as mentioned in para 4.3.5 and 4.3.6	14206.00	21504.00	331.00	3045.70	10680.00	11917.75	26691.20
12	RoE Claimed by WBPDC	14879.31	20773.26	305.37	3216.53	11723.97	14226.61	28535.72
13	RoE Claimed by WBPDC for transmission Asset		1412.63			730.08		
14	Proportionate ROE for transmission asset		1462.32			665.07		
15	Allowable return on Gen asset after deduction of 5% in case of BkTPS and STPS as mentioned in para 4.3.6		19640.84			9514.18		



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Return on Equity for 2021-22								
Sl. No	Particulars	Rs in Lakh						
		Generating Stations						
		Kolaghat	Bakreswar	Bandel- I	Bandel- II	Santaldihi	Sagardighi- I	Sagardighi II
1	Actual Equity base at the beginning of the year	108705.04	140966.82	3884.36	21455.65	75241.09	82915.90	181432.63
2	Opening balance of admissible equity base at the beginning of the year	91823.16	138884.85	2137.67	20984.38	69242.57	81021.67	181421.21
3	Addition / withdrawal to / from equity base during the year	1260.14	549.96	3.13	473.59	433.24	279.93	444.18
4	Actual Equity base at the end of the year – computed [(1)+(3)]	109965.18	141516.78	3887.49	21929.24	75674.33	83195.83	181876.81
5	Net addition to the original cost of fixed assets	4200.47	1833.20	10.44	1578.63	1444.13	933.08	1480.59
6	Normative addition to Fixed Assets @ 30%	1260.00	550.00	3.00	474.00	433.00	280.00	444.00
7	Normative addition to Equity Base [lower of (3) and (6)]	1260.00	549.96	3.00	473.59	433.00	279.93	444.00
8	Admissible Equity base at the end of the year [(2)+(7)]	93083.16	139434.81	2140.67	21457.97	69675.57	81301.60	181865.21
9	Average equity base for the year $\frac{[(2)+(8)]}{2}$	92453.00	139160.00	2139.00	21221.00	69459.00	81162.00	181643.00
10	Rate of return	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
11	Allowable return after deduction of 5% in case of BTPS II, SgTPS I and SgTPS II as mentioned in para 4.3.5 and 4.3.6	14330.00	21570.00	332.00	3124.55	10766.00	11951.00	26747.25
12	RoE Claimed by WBPDC	15003.74	20839.56	305.86	3299.79	11810.52	14258.00	28594.7
13	RoE Claimed by WBPDC for transmission Asset		1412.2			731.92		
14	Proportionate ROE for transmission asset		1461.70			667.19		
15	Allowable return on Gen asset after deduction of 5% in case of BkTPS and STPS as mentioned in para 4.3.6		19706.14			9593.87		



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Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Return on Equity for 2022-23								
Sl.	Particulars	Generating Stations						
No.		Kolaghat	Bakreswar	Bandel- I	Bandel- II	Santalদিহি	Sagardighi-I	Sagardighi II
1	Actual Equity base at the beginning of the year	109965.18	141516.78	3887.49	21929.24	75674.33	83195.83	181876.81
2	Opening balance of admissible equity base at the beginning of the year	93083.16	139434.81	2140.67	21457.97	69675.57	81301.60	181865.21
3	Addition / withdrawal to / from equity base during the year	1192.23	605.37	3.13	133.01	1719.53	1141.30	720.43
4	Actual Equity base at the end of the year – computed [(1)+(3)]	111157.41	142122.15	3890.62	22062.25	77393.86	83195.83	182597.24
5	Net addition to the original cost of fixed assets	3974.11	2017.89	10.44	443.38	5731.77	3804.34	2402.78
6	Normative addition to Fixed Assets @ 30%	1192.00	605.00	3.00	133.00	1720.00	1141.00	721.00
7	Normative addition to Equity Base [lower of (3) and (6)]	1192.00	605.00	3.00	133.00	1719.53	1141.00	720.43
8	Admissible Equity base at the end of the year [(2)+(7)]	94275.16	140039.81	2143.67	21590.97	71395.10	82442.60	182585.64
9	Average equity base for the year $\frac{[(2)+(8)]}{2}$	93679.00	139737.00	2142.00	21524.00	70535.00	81872.00	182225.00
10	Rate of return	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
11	Allowable return after deduction of 5% in case of BTPS II, SgTPS I and SgTPS II as mentioned in para 4.3.5 and 4.3.6	14520.00	21659.00	332.00	3169.20	10933.00	12055.50	26832.75
12	RoE Claimed by WBPDC	15193.80	20928.49	306.34	3346.8	11977.36	14368.85	28684.98
13	RoE Claimed by WBPDC for transmission Asset		1412.80			728.28		
14	Proportionate ROE for transmission asset		1462.11			664.78		
15	Allowable return on Gen asset after deduction of 5% in case of BkTPS and STPS as mentioned in para 4.3.6		19792.95			9754.81		



