

# WEST BENGAL ELECTRICITY REGULATORY COMMISSION



CORRIGENDUM TO THE ORDER DATED 25.08.2021 OF THE COMMISSION IN RESPECT OF THE HIRANMAYE ENERGY LIMITED IN REGARD TO THE MULTI YEAR TARIFF APPLICATION IN CASE NO TP-97/20-21

Attention of the Commission has been drawn to some typographical errors/ apparent mistakes in the tariff order dated 25.08.2021 passed by the Commission in respect of Hiranmaye Energy Limited for the years 2020-21, 2021-22 and 2022-23 in Case No TP-97/20-21.

These inadvertent typographical errors/ apparent mistakes do not have any effect on the tariff already determined. The Commission is of the considered opinion that the said typographical errors/ apparent mistakes be corrected and necessary corrigendum be issued. The Commission now issues the following corrigendum:-

Correction of the typographical error/apparent mistake in the Tariff Order dated 25.08.2021 in respect of the Hiranmaye Energy Limited.

Page No	Nomenclature	Present Description	Corrected Description
1(Cover Page)	Date of issue the order	25.08.2019	25.08.2021
36	Authenticated date of the order	25.08.2029	25.08.2021

Sd/-

Sd/-

Sd/-

(PULAK KUMAR TEWARI) (DURGADAS (IGOSWAMI) (SUTIRTHA BHATTACHARYA) **MEMBER MEMBER CHAIRPERSON** 

Dated 10.09.2021

corrigendum

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#### ORDER

#### OF THE

# WEST BENGAL ELECTRICITY REGULATORY COMMISSION

# FOR THE YEARS 2020 – 21 AND 2021 – 22

IN

CASE NO: TP - 97 / 20 - 21

IN REGARD TO THE MULTI YEAR TARIFF APPLICATION UNDER SEVENTH CONTROL PERIOD OF THE HIRANMAYE ENERGY LIMITED FOR THE YEARS 2020 – 21, 2021 – 22 AND 2022-23 UNDER SECTION 64(3)(a) READ WITH SECTION 62(1) OF THE ELECTRICITY ACT, 2003

DATE: 25.08.2019



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# 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 Hiranmaye Energy Limited (hereinafter referred to as HMEL), [formerly known as India Power Corporation (Haldia) Limited] registered under the Companies Act, 1956, is a generating company in terms of section 2(28) of the Act and is engaged in the business of generation of electricity within the State of West Bengal and the generation tariff of HMEL 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 vide order dated 28.05.2019 in Case No: SM-19/19-20 decided that the seventh control period shall be for three years consisting of 2020 - 21, 2021 - 22 and 2022 - 23. The Commission extended the last date of filing tariff petition for seventh control period upto 31.08.2020 considering repeated prayer of the utilities of the State in view of issuance of 3rd amendment of the Tariff Regulations and continuing lockdown conditions as per direction of the Government to contain spread of COVID - 19. Thereafter, based on the prayer of HMEL vide their letter dated 09.09.2020 to extend the last date of filing of tariff petition for the seventh control period, the Commission extended the last





date of filing of tariff petition for seventh control period upto 16.10.2020for HMEL.

Tariff Order of Hiranmaye Energy Limited for the years 2020 - 21 and 2021 - 22

- Accordingly, HMEL submitted the petition for determination of tariff for the 1.4 seventh control period consisting of the years 2020 - 21, 2021 - 22 and 2022 - 23 on 16th October, 2020. The tariff application has been admitted by the Commission in Case No.TP-97/20-21 on 03.11.2020, with a 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 on 18.11.2020 in the newspapers - (i) 'The Telegraph' (English), (ii) the 'Ananda Bazar Patrika' (Bengali), (iii) the 'Aajkal' (Bengali) and (v) the 'Sanmarg' (Hindi). The gist and the tariff application were also posted in the website of HMEL. The publications invited attention of all interested parties, stake holders and the members of the public to the application for determination of tariff of HMEL 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 11.12.2020. Opportunities were also extended to all to inspect the tariff application and to take copies thereof.
- No suggestions, objections and comments on the tariff application of HMEL was received by the Commission within the stipulated time i.e. 11.12.2020.
- 1.6 Now, the Commission proceeds to determine the tariff in accordance with the Electricity Act, 2003 and the Tariff Regulations framed thereunder for the years 2020 2021 and 2021 2022 in the subsequent chapters.







# CHAPTER – 2 THE CASE OF HMEL

- 2.1 HMEL has submitted the application containing its proposal for determination of Annual Revenue Requirement (ARR) and tariff for the seventh control period, in accordance with the Tariff Regulations. The applicant has proposed the ARR and tariff for the seventh control period and has prayed for allowing the same. HMEL has also prayed for other dispensations which are mentioned in subsequent paragraphs.
- 2.2 HMEL has submitted the present application for determination of tariff of Unit 1 (150 MW) and Unit 2 (150 MW). The dates of commercial operation (COD) of Unit 1 and Unit 2 are 13.08.2017 and 31.12.2017 respectively. HMEL also submitted that the tariff application is based on the actual capital cost of Rs. 2646.49 Crore as on 31.12.2017. HMEL has considered an amount of Rs. 1903.70 Crore as debt and Rs. 742.79 Crore as equity for tariff determination.
- 2.3 HMEL has proposed gross generation of power during the seventh control period as 2233.80 MU from both the units during each of the years of 2020 21, 2021 22 and 2022 23.
  - 2.4 HMEL has submitted that that they have relied upon the norms approved by the Commission for HMEL for the purpose of tariff application. HMEL also submitted that they have their own dedicated transmission system which is expected to have transmission losses of 0.05% as per normative practice. HMEL has excluded the transmission loss from the approved auxiliary consumption of 10.5%.
  - 2.5 HMEL has submitted that the coal ministry in May, 2017 introduced the Scheme for Harnessing and Allocating Koyala (coal) Transparently in India (SHAKTI) to ensure coal linkage to power producers based on auction and/or tariff-based bidding. HMEL was pursuing the matter with the Ministry of Power, the Ministry of Coal and the Central Electricity Authority (CEA) so that they can participate and ensure long term linkage from domestic coal mines in view of the Power





Purchase Agreement signed with the West Bengal State Electricity Distribution Company Limited (WBSEDCL) under Section 62 of the Electricity Act, 2003.

Subsequently, the coal ministry had published notification on 20.02.2019 and conducted the second round of Auction of Coal Linkage wherein HMEL had participated and successfully secured allocation of 1502300 Ton per annum of coal from Mahanadi Coalfields Limited (MCL). HMEL has signed the FSA with MCL on 17.03.2020.

HMEL has submitted that the quantity of coal is expected to meet only 93% of total yearly coal requirement due to heat value loss and HMEL will have to depend on open market sources such as on spot E-Auction, Special Forward E-Auction and import coal etc. and the preferred source mix depending upon the coal price volatility, availability, variation in exchange rate, policy changes, etc.