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

Annexure – 4E

Interest on Working Capital for 2020-21								
Sl. No	Particulars	Generating Stations						
		Kolaghat	Bakreswar	Bandel- I	Bandel- II	Santaldihi	Sagardighi- I	Sagardighi II
A	Gross Sale	244016.94	209434.06	21819.73	44301.73	109740.51	106303.96	211418.65
B1	Depreciation including AAD	1879.14	17359.70	169.84	2512.58	10128.88	10866.98	20935.37
B2	Deferred Revenue Expenditure	0	0	0	0	0	0	0
B3	Return on Equity	14206.00	19640.84	331.00	3045.70	9514.18	11917.75	26691.20
B4	Bad Debt	0	0	0	0	0	0	0
B5	Reserve for Unforeseen exigencies	0	0	0	0	0	0	0
B6								
B	Total Deductions	16085.14	37000.54	500.84	5558.28	19643.07	22784.73	47626.57
C	Allowable Gross Sales for Working Capital	227931.80	172433.52	21318.89	38743.45	90097.45	83519.23	163792.08
D	Allowable Working Capital @ 10% on C(A-B)	22793	17243	2132	3874	9010	8352	16379
E	Interest Rate	8.55%	8.55%	8.55%	8.55%	8.55%	8.55%	8.55%
F	Interest on Working Capital (E% on D)	1949	1474	182	331	770	714	1400



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Interest on Working Capital for 2021-22								
Sl. No	Particulars	Generating Stations						
		Kolaghat	Bakreswar	Bandel-I	Bandel-II	Santalদিহি	Sagardighi-I	Sagardighi-II
A	Gross Sale	240251.44	197893.39	21794.05	44341.13	106197.97	105689.63	208420.44
B1	Depreciation including AAD	2041.37	17434.73	171.18	2568.62	10183.05	10904.63	20995.95
B2	Deferred Revenue Expenditure	0	0	0	0	0	0	0
B3	Return on Equity	14330.00	19706.14	332.00	3124.55	9593.87	11951.00	26747.25
B4	Bad Debt	0	0	0	0	0	0	0
B5	Reserve for Unforeseen exigencies	0	0	0	0	0	0	0
B6								
B	Total Deductions	16371.37	37140.86	503.18	5693.17	19776.92	22855.63	47743.20
C	Allowable Gross Sales for Working Capital	223880.07	160752.53	21290.87	38647.96	86421.05	82834.00	160677.24
D	Allowable Working Capital @ 10% on C(A-B)	22388	16075	2129	3865	8642	8283	16068
E	Interest Rate	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
F	Interest on Working Capital (E% on D)	1735	1246	165	300	670	642	1245



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

Sl. No	Particulars	Interest on Working Capital for 2022-23						
		Generating Stations						
		Kolaghat	Bakreswar	Bandel-I	Bandel-II	Santaldihi	Sagardighi-I	Sagardighi-II
A	Gross Sale	241971.01	200352.12	21973.56	44709.34	106132.61	105214.34	206189.51
B1	Depreciation including AAD	2195.46	17516.27	172.52	2585.84	10383.85	11040.47	21088.08
B2	Deferred Revenue Expenditure	0	0	0	0	0	0	0
B3	Return on Equity	14520.00	19792.95	332.00	3169.20	9754.81	12055.50	26832.75
B4	Bad Debt	0	0	0	0	0	0	0
B5	Reserve for Unforeseen exigencies	0	0	0	0	0	0	0
B6		0	0	0	0	0	0	0
B	Total Deductions	16715.46	37309.21	504.52	5755.04	20138.66	23095.97	47920.83
C	Allowable Gross Sales for Working Capital	225255.55	163042.91	21469.04	38954.30	85993.95	82118.37	158268.68
D	Allowable Working Capital @ 10% on C(A-B)	22526	16304	2147	3895	8599	8212	15827
E	Interest Rate	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
F	Interest on Working Capital (E% on D)	1577	1141	150	273	602	575	1108