- However, HMEL has considered suitable escalation based on CIL historical 2.6 price change trend, railway freight change and other incidental component price variation for the purpose of the tariff application.
- 2.7 HMEL has submitted that in order to sell the entire generation of Unit 1 and 2, they have entered into a power purchase agreement with the West Bengal State Electricity Distribution Company Limited (in short 'WBSEDCL') which has been approved by the Commission in Case No. WBERC/PPA-22/10-11 dated 08.04.2011.Further, HMEL has also submitted that a discount of 7 paisa/ unit is to be given to WBSEDCL for the sale of energy specifically generated by using the coal from Shakti Scheme based on the discount quoted in Shakti Scheme and PPA executed with WBSEDCL. HMEL has not considered any discount amount in the total Annual Revenue Requirement (ARR) and the same shall be calculated on monthly basis for applicable months and shall be shown as a separate item in the energy bill to be raised to WBSEDCL.







- 2.8 The per unit energy charge during the seventh control period has been projected by HMEL as 376paise/kWh, 396paise/kWh and 419paise/kWh for FY 2020-21, FY 2021-22 and FY 2022-23 respectively.
- 2.9 HMEL has submitted that the approved man/MW ratio for HMEL should be relatively higher than the norms applicable for Unit size of 300 MW of Sagardighi Thermal Power Station Stage 1 (SgTPS Stage I). HMEL has also submitted that due to shortage of manpower, the supervision of machine during operation is getting affected. However, in the instant application for determination of tariff, HMEL has considered Man/MW ratio as 1.30 as approved by the Commission since no comparable unit size is present under the purview of the Commission and thus benchmarking is also not possible. HMEL also submitted that the actual Man/MW ratio may be considered at the time of determination of Annual Performance Review. Further, in absence of any approved employee cost for HMEL, they have considered the average employee cost based on approved average for SgTPS Stage I. Thus, the projected employee cost for FY 2020-21, FY 2021-22 and FY 2022-23 has been claimed as Rs. 4045 Lakh, Rs. 4262 Lakh and Rs. 4491 Lakh respectively.
- 2.10 Regarding expenses on Operation & Maintenance (O&M), HMEL has proposed total expenditure of Rs. 3291Lakh for FY 2020-21, Rs. 3486 Lakh for FY 2021-22 and Rs. 3693Lakh for FY 2022-23. HMEL has prayed to allow O&M expense norms as Rs. 10.97 Lakh/MW for FY 2020-21, Rs. 11.62 Lakh/MW for FY 2021-22 and Rs. 12.31Lakh/MW for FY 2022-23. HMEL has submitted that they have considered an annual escalation of 5.93% over claim for O&M expenses of FY 2019 20.
- 2.11 The coal and ash handling charges for generating station of HMEL for FY 2020-21, FY 2021-22 and FY 2022-23 has been projected on the basis of the rate indicated in LoA for different Annual Maintenance Contracts entered by HMEL with the agency selected for coal and ash handling activities. For the subsequent ensuing years, HMEL has also considered an inflation of 7.1% per





annum based on hybrid index comprising of WPI and CPI of past two years. The amount projected for the years 2020-21, 2021-22 and 2022-23 is Rs. 586.65Lakh, Rs. 628.09Lakh and Rs. 672.46Lakh respectively.

- 2.12 HMEL has projected the Water Charges at a rate of Rs. 17.48/ KLfor water supplied by Haldia Development Authority (HDA). The amount projected for the years 2020-21, 2021-22 and 2022-23 is Rs. 1171Lakh for each of the years.
- 2.13 HMEL has projected Insurance Cost for 7<sup>th</sup> control period based on the premium paid during base year of 2019 20 with an annual inflation of 7.1% per annum, considering hybrid index comprising of WPI and CPI. Thus, the amount projected for the years 2020-21, 2021-22 and 2022-23 are Rs. 238.09Lakh, Rs. 254.99Lakh and Rs. 273.10Lakh respectively.
- 2.14 HMEL has projected Rent, Rates and Taxes for 7<sup>th</sup> control period based on the premium paid during base year of 2019 20 with an annual inflation of 7.1% per annum, considering hybrid index comprising of WPI and CPI. Thus, the amount projected for the years 2020-21, 2021-22 and 2022-23 is Rs. 154.48Lakh, Rs. 165.45Lakh and Rs. 177.20Lakh respectively.
- 2.15 HMEL has also proposed its other fixed costs under the seventh control period and adduced justifications for increase, wherever required.
- 2.16 The per unit fixed charge during the seventh control period has been projected by HMEL as 265paise/kWh, 261 paise/kWh and 257paise/kWh for FY 2020-21, FY 2021-22 and FY 2022-23 respectively.







# CHAPTER – 3 VARIABLE COST& EXPENDITURE

Examination of the fuel cost as claimed by HMEL for the years 2020 – 21, 2021 – 22 and 2022 – 23 of the seventh control period under different heads for its generating station has been taken up in this chapter. For the purpose of calculation of fuel cost and determination of energy charge, the energy generated from the generating station has been considered as per normative PLF of the generating station but it is to be noted that capacity charge recovery of the generating station shall be on the basis of normative PAF.

#### 3.2 Normative parameters:

The Commission in terms of regulation 2.8.1.4.9 of the Tariff Regulations has determined the norms of different operating parameters for the years 2017-18 in respect of 3 X 150 MW coal based thermal power plants set up by HMEL vide its order in Case No. OA-287/18-19 dated 13.09.2018. The operating norms, thus specified for fuel cost computations are as below:

SI No	Operating parameters	Normative value
1	Gross Station heat rate (GSHR)	2477.15 kCal/kWh
2	Secondary oil consumption	1.00 ml/kWh
3	Auxiliary consumption	10.50 %
4	Plant Availability Factor (PAF)	85 %
5	Plant Load Factor (PLF)	80 %
6	Transit and handling loss	0.80 %

#### 3.3 Gross Generation:

HMEL owns and operates a 2 X 150 MW coal fired Thermal Power Station located at Haldia, East Midnapore. The dates of commercial operation of these two units are 13.08.2017 and 31.12.2017. HMEL has also submitted certificate from Central Electricity Authority, Ministry of Power, Government of India regarding COD of both the units. HMEL has proposed gross generation of

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2233.80 MU for all three ensuing years of seventh control period on the basis of normative PAF.

The Commission finds it suitable to admit the projected generation for the ensuing years of seventh control period on the basis of normative PLF. Accordingly, the gross generation figures projected from these two units of HMEL during the seventh control period stand as follows

Van	Gross Generation (in MU)			
Year	Projected by HMEL	Admitted		
2020 – 21	2330.80	2102.40		
2021 – 22	2330.80	2102.40		
2022 - 23	2330.80	2102.40		

#### Auxiliary consumption and ex-bus generation: 3.4

HMEL has projected the auxiliary consumption and sent-out generation during the years 2020 - 21, 2021 - 22 and 2022 - 23 considering the auxiliary consumption norms approved by the Commission. The projected auxiliary consumption and ex-bus generation based on approved norms are admitted as below:

Year	Gross Generation (in MU)	Rate of Aux. Consumption (%)	Aux. Consumption (in MU)	Ex-bus Generation (in MU)
2020 - 21	2102.40	10.50 %	220.75	1881.65
2021 – 22	2102.40	10.50 %	220.75	1881.65
2022 – 23	2102.40	10.50 %	220.75	1881.65

#### 3.5 Fuel Cost:

3.5.1 HMEL has projected the fuel cost and per unit energy charge for its generating stations in their petition as below:

Particulars	2020 - 21	2021 – 22	2022 - 23
Fuel cost (Rs. in lakh)	75177.44	79212.79	83734.29
Energy charge (Rs. /kWh	3.76	3.96	4.19







- 3.5.2 In the tariff application, HMEL has submitted that, its earlier Fuel Supply Agreement (FSA) with WBMDTCL was cancelled as the said coal block was deallocated by the Central Government pursuant to the directives of Hon'ble Supreme Court. Subsequently, coal ministry in May 2017 introduced the Scheme for Harnessing and Allocating Koyala Transparently in India (SHAKTI) to ensure coal linkage to power producers based on auction and /or tariff-based bidding. HMEL participated in the second round of auction of coal linkage under SHAKTI scheme and secured allocation of 1502300 tonne per annum of coal from Mahanadi Coalfields Limited (MCL) with levelised tariff discount of 7 paisa/kWh. HMEL has signed the FSA with MCL on 17.03.2020.
- 3.5.3 HMEL further submitted that, 100% availability as per FSA quantity shall meet about 93% of its coal requirement and out of this 93% coal under SHAKTI scheme, 7% is expected through Rail cum Road (RCR) mode and balance 86% through rail mode. HMEL also proposed to purchase balance 7% of coal requirement through e-auction. HMEL, accordingly, has furnished the coal mix as below:

Contract Type	Source	% mix	Heat Value (kCal/kg)	Landed cost of coal (Rs. / Tonne)
For the Year 2020	- 21			
SHAKTI Scheme	MCL -Talcher / IB Valley	93%	3281	4275
E-auction		7%	3431	5989
For the Year 2021	- 22	1/		
SHAKTI Scheme	MCL -Talcher / IB Valley	93%	3281	4550
E-auction		7%	3431	6321
For the Year 2022	- 23			
SHAKTI Scheme	MCL -Talcher / IB Valley	93%	3281	4740
E-auction		7%	3431	6676

3.5.4 While scrutinizing the submission of HMEL, it has been observed that, HMEL has considered weighted average 'as received GCV' value of coal without deducting 120 kCal/kg from weighted average 'as received GCV' value of coal in terms of regulation 5.8.4 of the Tariff Regulations for determination of energy charge. Further, HMEL has considered coal price in line with CIL notified price during 2020 – 21 and applied escalation of 6.43% and 4.18% to arrive at the

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price of coal for 2021 - 22 and 2022 - 23 respectively. The coal price computed for 2020 -21 as per CIL notified rate is considered. However, the Commission finds it suitable to allow a growth rate of 0.93% for 2021 -22 and 2022 -23 on price of coal considering CERC notified domestic coal escalation rates as per provision of regulation 5.8.7of the Tariff Regulations.

Year	Escalation rate of CERC	Domestic coal
2020 -21	CERC notice no ECO-1/2020 dt13.05.2020	0.00
	CERC notice no ECO-2/2020 dt12.10.2020	0.00
2021 -22 #	CERC notice no ECO-1/2021 dt 23.04.2021	0.93%

<sup>#</sup> upto latest notification available in CERC website.

3.5.5 HMEL has computed weighted average coal transportation cost for 2020 -21 @ Rs. 2687.50 /tonne. From detail transportation figures it is observed that, besides railway transportation charge, HMEL has considered road transportation cost (from Haldia Dock siding (HDGC) to power plant) at Rs.1061.70/ tonne, Rs. 80.49 /tonne as HDGC statutory charge, Rs. 47.42 of handling & supervision charge. HMEL has also considered a road transportation charge from mine to railway sliding in case of proposed 7% RCR (road-cum-rail) mode of transportation. HMEL has also considered demurrage charge at the rate Rs. 27.7 /tonne in case of railway rakes from MCL Talcher Coalfield, without mentioning any specific reason.

In the tariff order dated 31.05.2021 for the years 2018 - 19 and 2019 - 20, the Commission has already expressed its concern over the road transportation of coal on the ground of economic and environmental issues and directed HMEL to establish connectivity either by conveyor or by rail upto their plant. The Commission allowed coal transportation cost of Rs. 1906 /tonne for the year 2019 -20 including Rs. 1289 /tonne as railway freight from MCL mines, Rs. 533 /tonne as road transportation cost and Rs. 84/ tonne as other charges. In view of zero escalation notified by CERC for domestic coal transport during 2020 & 2021 as given below, the same coal transportation rate of Rs. 1906 /tonne is considered for 2020 -21, 2021-22 and 2022 - 23.





Year	Escalation rate of CERC	Inland transportation of coal					
		Upto 125 km	Upto 500 km	Upto 1000 km	upto 2000 km	Beyond 2000 km	
2020 -21	CERC notice no ECO-1/2020 dt13.05.2020	0.00	0.00	0.00	0.00	0.00	
	CERC notice no ECO-2/2020 dt12.10.2020	0.00	0.00	0.00	0.00	0.00	
2021 -22 #	CERC notice no ECO-1/2021 dt 23.04.2021	0.00	0.00	0.00	-39.63%	-40.00%	

<sup>#</sup> upto latest notification available in CERC website.

From the petition (para 4.9) it is noted that, HMEL has considered an additional planned capex for construction of railway siding adjacent to plant and Railway line to connect HMEL plant. HMEL expected such infrastructure in the year 2022-23. Pending readiness of such suitable infrastructure, road transportation rate is subject to a normative analysis. HMEL shall explain the rate of road transportation as may be sought in their FCA petition from the point of view of transparency and reasonability along with necessary backup data and information.

3.5.6 The admissible "as received GCV" value and landed cost of coal in line with the decisions taken in 3.5.4 and 3.5.5 above, are shown in the table below:

SI	Parameters	Unit	2020 -21	2021 - 22	2022 - 23
No					
Α	Weighted average "as received GCV"	kCal/kg	3291.35	3291.35	3291.35
В	Weighted average cost of coal	Rs./tonne	1708.44	1724.33	1740.37
С	Weighted average transportation cost	Rs./tonne	1906.00	1906.00	1906.00
D	Weighted average landed cost	Rs./tonne	3614.44	3630.33	3646.37

Detailed computation is shown in Annexure 3A.

- 3.5.7 HMEL has proposed average heat value of oil and oil price at 8823.79 kCal/liter and Rs. 41772.00 per KL in 2020 21 as per prevailing market rate and considered 5% increase in price for 2021-22 and 2022 -23. The Commission admits the same subject to truing up during the FCA.
- 3.5.8 Considering the admissible weighted average "as received GCV value", price of coal and price of oil and after allowing a margin of 120 kCal/kg in heat value

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in terms of regulation 5.8.4 (1)of the Tariff Regulations, the detailed computation of allowable fuel cost for the years 2020 - 21, 2021 - 22 and 2022 - 23 has been shown in the table at Annexure - 3 to this chapter.