CHAPTER – 5

SUMMARISED STATEMENT OF AGGREGATE REVENUE REQUIREMENT FOR 2020-21, 2021-22 AND 2022-23 AND REVENUE RECOVERABLE THROUGH TARIFF FOR THE YEARS 2020-21 AND 2021-22

- 5.1 Based on the analyses and findings recorded in the foregoing chapters the commission is now drawing the statement of Aggregate Revenue Requirements (ARR) separately for each of the generating stations of WBPDCCL. Such summarized statements are given in Annexures 5A to 5G to this chapter. The ARR of each generating station is as follows:

Rupees in Lakh

Generating stations	2020-21	2021-22	2022-23
Kolaghat	245965.94	241986.44	243548.01
Bakreswar	210908.06	199139.39	201493.12
Bandel I	22001.73	21959.05	22123.56
Bandel II	44632.73	44641.13	44982.34
Santaldih	110510.51	106867.97	106734.61
Sagardighi (I & II)	107017.96	106331.63	105789.34
Sagardighi (III & IV)	212818.65	209665.44	207297.51

- 5.2 Accordingly, the amount of revenue in respect of capacity charges to be recovered through tariff for the years 2020-21 and 2021-22 separately for each of the generating stations of WBPDCCL works out as under:

Capacity charges for 2020-21

Rupees in Lakh

Sl No.	Particulars	Kolaghat	Bakreswar	Bandel I	Bandel II	Santaldih	Sagardighi	Sagardighi
1	Aggregate Revenue Requirement for the year 2020-21	245965.94	210908.06	22001.73	44632.73	110510.51	107017.96	212818.65
2	Fuel cost admitted for the year 2020-21	199822.40	132692.66	16839.91	30155.53	65395.93	68532.95	110912.76
3	Capacity charge allowed for the year 2020-21 [(3)= (1)-(2)]	46143.53	78215.40	5161.81	14477.20	45114.58	38485.01	101905.89



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Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Capacity charges for 2021-22

Sl No.	Particulars	Rupees in Lakh						
		Kolaghat	Bakreswar	Bandel I	Bandel II	Santaldih	Sagardighi	Sagardighi
1	Aggregate Revenue Requirement for the year 2021-22	241986.44	199139.39	21959.05	44641.13	106867.97	106331.63	209665.44
2	Fuel cost admitted for the year 2021-22	194457.74	120629.71	16640.02	29765.35	62168.63	68532.85	110913.04
3	Capacity charge allowed for the year 2021-22 [(3)= (1)-(2)]	47528.70	78509.68	5319.03	14875.78	44699.33	37798.78	98752.40



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

AGGREGATE REVENUE REQUIREMENT OF DIFFERENT GENERATING STATIONS OF WBPDC
Annexure – 5A

KOLAGHAT THERMAL POWER STATION					Rupees in Lakh		
Sl. NO.	PARTICULARS	As claimed by WBPDC			As admitted		
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Fuel	199821.34	194456.18	194456.2	199822.40	194457.74	194457.74
2	Coal and Ash Handling charge	3134.52	3297.51	3468.98	2363.82	2542.05	2733.72
3	Employee Cost	14996.57	15543.83	16112.96	14612.58	15051.12	15502.72
4	Rates and Taxes	1.66	1.75	1.84	1.64	1.71	1.78
5	Filing fees	1.27	1.33	1.40	1.27	1.33	1.40
6	ERPC Charges	2.10	2.10	2.10	3.85	3.85	3.85
7	Operation and Maintenance Expenses	13173.02	13858.03	14578.65	13122.53	13804.90	14522.76
9	Insurances	870.74	914.27	959.99	340.04	353.71	367.93
10	Financing Charges	246.19	246.19	246.19	246.19	246.19	246.19
11	Interest on borrowed capital	0.00	0.00	0.00	0.00	0.00	0.00
12	Interest on Working Capital	4751.20	4364.27	4173.13	1949.00	1735.00	1577.00
13	Interest on Temporary Accommodation	4311.24	4311.24	4311.24	0	0	0
14	Depreciation	1879.14	2041.37	2195.46	1879.14	2041.37	2195.46
15	Water Charges	0.00	0.00	0.00	0.00	0.00	0.00
16	Maintenance charge to PGCIL	0.00	0.00	0.00	0.00	0.00	0.00
17	License & Registration Charges	38.60	40.14	41.75	0.00	0.00	0.00
18	Tax	0.00	0.00	0.00	0.00	0.00	0.00
19	Total Expenditure (19 = sum 1 to 18)	243227.59	239078.21	240549.87	234342.47	230238.97	231610.54
20	Return on Equity	14879.31	15003.74	15193.8	14206.00	14330.00	14520.00
21	Gross Aggregate Revenue Requirement: [(21) = (19) + (20)]	258106.90	254081.95	255743.67	248548.47	244568.97	246130.54
22	Less Misc. other income	2582.53	2582.53	2582.53	2582.53	2582.53	2582.53
23	Aggregate Revenue Requirement (Annual): [(23) = (21) - (22)]	255524.37	251499.42	253161.14	245965.94	241986.44	243548.01