The summarized statement of the admitted fuel cost and energy charge for the power station of HMEL pertaining to the years 2020 – 21, 2021 – 22 and 2022 – 2023 as per admitted generation in paragraph 3.4 above, is shown hereunder:

SI No	Particulars	Unit	2020 - 21	2021 – 22	2022 – 23
1	Fuel cost as per Annexure -3	Rs. in Lakh	60499.74	60805.76	61116.45
2	Ex-bus generation	MU	1881.65	1881.65	1881.65
3	Energy charge	Paise/kWh	321.52	323.15	324.80

An additional discount @ 7 paisa per kWh will be applicable to the extent of usage of coal under SHAKTI Scheme in terms of the provision of the amended PPA. HMEL shall compute the same every month based on the coal used from SHAKTI scheme and show the adjustment in its energy bill.







## **ANNEXURE 3**

## **FUEL COST DETERMINATION OF HMEL**

SL no	Particulars	Unit	2020 ~ 21	2021 - 22	2022 - 23
1	Generation	MU	2102.40	2102.40	2102.40
2	Rate of Auxiliary Consumption	%	10.50	10.50	10.50
3	Auxiliary consumption	MU	220.75	220.75	220.75
4	Ex-bus generation (4=1-3)	MU	1881.65	1881.65	1881.65
- 5	Station Heat rate	Kcal/KWh	2477.15	2477.15	2477.15
6	Total Heat required (6=1 x 5)	GCal	5207960.16	5207960.16	5207960.16
7	Specific Oil Consumption rate	ml/KWh	1.00	1.00	1.00
8	Oil Consumed (8=1 x 7)	KL	2102.4	2102.4	2102.4
9	Heat Value of Oil	Kcal/lit	8823.79	8823.79	8823.79
10	Heat Generated from oil (8 x 9/1000)	GCal	18551.14	18551.14	18551.14
11	Heat Generated from Coal (6 - 10)	GCal	5189409.02	5189409.02	5189409.02
12	As received GCV of coal	Kcal/kg	3291.35	3291.35	3291.35
13	Allowable Value of Coal (after adjusting 120 kCal/kg)	Kcal/Kg	3171.35	3171.35	3171.35
14	Coal required [(11/13)x1000]	Tonne	1636340.68	1636340.68	1636340.68
15	Coal required at 0.80% Transit Loss	Tonne	1649536.98	1649536.98	1649536.98
16	Average Price of Oil	Rs./KL	41772.00	43860.60	46053.63
17	Average Price of coal	Rs./Tonne	3614.44	3630.33	3646.37
18	Cost of oil [(8 x 16)/100000]	Rs. In lakh	878.21	922.13	968.23
19	Cost of Coal [(15x17)/100000]	Rs. In lakh	59621.52	59883.64	60148.22
20	Total Cost of Fuel (18 + 19)	Rs. In lakh	60499.74	60805.76	61116.45







#### **ANNEXURE 3A**

## PROJECTED COAL PRICE AND HEAT VALUE FOR 2020 - 21

Source	Grade	Admissible GCV as received	Rs./1000 kCal (min GCV)	Quantum of coal	Amount charged by coal company	Transportation cost	Handling, sampling, etc.	Admitted landed cost
		Kcal/kg		MT	Rs. /MT	Rs. /MT	Rs. /MT	Rs. /MT
MCL- Talcher rail	G13	3431	1.055	692425.00	1712.48	1906.00	0.00	3618.48
MCL- Talcher RCR	G13	3431	1.055	57475.00	1712.48	1906.00	0.00	3618.48
MCL-IB Valley rail	G14	3131	1.128	694300.00	1626.64	1906.00	0.00	3532.64
MCL-IB Valley RCR	G14	3131	1.128	58100.00	1626.64	1906.00	0.00	3532.64
SUB-TOTAL		3280.75	0	1502300.00				
E-auction	G13	3431	1.203	114026.00	2221.60	1906.00	0.00	4127.60
TOTAL		3291.35	1.098	1616326.00	1708.44	1906.00	0	3614.44

# PROJECTED COAL PRICE AND HEAT VALUE FOR 2021 – 22

Source	Grade	Admissible GCV as received	Rs./1000 kCal (min GCV)	Quantum of coal	Amount charged by coal company	Transportation cost	Handling, sampling, etc.	Admitted landed cost
		Kcal/kg		MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT
MCL- Talcher rail	G13	3431	1.301	692425.00	1728.41	1906.00	0.00	3634.41
MCL- Talcher RCR	G13	3431	1.687	57475.00	1728.41	1906.00	0.00	3634.41
MCL-IB Valley rail	G14	3131	1.389	694300.00	1641.77	1906.00	0.00	3547.77
MCL-IB Valley RCR	G14	3131	1.742	58100.00	1641.77	1906.00	0.00	3547.77
SUB-TOTAL		3280.75	1.372	1502300.00				
E-auction	G13	3431	1.842	114026.00	2242.26	1906.00	0.00	4148.26
TOTAL		3291.35		1616326.00	1724.33	1906.00	0	3630.33

## PROJECTED COAL PRICE AND HEAT VALUE FOR 2022 - 23

Source	Grade	Admissible GCV as received	Rs./1000 kCal (min GCV)	Quantum of coal	Amount charged by coal company	Transportation cost	Handling, sampling, etc.	Admitted landed cost
		Kcal/kg		MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT
MCL- Talcher rail	G13	3431	1.369	692425.00	1744.48	1906.00	0.00	3650.48
MCL- Talcher RCR	G13	3431	1.783	57475.00	1744.48	1906.00	0.00	3650.48
MCL-IB Valley rail	G14	3131	1.464	694300.00	1657.04	1906.00	0.00	3563.04
MCL-IB Valley RCR	G14	3131	1.841	58100.00	1657.04	1906.00	0.00	3563.04
SUB-TOTAL		3280.75	1.445	1502300.00				
E-auction	G13	3431	1.946	114026.00	2263.11	1906.00	0.00	4169.11
TOTAL		3291.35		1616326.00	1740.36	1906.00	0	3646.36



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# CHAPTER – 4 FIXED CHARGES

4.1 An examination of the projected fixed charges claimed by HMEL for the years 2020-21, 2021-22 and 2022-13 under different heads for its generating stations have been taken up in this chapter.

#### 4.2 Project Cost:

#### 4.2.1 Project cost of Unit 1 & Unit 2:

HMEL [formerly known as IPC(H)L] had submitted a petition on 19.10.2012 for 'in-principle' investment approval for 3 X 150 MW coal based TPP project in Haldia with estimated cost of Rs 2672.00 Crore. Subsequently, HMEL vide a supplementary petition dated 24.07.2015 revised the estimated cost to Rs 3307.00 Crore. The Commission vide its order in Case no. OA-159 /12-13 dated 20.11.2017 accorded 'in-principle' approval of Rs. 2672.09 Crore for 3 X 150 MW power plant. The Commission in the said order under paragraph 15.0 observed the following:

#### [Quote]

.... enhanced cost under IDC and building & civil works including employee accommodation are not tenable and for the time being agree to the estimated project cost submitted in the initial petition. However, the Commission will take final view of the project cost after completion of the project and submission of all necessary documents with audited figures and with prudent check during final approval of project cost....