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Annexure 5B

BAKRESWAR THERMAL POWER STATION							
SI. NO.	PARTICULARS	Rupees in Lakh					
		As claimed by WBPDC			As admitted		
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Fuel	132692.70	120627.91	122473.32	132692.66	120629.71	122472.65
2	Coal and Ash Handling charge	2508.32	2638.66	2775.87	2121.02	2280.94	2452.92
3	Employee Cost	17381.17	17943.35	18528.01	16935.08	17443.14	17966.43
4	Rates and Taxes	11.06	11.64	12.25	10.94	11.38	11.84
5	Filing fees	0.72	0.76	0.80	0.72	0.76	0.80
6	ERPC Charges	5.60	5.89	6.20	3.69	3.69	3.69
7	Operation and Maintenance Expenses	14133.78	14868.74	15641.91	14084.40	14816.79	15587.26
9	Insurances	945.44	992.71	1042.35	492.72	512.53	533.13
10	Financing Charges	602.67	602.67	602.67	602.67	602.67	602.67
11	Interest on borrowed capital	10016.79	8855.43	7694.06	8761.01	7730.29	6699.58
12	Interest on Working Capital	4554.99	4184.03	4000.79	1474.00	1246.00	1141.00
13	Interest on Temporary Accommodation	4133.20	4133.20	4133.20	0.00	0.00	0.00
14	Depreciation	18155.07	18231.63	18314.83	17359.70	17434.73	17516.27
15	Water Charges	0.00	0.00	0.00	0.00	0.00	0.00
16	Maintenance charge to PGCIL	0.00	0.00	0.00	0.00	0.00	0.00
17	License & Registration Charges	58.79	61.84	65.06	0.00	0.00	0.00
18	Tax	0.00	0.00	0.00	0.00	0.00	0.00
19	Total Expenditure (19 = sum 1 to 18)	205200.30	193158.46	195291.32	194538.61	182712.64	184988.24
20	Return on Equity	20773.26	20839.56	20928.49	19640.84	19706.14	19792.95
21	Gross Aggregate Revenue Requirement: [(21) = (19) + (20)]	225973.56	213998.02	216219.81	214179.45	202418.77	204781.19
22	Less Misc. other income	2460.57	2460.57	2460.57	2460.57	2460.57	2460.57
23	Less : Interest Credit	0.00	0.00	0.00	810.82	818.81	827.50
24	Aggregate Revenue Requirement (Annual): [(24 = 21-(22+23)]	223512.99	211537.45	213759.24	210908.06	199139.39	201493.12



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Annexure 5C

BANDEL THERMAL POWER STATION (UNITS 1&2)							
Rupees in Lakh							
Sl. NO.	PARTICULARS	As claimed by WBPDC			As admitted		
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Fuel	16839.91	16640.03	16640	16839.91	16640.02	16640.02
2	Coal and Ash Handling Charge	137.04	144.17	151.67	95.5	102.7	110.44
3	Employee Cost	2451.78	2544.23	2640.39	2375.54	2446.81	2520.21
4	Rates and Taxes	14.63	15.39	16.19	14.47	15.05	15.66
5	Filing Fees	0.01	0.02	0.02	0.01	0.02	0.02
6	ERPC Charges	0.24	0.25	0.26	0.34	0.34	0.34
7	Operation and Maintenance Expenses	3657.74	3847.94	4048.03	2294.40	2386.80	2482.80
9	Insurances	105.3	110.56	116.09	10.31	10.72	11.15
10	Financing Charges	25.50	25.50	25.50	25.50	25.50	25.50
11	Interest on borrowed capital	0.00	0.00	0.00	0	0.00	0.00
12	Interest on Working Capital	483.28	443.92	424.48	182.00	165.00	150.00
13	Interest on Temporary Accommodation	438.52	438.52	438.52	0	0	0
14	Depreciation	169.84	171.18	172.52	169.84	171.18	172.52
15	Water Charges	0.00	0.00	0.00	0.00	0.00	0.00
16	Maintenance charge to PGCIL	0.00	0.00	0.00	0.00	0.00	0.00
17	License & Registration Fees	3.53	3.71	3.9	0.00	0.00	0.00
18	Tax	0.00	0.00	0.00	0.00	0.00	0.00
19	Total Expenditure (19 = sum 1 to 18)	24327.32	24385.42	24677.60	22007.82	21964.14	22128.65
20	Return on Equity	305.37	305.86	306.34	331.00	332.00	332.00
21	Gross Aggregate Revenue Requirement: [(21) = (19) + (20)]	24632.69	24691.28	24983.94	22338.82	22296.14	22460.65
22	Less Misc. other income	337.09	337.09	337.09	337.09	337.09	337.09
23	Aggregate Revenue Requirement (Annual): [(23) = (21) - (22)]	24295.60	24354.19	24646.85	22001.73	21959.05	22123.56



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Annexure 5D

Rupees in Lakh							
BANDEL THERMAL POWER STATION (UNIT 5)							
SI. NO.	PARTICULARS	As claimed by WBPDC			As admitted		
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Fuel	30155.54	29765.38	29765.38	30155.53	29765.35	29765.35
2	Coal and Ash Handling Charge	245.53	258.30	271.73	225.40	242.40	260.68
3	Employee Cost	4392.76	4558.42	4730.68	4252.33	4379.89	4511.30
4	Rates and Taxes	26.21	27.57	29.01	25.91	26.95	28.04
5	Filing Fees	0.03	0.03	0.03	0.03	0.03	0.03
6	ERPC Charges	0.42	0.45	0.47	0.76	0.76	0.76
7	Operation and Maintenance Expenses	6553.44	6894.22	7252.71	3702.30	3850.65	4005.45
9	Insurances	188.66	198.09	208	18.47	19.21	19.98
10	Financing Charges	45.68	45.68	45.68	45.68	45.68	45.68
11	Interest on borrowed capital	969.46	969.46	969.46	920.99	920.99	920.99
12	Interest on Working Capital	865.87	795.35	760.52	331.00	300.00	273.00
13	Interest on Temporary Accommodation	785.69	785.69	785.69	0	0	0
14	Depreciation	2644.82	2703.81	2721.94	2512.58	2568.62	2585.84
15	Water Charges	0.00	0.00	0.00	0.00	0.00	0.00
16	Maintenance charge to PGCIL	0.00	0.00	0.00	0.00	0.00	0.00
17	License & Registration Fees	6.32	6.65	6.99	0.00	0.00	0.00
18	Tax	0.00	0.00	0.00	0.00	0.00	0.00
19	Total Expenditure (19 = sum 1 to 18)	46880.43	47009.10	47548.29	42190.98	42120.53	42417.09
20	Return on Equity	3216.53	3299.79	3346.80	3045.70	3124.55	3169.20
21	Gross Aggregate Revenue Requirement: [(21) = (19) + (20)]	50096.96	50308.89	50895.09	45236.68	45245.08	45586.29
22	Less Misc. other income	603.95	603.95	603.95	603.95	603.95	603.95
23	Aggregate Revenue Requirement (Annual): [(23) = (21) - (22)]	49493.01	49704.94	50291.14	44632.73	44641.13	44982.34