#### [Unquote]

4.2.2 After declaration of COD of first two units (13<sup>th</sup> August 2017 and 31<sup>st</sup> December 2017 respectively) HMEL had submitted a petition on 20.02.2019 seeking 2<sup>nd</sup> stage final approval of the investment proposal for an amount of Rs. 4274.79







crore in terms of regulation 2.8.1.4.3 of the Tariff Regulations. The Commission in its order dated 14.10.2020 in Case no OA-299/18-19 inter-alia observed that, seeking 2<sup>nd</sup> stage approval after completion of COD of two units is not tenable under regulation 2.8.1.4.3 of the Tariff Regulations and directed HMEL to submit fresh petition for the final project cost as per the provision of regulation 2.8.1.4.13 of the Tariff Regulations along with audited figures and substantial documents in support of variation in project cost from the 'in principle' approval order.

- 4.2.3 HMEL vide a petition dated 09.12.2020 has sought time extension till 31.12.2022 for filing final project cost approval under regulation 2.8.1.4.13 of the Tariff Regulations, which has been allowed by the Commission.
- 4.2.4 On the above grounds, especially keeping in mind the observation made by the Commission during the 'in-principle' approval order, it is found prudent to consider the 'in-principle' approved amount for computation of ARR till the final project cost is approved. Accordingly, the Commission, decides to consider the proportionate amount of project cost for Unit 1 & 2 amounting to Rs. 1781.3933 crores (Rs.2672.09 X 2/3) provisionally and proceeds to determine Aggregate Revenue Requirements (ARR) for the years 2020-21, 2021-22 and 2022-23 following the same principle as adopted in the Tariff Order dated 31st May, 2021.

#### 4.3 Employees' cost:

- 4.3.1 HMEL submitted that the approved man/MW ratio for HMEL for 2017-18 is low compared to Sagardighi Thermal Power Plant Stage-1 (SgTPP-I) of WBPDCL and has prayed for a review of the man/MW ratio norms based on actual performance if any excess manpower is required.
- 4.3.2 HMEL has also submitted that in absence of any approved employees' cost, they have proposed their employee cost considering the average employee cost based on approved average for SgTPS Stage I. They have accordingly submitted to consider the average employee cost of SgTPP-I in Rs/lakh given in the tariff order of WBPDCL for 2017-18 as a benchmark and applied 5.38% annual escalation to determine the employee cost of HMEL for the years 2018-





19 and 2019-20. Accordingly, HMEL has claimed Rs. 4045 lakh, Rs.4262 lakh and Rs.4491 lakh respectively under employee cost for the years 2020-21, 2021-22 and 2022-23.

4.3.3 Employee cost has been recognized as an uncontrollable element in the Tariff Regulations subject to approved man / MW ratio. During the first ARR petition of HMEL, for sixth control period the Commission had considered an amount of Rs. 9.84 lakh per employee as a benchmark employee cost for the year 2019-20.

The Commission therefore proceeds to determine the per employee cost for the seventh control period considering the escalation of 5.35% (average of CPI for 2017-18 to 2019-20) for each of the years of 2020-21, 2021-22 & 2022-23. The employee cost is subject to truing up during APR.

The Commission, thus, admits the employee cost as per the details given below:

-SI	No	Particulars	2020-21	2021-22	2022-23
	1	Man / MW norms for HMEL	1.3	1.3	1.3
	2	Maximum Manpower [ 1.3 X 300] (no)	390	390	390
	3	Per employee (normative) cost allowed for 2019-20 in Tariff Order dated 31.05.2021 as detailed in paragraph 5.4.3 above	9.84	9.84	9.84
1	4	Annual Escalation over Employees Cost (Average of CPI for 17-18 to 19-20)	5.35%	5.35%	5.35%
	5	Admissible Rs. lakh per employee [ * Sl no 3 X 1.0535]	10.37*	10.92**	11.50***
	9	Admitted Emp Cost [SI no 2 X SI no 5] (Rs lakh)	4044.30	4258.80	4485.00

<sup>\*\*[ 9.84</sup> X 1.0535^2], \*\*\*[ 9.84 X 1.0535^3]

The Claim vis-à-vis admitted amount for employee cost thus stands as depicted below:

Rs. Lakh

As Claimed by HMEL			As Adm	itted by Comn	nission
2020-21 2021-22		2022-23	2020-21	2021-22	2022-23
4045.00	4262.00	4491.00	4044.30	4258.80	4485.00







HMEL shall furnish relevant information and supporting documents in this respect with the application for APR for the concerned year and the same will be considered for adjustment in APR to the extent it is found fit by the Commission. Along with the information and documents as mentioned above, HMEL shall, in the application for APR for the concerned year, also furnish the information in the format given in Form 1.17(h) of Annex - 1 to the Tariff Regulations indicating details in respect of both regular and contracted employees engaged in Unit 1 and Unit 2.

#### Coal and Ash Handling Expenses: 4.4

- 4.4.1 HMEL has claimed Rs. 587.00 lakh, Rs.628.00 lakh and Rs. 672.00 lakh for the years 2020-21, 2021-22 and 2022-23 respectively towards coal and ash handling expenses. They have submitted that the claim has been made on the basis of rates indicated in the LOA of different maintenance Contracts entered by them with the agency for coal and ash handling for the year 2020-21 and application of annual escalation of 7.1% on that for the subsequent years 2021-22 and 2022-23.
- 4.4.2 The Commission, after due consideration and in view of the fact that coal and ash handling expenses are uncontrollable in nature and are directly related with level of generation, decides to consider proportionate increase over the admitted expenditure in the tariff order for the year 2019-20 by giving a further annual escalation of 7.54% (being the CPI for industrial workers for 2019-20) for each of the years of 2020-21, 2021-22 and 2022-23. The admissible Coal and Ash handling expenses is thus computed at Rs.122.20 lakh for 2020-21 [(Rs.114.15 lakh\*1.0754)], Rs.130.82 lakh for 2021-22 [(Rs. 122.20 lakh\*1.0754)] and Rs.140.05 lakh for 2022-23 [(Rs. 130.82 lakh\*1.0754)]. The claim vis-à-vis admitted amount is depicted in the table given below:

SI No	Particulars	2020-21	2021-22	2022-23
1	Amount Admitted in 2019-20 as per T.O. dated 31.05.2021 [Rs Lakh]		114.15	





2	Annual Escalation (%)	7.54	7.54	7.54
3	Admitted Coal and Ash handling expenses [Rs lakh]	122.20	130.82	140.05
4	Amount Claimed by HMEL [Rs lakh]	587.00	628.00	672.00

However, after submission of APR petitions at the end of concerned years, the actual expenditure vis-à-vis actual generation will be viewed separately by the Commission for adjustment of allowable expenses under this head.