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Annexure 5E

SANTALDIH THERMAL POWER STATION							Rupees in Lakh
SI. NO.	PARTICULARS	As claimed by WBPDC			As admitted		
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Fuel	65396.11	62168.71	62168.71	65395.93	62168.63	62168.63
2	Coal and Ash Handling Charge	697.97	734.26	772.45	697.97	734.26	772.45
3	Employee Cost	12570.32	13002.23	13451.36	12516.23	12891.73	13278.47
4	Rates and Taxes	0.19	0.2	0.21	0.19	0.19	0.20
5	Filing fees	0.18	0.19	0.2	0.18	0.19	0.20
6	ERPC Charges	2.98	3.14	3.3	1.76	1.76	1.76
7	Operation and Maintenance Expenses	7762.32	8165.96	8590.59	5430.00	5650.00	5875.00
9	Insurances	515.96	541.75	568.84	134.87	140.29	145.93
10	Financing Charges	336.82	336.82	336.82	336.82	336.82	336.82
11	Interest on borrowed capital	7431.39	6144.03	4856.68	6120.15	5015.67	3914.10
12	Interest on Working Capital	2169.04	1992.4	1905.14	770.00	670.00	602.00
13	Interest on Temporary Accommodation	1968.19	1968.19	1968.19	0	0	0
14	Depreciation	11628.58	11685.6	11896.97	10128.88	10183.05	10383.85
15	Water Charges	848.13	848.13	848.13	451.39	469.54	488.42
16	Maintenance charge to PGCIL	0.00	0.00	0.00	0.00	0.00	0.00
17	License & Registration Fees	30.93	32.54	34.23	0.00	0.00	0.00
18	Tax	0.00	0.00	0.00	0.00	0.00	0.00
19	Total Expenditure (19 = sum 1 to 18)	111359.11	107624.15	107401.82	101984.37	98262.14	97967.84
20	Return on Equity	11723.97	11810.52	11977.36	9514.18	9593.87	9754.81
21	Gross Aggregate Revenue Requirement: [(21) = (19) + (20)]	123083.08	119434.67	119379.18	111498.55	107856.01	107722.65
22	Less Misc. other income	988.04	988.04	988.04	988.04	988.04	988.04
23	Aggregate Revenue Requirement (Annual): [(23) = (21) - (22)]	122095.04	118446.63	118391.14	110510.51	106867.97	106734.61



Tariff Order of WBPDC for the years 2020-21, 2021-22 and 2022-23

Annexure 5F

SAGARDIGHI THERMAL POWER STATION (UNITS 1&2)							
Rupees in Lakh							
Sl. NO.	PARTICULARS	As claimed by WBPDC			As admitted		
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Fuel	68532.92	68532.92	68532.92	68532.95	68532.85	68532.85
2	Coal and Ash Handling Charge	212.52	223.57	235.19	212.52	223.57	235.19
3	Employee Cost	6660.08	6878.61	7105.86	6580.86	6778.29	6981.62
4	Rates and Taxes	2.38	2.5	2.63	2.35	2.45	2.54
5	Filing Fees	0.14	0.15	0.15	0.14	0.15	0.15
6	ERPC Charges	2.01	2.12	2.23	2.10	2.10	2.10
7	Operation and Maintenance Expenses	5068.68	5332.25	5609.53	5056.82	5319.77	5596.40
9	Insurances	526.15	552.45	580.08	186.09	193.57	201.35
10	Financing Charges	221.43	221.43	221.43	221.43	221.43	221.43
11	Interest on borrowed capital	3818.65	2596.68	1374.71	3627.72	2452.74	1226.47
12	Interest on Working Capital	2602.85	2390.88	2286.16	714.00	642.00	575.00
13	Interest on Temporary Accommodation	2361.83	2361.83	2361.83	0	0	0
14	Depreciation	11438.93	11478.56	11621.55	10866.98	10904.63	11040.47
15	Advance against Depreciation (AAD)	0.00	0.00	0.00	0.00	0.00	0.00
16	Maintenance charge to PGCIL for 400 KV LILO line	308.17	319.00	330.18	308.17	319.00	330.18
17	License & Registration Fees	17.23	18.13	19.07	0.00	0.00	0.00
18	Tax	0.00	0.00	0.00	0.00	0.00	0.00
19	Total Expenditure (19 = sum 1 to 18)	101773.97	100911.08	100283.52	96312.13	95592.55	94945.76
20	Return on Equity	14222.61	14258.00	14368.15	11917.75	11951.00	12055.50
21	Gross Aggregate Revenue Requirement: [(21) = (19) + (20)]	115996.58	115169.08	114651.67	108229.88	107543.55	107001.26
22	Less Misc. other income	1211.92	1211.92	1211.92	1211.92	1211.92	1211.92
23	Aggregate Revenue Requirement (Annual): [(23) = (21) - (22)]	114784.66	113957.16	113439.75	107017.96	106331.63	105789.34