#### 4.5 Water charges:

- 4.5.1 HMEL has projected expenditures of Rs. 1171 lakh for each of the years of 2020-21, 2021-22 and 2022-23 towards water charges. They have submitted a detailed calculation of water charges considering projected Generation of 2233.88 MU for 2020-21, 2021-22 and 2022-23 considering the rate specified by Haldia Development Authority (HDA).
- 4.5.2 The Commission admits the water consumption during the period considering the normative level of generation (as Fixed cost will be realized in relation to normative PAF) for the years 2020-21,2021-22 and 2022-23 at the rate specified by HDA which is Rs. 17.48 /KL. The admitted Water Charges thus computed at Rs. 1171.40 lakh for each of the three years is given hereunder:

Particulars	Derivatives	Claimed by HMEL (against projected generation)			Admitted by Commission (against normative generation)		
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Generation of Power (MU)	[A]	2233.88	2233.88	2233.88	2233.80	2233.80	2233.80
Water Consumption (KL/MWH)	[B]	3	3	3	3	3	3
Water Requirement (KL)	[C]=[A]X[B]X10^3	6701640	6701640	6701640	6701400	6701400	6701400
Rate (Rs/KL)	[D]	17.48	17.48	17.48	17.48	17.48	17.48
Water Charges (Rs Lakhs)	[E]=[C]*[D]/10^5	1171.00 *	1171.00 *	1171.00 *	1171.40	1171.40	1171.40

<sup>\*\*</sup> In Form E(B) the claim is Rs. 1171.00 lakh

- 4.5.3 However, the expenditure on water charges being uncontrollable in nature, on submission of APR petitions, the actual expenditure vis-à-vis actual generation will be viewed separately by the Commission for adjustment of allowable expenses under this head.
  - 4.6 Operation and Maintenance (O&M) Expenses:







- 4.6.1 HMEL has proposed to consider O&M cost at 10% higher than the normative O&M for SgTPP-I with an annual increase of 5.93% stating inter-alia that the O&M norms for 2017-18 as determined by the Commission vide its order dated 13.09.2018 was not rational. Accordingly, HMEL has proposed O&M expense as Rs. 9.78 lakh/MW and Rs. 10.36 lakh/MW for 2018-19 and 2019-20 respectively in its petition for determination of tariff for the sixth control period. HMEL has accordingly submitted to have proposed O&M expense as Rs.10.97 lakh/MW, Rs. 11.62 lakh/MW and Rs. 12.31 lakh/MW for 2020-21, 2021-22 and 2022-23 respectively by applying an annual escalation rate of 5.93% over their claim for FY 2019-20.
- 4.6.2 It is observed that the Commission has determined the O&M norms of HMEL for the year 2017-18 as Rs. 7.92 lakh/MW in case no OA-287/18-19 dt 13.09.2018. HMEL had neither requested for review of the order nor had challenged it before any court of law. Thus, the request of HMEL at this stage cannot be considered. However, the Commission proceeds to determine the O&M norms by allowing inflation as detailed in the paragraphs below.
- In terms of Regulation 2.8.6.1 of the West Bengal Electricity Regulatory 4.6.3 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 or/ and 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. The Commission observes that the actual expenditure for the year 2019-20 is yet to be submitted through APR Petition and hence, yet to be finalized. The Commission had finalized the O&M norms for the year 2019-20 by applying the average inflation rate for 2017-18, 2018-19 and 2019-20 by giving 60:40 weightage to WPI: CPI (average rates of inflation is given in Annexure 4B) on the norms specified for 2017-18 in the order dated 13.09.2018. Similarly, the norms for the years pertaining to the seventh control period are determined giving escalation of 4.02% being the average rate of



inflation for the year 2019-20 giving 60:40 weightage to WPI: CPI as depicted below:

Norms of 2019- 20	For 2020-21 considering inflation 4.02%	For 2021-22 considering inflation 4.02%	For 2022-23 considering inflation 4.02%
Lakh /MW	Lakh /MW	Lakh /MW	Lakh /MW
[1]	[2]= [1]X 1.0402	[3]=[2]X1.0402	[4]=[3]X1.0402
8.62	8.97	9.33	9.71

4.6.4 The admissible (O&M) expenditure for 2020-21, 2021-22 & 2022-23 for the generating station thus come to be Rs.2691 lakh, Rs.2799 lakh and Rs.2913 lakh respectively as shown below:

Units	Installed	Norms for 20-21 as	Norms for 21-22 as	Norms for 22- 23 as		Admissible Amour	nt
	capacity	중심장으로 그 그 그 사이에 가게 하셨습니다	determined above	Total for (2020-21)	Total for (2021-22)	Total for (2022-23)	
A RELIGION VI	(in MW)	Lakh /MW	Lakh /MW	Lakh /MW	(Rs lakh)	(Rs lakh)	(Rs lakh)
	[1]	[2]	[3]	[4]	$[5] = [1] \times [2]$	[6] = [1] X [3]	[7] = [1] X [4]
Unit-1 & 2	300	8.97	9.33	9.71	2691.00	2799.00	2913.00

Accordingly, the claim vis-à-vis the admitted figures for (O&M) for generation function is as below:

Dc	lak	ı

As Proposed by HMEL				As Admitted	
2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
3291.00	3486.00	3693.00	2691.00	2799.00	2913.00

#### 4.7 Insurance, Rent, Rates &Taxes

HMEL has claimed Rs 238.09 lakh, Rs.254.99 lakh and Rs. 273.10 lakh for insurance for the years 2020-21, 2021-22 and 2022-23 respectively. HMEL has submitted that they have projected for 2020-21 based on the premium payment for the year 2019-20 and have considered annual escalation of 7.10% for 2021-22 and 2022-23. At this juncture the Commission admits Rs. 238.09 lakh for each of the three years without considering any escalation. The same would be

reviewed at the time of APR.





Similarly, HMEL has projected Rs. 154.48 lakh and Rs. 290.45 lakh for rent, rates & taxes for each of the years of 2018-19 and 2019-20. The Commission admits the same. HMEL is directed to segregate the rent and rates & taxes in its APR Petition. The claim vis-à-vis admitted amount under Insurance, Rent, Rates and Taxes is as shown below:

Rs in Lakh

01.11	D. C. L.	Aso	laimed by H	MEL	As admitte	ed by the Cor	nmission
SI No Particula	Particulars	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Insurance	238.09	254.99	273.10	238.09	238.09	238.09
2	Rent, Rates & Taxes	154.48	165.45	177.20	154.48	165.45	177.20

#### 4.8 Depreciation:

- 4.8.1 HMEL has submitted to have considered the rates of depreciation as per the depreciation schedule and the weighted average rate of depreciation claimed by them comes to 3.52%. However, from Form B and submission made in para 4.9 of their petition it is observed that they have computed depreciation on written down value method whereas Regulation 5.6.2 of the WBERC (Terms and Conditions of Tariff) Regulations, 2011 specifies "For the purpose of tariff, depreciation shall be computed in the following manner:
  - (i) The value base for the purpose of depreciation shall be historical cost of the asset.
  - (ii) The depreciation shall be calculated annually, based on straight line method at the rates prescribed in the Annexure A to these regulations.
  - (iii) The residual value of assets shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the original cost of the Asset."

HMEL has further submitted to have planned for an additional capex to the tune of Rs. 178.25 Crore for construction of railway sliding adjacent to plant and Railway line to connect HMEL plant and expected such infrastructure to be completed-by the year 2022-23. Accordingly, they have considered an amount

of Rs.85.25 crore as the share of such expenditure for unit 1 & 2 in the year

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2022-23. They have also submitted that they have not estimated for FGD units and shall approach the Commission through a separate petition for investment approval.