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

Annexure 5G

SAGARDIGHI THERMAL POWER STATION (UNITS 3&4)							
Rupees in Lakh							
SI. NO.	PARTICULARS	As claimed by WBPDCCL			As admitted		
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Fuel	113089.51	113089.51	113090	110912.76	110913.04	110913.04
2	Coal and Ash Handling Charge	354.2	372.61	391.99	354.2	372.61	391.99
3	Employee Cost	11100.14	11464.34	11843.1	10420.43	10733.02	11055.04
4	Rates and Taxes	3.97	4.17	4.39	3.92	4.08	4.24
5	Filing Fees	0.23	0.24	0.26	0.23	0.24	0.26
6	ERPC Charges	3.36	3.53	3.72	3.50	3.50	3.50
7	Operation and Maintenance Expenses	8612.99	9060.86	9532.03	6820.00	7090.00	7380.00
9	Insurances	876.91	920.76	966.80	261.06	271.55	282.47
10	Financing Charges	369.05	369.05	369.05	369.05	369.05	369.05
11	Interest on borrowed capital	39156.99	35843.06	32529.13	36345.26	32618.48	29567.42
12	Interest on Working Capital	4516.85	4149.00	3967.29	1400.00	1245.00	1108.00
13	Interest on Temporary Accommodation	4098.59	4098.59	4098.59	0	0	0
14	Depreciation	22037.23	22101.00	22197.98	20935.37	20995.95	21088.08
15	Advance against Depreciation (AAD)	0.00	0.00	0.00	0.00	0.00	0.00
16	Maintenance charge to PGCIL	0.00	0.00	0.00	0.00	0.00	0.00
17	License & Registration Fees	28.72	30.21	31.78	0.00	0.00	0.00
18	Tax	0.00	0.00	0.00	0.00	0.00	0.00
19	Total Expenditure (19 = sum 1 to 18)	204248.74	201506.93	199025.64	187825.78	184616.52	182163.09
20	Return on Equity	28535.72	28594.70	28685	26691.20	26747.25	26832.75
21	Gross Aggregate Revenue Requirement: [(21) = (19) + (20)]	232784.46	230101.63	227710.62	214516.98	211363.77	208995.84
22	Less Misc. other income	1702.74	1702.74	1702.74	1698.33	1698.33	1698.33
23	Aggregate Revenue Requirement (Annual): [(23) = (21) - (22)]	231081.72	228398.89	226007.88	212818.65	209665.44	207297.51



CHAPTER 6

TARIFF ORDER

6.1 Based on the analyses and the decisions recorded in earlier chapters the Commission has determined the capacity charge and energy charge for 2020-21 and 2021-22 in respect of Kolaghat, Bakreswar, Bandel- I (Units I and II), Bandel – II (Unit V), Santaldih, Sagardighi- I (Units I and II) and Sagardighi- II (units III and IV) generating stations of WBPDC as shown in chapter 5. The Commission now orders as shown in the following paragraphs.

6.2 The annual capacity charge recoverable by WBPDC from WBSEDCL shall be on the following basis:

- (a) The annual capacity charge recoverable by WBPDC from WBSEDCL shall be on monthly basis depending on actual availability during the month with reference to the target normative annual availability subject to the conditions as laid down in regulation 6.11.4 of the Tariff Regulations.
- (b) The annual capacity charge determined on the basis of submission of WBPDC and on prudence check for 2020-21 and 2021-2022 are provided in the following table.

Generating Station	2020-21		2021-22	
	Target normative availability factor	Determined Annual capacity charge in Rs. lakh	Target normative availability factor	Determined Annual capacity charge in Rs. lakh
Kolaghat	75%	46143.53	75%	47364.02
Bakreswar (Units I to V)	85%	78215.40	85%	78361.80
Bandel -I (Units I and II)	70%	5161.81	70%	5312.42
Bandel – II (Unit V)	85%	14477.20	85%	14859.16
Santaldih (Units V & VI)	85%	45114.58	85%	44699.33
Sagardighi – I (units I & II)	85%	38485.01	85%	37798.78
Sagardighi (Units III & IV)	85%	101905.89	85%	98752.40

6.3 The energy charges recoverable in 2020-21, 2021-2022 and 2022-23 against each unit of injection of energy under implemented schedule on injection as decided in chapter 3 of this order shall be as follows:



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

Generating Station	Energy Charge (Paisa/kWh)	
	2020-21	2021-22
Kolaghat	286.09	278.41
Bakreswar (Units I to V)	198.16	180.15
Bandel – I (Unit I and II)	275.06	271.80
Bandel – II (Unit V)	219.93	217.09
Santaldih	205.09	194.97
Sagardighi (Units I & II)	179.11	179.11
Sagardighi (Units III & IV)	173.92	173.92