The Commission decides to consider the amount proposed separately at the time of APR after finalization of the Project Costs on receipt of final proposal under Regulation 2.8.4 of the WBERC (Terms and Conditions of Tariff) Regulations, 2011 and proceeds to admit depreciation at the same amount as admitted in Tariff Order dated 31.05.2021 on the proportionate amount of in principle approved cost as decided in Paragraph 4.2.4 above. Accordingly, Rs. 6306.13 lakh for each year are admitted for 2020-21, 2021-22 and 2022-23 as detailed below:

Rupees in lakh

SI	n di alam	As Claimed by HMEL			As Admitted by Commission		
No-	Particulars	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Gross Fixed Asset	244123.97	235516.23	227224.49	178139.34	178139.34	178139.3
2	Depreciation	8608.00	8292.00	7988.00	6306.13	6306.13	6306.13

#### 4.9 Interest on Borrowed Capital:

- 4.9.1 HMEL has submitted that at present they have borrowing agreements with two sources, viz., REC and PFC, amounting to Rs. 1347.12 crore @ 13.5% and Rs. 958.85 crore @ 13.25% respectively for their project.
- 4.9.2 They have further submitted that their claim has been made considering the actual amount drawn (Rs. 190369.98 lakh) from the lending institutions at the weighted average rate of interest of 13.19% and have shown the detailed calculations in Form C and in Table 21 under para 4.10.2 of their petition. HMEL has also submitted that the repayment of debts has not yet been commenced and stated that they are in active negotiations with the lending institutions to modify the debt schedule going forward. HMEL has accordingly not shown any repayment under Form C. HMEL has clubbed the interest on Revenue account (Working Capital interest) and that on Capital Borrowings and claimed in Form







- E(B) under Interest heading. Further the amount shown under Form C is different from their claim in E(B).
- 4.9.3 The Commission considers the debt equity ratio of 70:30 on the project cost as decided in paragraph 4.2.4 above in terms of regulation 5.4.2 of Tariff Regulations and accordingly admits an amount of Rs. 16447.60 lakh for each of the years 2020-21, 2021-22 and 2022-23 respectively against their claim against interest on capital borrowing of Rs. 21253.00lakh, Rs. 20138.00lakh and Rs.19065.00lakh as depicted below:

Rs in lakh

SI	5 " 1	As claimed by HMEL			As admitted		
No	Particulars	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Project Cost	264648.83	264648.83	264648.83	178139.33	178139.33	178139.33
2	Capital Borrowings	185254.18	185254.18	185254.18	124697.53	124697.53	124697.53
3	Wt. Avg rate of interest	13.19%	13.19%	13.19%	13.19%	13.19%	13.19%
4	Interest amount	21253.00	20138.00	19065.00	16447.60	16447.60	16447.60

#### 4.10 Other Finance Charges:

4.10.1 The amounts claimed by HMEL towards other finance charges comprises of Bank Charges, L/C Charges and Fees & Expenses for Restructuring. Since the fees paid for restructuring could not be assessed as attributable to HMEL from the documents submitted by HMEL, the same is not admitted at this juncture. HMEL is directed to submit the relevant documents in support of their claim in the APR Petition for examination by the Commission. The claims vis-a-vis admitted amount under 'Other Finance Charges' is depicted below:

Figures in Rs lakh

SI. No.	Particular	As o	laimed by H	IMEL	As admitted by Commission			
140.		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23	
1	Bank Charges	2.00	4.00	4.00	2.00	4.00	4.00	
2	L/C Opening Charges	7.00	10.00	10.00	7.00	10.00	10.00	







3	Fees & Exp for restructuring	250.00	250.00	250.00		-	-
4	Total (4=1+2+3)	259.00	264.00	264.00	9.00	14.00	14.00

#### 4.11 Income Tax:

4.11.1 HMEL has not claimed any amount under this head and accordingly no amount is admitted for income tax for the years 2020-21, 2021-22 and 2022-23. However, if any tax liability arises and is met the same would be addressed in the APR Petition.

#### 4.12 Filing Fees:

4.12.1 HMEL has claimed an amount of Rs. 10 lakh towards filing fees for the year 2020-21 which is admitted by the Commission.

#### 4.13 Return on Equity:

- 4.13.1 HMEL has submitted to have considered the equity base of Rs. 79394.70 lakh for the purpose of calculation of return on Equity. Further, they have considered an addition of Rs. 2563.40 lakh in 2022-23 being 30% of the estimated completion cost of the additional capex planned as referred in para 4.9 of their petition. Accordingly, HMEL has claimed Rs. 12306.17 lakh as ROE in each years of the control period.
- 4.13.2 The Commission considers the normative equity (30%) on the project cost as decided in paragraph 4.2.4 above and determines the admissible return on equity as below:

Rs in lakh

SI No	Particulars	Basis	2020-21	2021-22	2022-23
1	Project cost (as per para 5.2.4	Α	178139.33	178139.33	178139.33
2	Admissible equity (30% of A)	В	53441.80	53441.80	53441.80
3	Rate of Return	С	15.50%	15.50%	15.50%

B sent

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	4	Return on Equity as admitted	D = B xC	8283.48	8283.48	8283.48
- 1		Hotain on Equity do dannitou	0 0 10			

#### 4.14 Interest on Working Capital:

- 4.14.1 HMEL has proposed for interest on normative working capital for the years 2018 2019 and 2019-20 to the extent of Rs. 405.82 lakh and Rs.1245.10 lakh respectively.
- 4.14.2 In terms of second proviso to regulations 5.6.5.1 of the Tariff Regulations, as amended working capital requirement for HMEL shall be assessed on normative basis @ 10% on the base amount derived by summation of annual fixed charges and fuel and power purchase cost reduced by the elements of the ARR determined, viz., depreciation etc.
  - 4.14.3 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, 2021-22 and 2022-23 respectively.
- 4.14.4 The interest on working capital is worked out as under considering the rates as mentioned in paragraph 4.14.3 above

In	Re	Lakh	i
111	1/2	Lani	

SI. No.	Particulars	2020-21	2021-22	2022-23
1	Gross Annual Fixed charges now arrived excluding interest on working capital	38645.90	38982.99	39344.17
2	Fuel Cost as admitted	60499.74	60805.76	61116.45
3	Sub Total (1+2)	99145.64	99788.75	100460.62
	Less:			
4	Depreciation	6306.13	6306.13	6306.13
5	Advance against depreciation	•	-	
6	Deferred revenue expenditure	÷	₩.	-
7	Return on Equity	8283.48	8283.48	8283.48
8	Reserve for Unforeseen Exigencies	· #	% <b>=</b> .	-







SI. No.	Particulars	2020-21	2021-22	2022-23
9	Sub Total (4 to 8)	14589.61	14589.61	14589.61
10	Allowable Charges for working capital (3-9)	84556.03	85199.14	85871.01
11	Normative requirement of Working Capital (10% of 10)	8455.60	8519.91	8587.10
12	SBI's one-year MCLR as on 01st April of previous year	8.55%	7.75%	7.00%
13	Interest allowable [ 11 X 12]	722.95	660.29	601.10
14	Interest on working capital allowed	722.95	660.29	601.10

4.14.5 During APR of the concerned year, the interest on working capital as above will be reviewed on the amount assessed on normative basis considering the actual amount of interest paid as per regulation 5.6.5.2 of the Tariff Regulations.