- 6.4 The tariff admitted for 2020-21 applicable for the period from 1st April, 2020 to 31 March 2021 includes the Monthly Fuel Cost Adjustment (MFCA), if any, realized by WBPDCCL during the period. The tariff admitted for 2021-22 applicable for the period from 1st April, 2021 to 31 March 2022 also includes the MFCA, if any, realized by WBPDCCL during the period.
- 6.5 Adjustments, if any, for over recovery / under recovery from WBSEDCL for the years 2020-21 and 2021-2022 as per this order shall be made in the monthly bills in 10 (ten) equal instalments commencing from the month succeeding to the month of issue of this order.
- 6.6 The rates of energy charges and annual capacity charges for the year 2021-22 as mentioned in paragraph 6.3 and 6.2 respectively shall also continue till further order of the Commission.
- 6.7 In addition to the energy charge mentioned in paragraph 6.3 above, WBPDCCL shall further be entitled to additional sums towards enhanced cost of fuel after the date of this order, if any, as per the provisions of the Tariff Regulations based on this tariff order. The MFCA to be realized after the date of this order, if any, by WBPDCCL is subject to truing up during fuel cost adjustment (FCA) for the respective year as per the provisions of the Tariff Regulations.
- 6.8 WBPDCCL shall claim the energy charges and capacity charges as per the rates admitted in this order for 2021-22 and MFCA, if any, considering the energy accounting and availability declared by State Load Despatch Centre (in short 'SLDC') in its monthly energy accounting schedule prospectively from the next month of issue of this order till further order of the Commission.
- 6.9 Availability of installed capacity for any of the generating stations of WBPDCCL may be adjusted downward against enhanced performance of any of the other generating stations of WBPDCCL,



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

which may register capacity availability over the target availability. In such event, recovery of capacity charge and energy charge and also the manner of adjustment of such charges shall be such as specified in regulation 2.8.6.7 of the Tariff Regulations.

6.10 Recoverable amount of the capacity charge for Bakreswar transmission system from WBSETCL are at the rate of Rs. 1903.41 lakh per annum and Rs 1902.79 lakh per annum for the years 2020-21 and 2021-2022 respectively. However, any adjustment on account of recovery of fixed cost for Bakreswar transmission system for the year 2020-21 and 2021-2022 as per the tariff order of WBSETCL shall be looked into while issuing the APR orders for the respective years.

6.11 Any matter, which has not been explicitly mentioned in this order, shall be guided by regulations 2.9.8 and 2.9.9 of the Tariff Regulations.

6.12 For merit order despatch, SLDC / ALDC shall consider the energy charge of the generating stations of WBPDCCL as determined in this tariff order for 2021-22 as per the following table prospectively. The merit order despatch as per the table below will be applicable from the date of issue of this order. However, the MFCA declared after this tariff order will be added to the energy charge for consideration of merit order despatch from the date of issue of the MFCA notification respectively.

Generating Station	Energy Charge for Merit Order Despatch (Paise/kWh)
Kolaghat	278.41
Bakreswar	180.15
Bandel-I (Units I & II)	271.80
Bandel-II (Unit V)	217.09
Santalidih	194.97
Sagardighi -I (Units I & II)	179.11
Sagardighi (Units III & IV)	173.92

6.13 In the tariff order of WBPDCCL for the year 2017-18, issued on 13.09.2018 and also in the Tariff order for 2018-19 and 2019-20, the Commission had given certain directions to WBPDCCL. Some of those directions are of continuous nature and WBPDCCL has to continue with compliance of those directions. The Commission has also given some directions in Chapter – 3 and Chapter- 4 in this order. WBPDCCL shall also comply with those directions in addition to the directions mentioned hereinabove.



Tariff Order of WBPDCCL for the years 2020-21, 2021-22 and 2022-23

- 6.14 WBPDCCL shall approach the GST authority for appropriate ruling for nil rating of GST on their captive coal consumption from their mines located within the State of West Bengal.
- 6.15 WBPDCCL shall present to the Commission a gist of this order in accordance with regulation 2.9.6 of the Tariff Regulations within five 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 terms of aforesaid regulations within six (6) working days from the date of receipt of the approval of the Commission.

Sd/-

(PULAK KUMAR TEWARI)
MEMBER

Sd/-

(DURGADAS GOSWAMI)
MEMBER

Sd/-

(SUTIRTHA BHATTACHARYA)
CHAIRPERSON

Date: 08 October, 2021

Sd/-

Secretary