#### 4.15 Interest Credit:

4.15.1 In terms of regulation 5.5.3 of the Tariff Regulations, where the actual amount of loan repayment in any year falls short of the depreciation allowable during the year, then interest credit of such excess depreciation charges at the rate of weighted average cost of debt is admissible. HMEL has not projected any amount under this head. However, as there is no repayment, chargeable depreciation is more than the amount of loan repayable for that year and accordingly the Commission determines applicable interest credit in the table below:

SI. No.	Particulars	2020-21	2021-22	2022-23
1	Depreciation as admitted in paragraph 5.9 (Rs Lakh)	6306.13	6306.13	6306.13
2	Repayment considered by HMEL in Form C (Rs Lakh)	-	-	18
3	Excess fund created (Rs Lakh)	6306.13	6306.13	6306.13
4	Weighted average rate of interest of existing loan (%)	13.19	13.19	13.19
5	Interest credit (Rs Lakh)	831.78	831.78	831.78





# Annexure 5A

# **Summary of Fixed Cost**

Figures in Rs lakh

	Figures III No lakii						
SI No	Descriptions		Petition			Admitted	
31 110		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
Α	O&M Expenses	3291.00	3486.00	3693.00	2691.00	2799.00	2913.00
В	Employee cost	4045.00	4262.00	4491.00	4044.30	4258.80	4485.00
С	Water charges	1171.00	1171.00	1171.00	1171.40	1171.40	1171.40
D	Coal & Ash handling Expenses	586.65	628.09	672.46	122.20	130.82	140.05
Ε	Rent, Rates & taxes	154.48	165.45	177.20	154.48	165.45	177.20
F	Insurance	238.09	254.99	273.10	238.09	238.09	238.09
G	Filing charges	10.00			10.00		
Н	Depreciation cost	8608.00	8292.00	7988.00	6306.13	6306.13	6306.13
1	Interest on Loan capital	21253.00	20138.00	19065.00	16447.60	16447.60	16447.60
J	Interest credit				-831.78	-831.78	-831.78
K	Other Finance Charge	259.00	264.00	264.00	9.00	14.00	14.00
L	Return on Equity	12306.17	12306.17	12306.17	8283.48	8283.48	8283.48
М	Interest on WC	1131.00	1168.00	1209.00	722.95	660.29	601.10
	TOTAL FIXED COST	53053.39	52135.70	51309.93	39368.85	39643.28	39945.27







#### CHAPTER - 5

# SUMMARIZED 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

- Based on the analyses and findings recorded in the foregoing chapters, the Commission is now drawing the statements of Aggregate Revenue Requirements (ARR) for each of the three years of the seventh control period. Such summarized statements are given in Annexure 5to this chapter.
  - 5.2 In terms of the Tariff Regulations, the Commission has to ascertain the amount of revenue recoverable through tariff for the generating station of HMEL for the years 2020 21 and 2021 22in the subsequent paragraphs. Tariff order for 2022 23 shall be determined prior to commencement of the year 2022 23 after carrying out allowable adjustment in subsequent APR order(s) of the Commission, if any.
  - 5.3 The amount of revenue in respect of capacity charges and fuel charges to be recovered through tariff for the years 2020 21 and 2021 –22 separately for the thermal power station of HMEL works out to be as under:

SI. No.	Particulars	2020-21	2021-22
1	Aggregate Revenue Requirement	99868.59	100449.04
2	Fuel Cost as admitted	60499.74	60805.76
3	Capacity Charges (3 = 1 - 2)	39368.85	39643.28

5.4 Energy charge rates for HMEL for the years 2020 - 21 and 2021 - 22 determined in Chapter 3 of this order are as below:

SI No	Particulars	Unit	2020-21	2021-22
1	Ex-bus generation as in Annexure -3A	MU	1881.65	1881.65
2	Fuel Cost	Rs lakh	60499.74	60805.76
3	Energy charge rate	paisa/kWh	321.52	323.15







# **ANNEXURE - 5**

# AGGREGATE REVENUE REQUIREMENT FOR 2020 - 21, 2021 - 22 AND 2022 - 23

SI No	Particulars	As claimed by HMEL			As Admitted by Commission		
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
1	Fuel cost	75177.00	79213.00	83734.00	60499.74	60805.76	61116.45
2	O&M Expenses	3291.00	3486.00	3693.00	2691.00	2799.00	2913.00
3	Employee cost	4045.00	4262.00	4491.00	4044.30	4258.80	4485.00
4	Water charges	1171.00	1171.00	1171.00	1171.40	1171.40	1171.40
5	Coal & Ash handling Expenses	586.65	628.09	672.46	122.20	130.82	140.05
6	Rent, Rates & taxes	154.48	165.45	177.20	154.48	165.45	177.20
7	Insurance	238.09	254.99	273.10	238.09	238.09	238.09
8	Filing charges	10.00	0.00	0.00	10.00	0.00	0.00
9	Depreciation cost	8608.00	8292.00	7988.00	6306.13	6306.13	6306.13
10	Interest on Loan capital	21253.00	20138.00	19065.00	16447.60	16447.60	16447.60
11	Other Finance Charge	259.00	264.00	264.00	9.00	14.00	14.00
12	Interest on WC	1131.00	1168.00	1209.00	722.95	660.29	601.10
13	Return on Equity	12306.17	12306.17	12306.17	8283.48	8283.48	8283.48
14	Gross Revenue Requirement (14 = Sum 1 to 13)	128230.39	131348.70	135043.93	100700.37	101280.82	101893.50
15	Less: Misc. other income	0.00	0.00	0.00	0.00	0.00	0.00
16	Less: Interest Credit	0.00	0.00	0.00	-831.78	-831.78	-831.78
17	Net Total Revenue Required (18 = 14 – 15 – 16)	128230.39	131348.70	135043.93	99868.59	100449.04	101061.72







#### **CHAPTER - 6**

# TARIFF ORDER FOR 2020 - 2021 AND 2021 - 2022

- 6.1 Based on the analyses and the decisions recorded in the previous chapters, the Commission, in accordance with the Tariff Regulations, has determined the capacity charge and energy charge for 2020 –21 and 2021 22 in respect of the generating station of HMEL as shown in chapter 5. The Commission now issues orders as shown in the following paragraphs.
- 6.2 The annual capacity charge recoverable by HMEL shall be on the following basis:
- 6.2.1 The annual capacity charge recoverable by HMEL 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.
- 6.2.2 The annual capacity charge is recoverable at the target normative annual availability as provided in following table:

	202	20 – 21	2021 -22		
Generating Station	Target normative availability factor	Capacity charge for the period in Rs. lakh	Target normative availability factor	Capacity charge for the period in Rs. lakh	
HMEL	85%	39368.85	85%	39643.28	

6.3 The energy charge recoverable during the year 2020 – 21 and 2021 - 22for injection of energy under implemented schedule on injection shall be as follows:

Generating Station	Energy Charge (Paisa/kWh)		
3	2020 - 2021	2021 - 2022	
HMEL	321.52	323.15	





- 6.4 HMEL shall raise the energy charge bill and capacity charge bill as per the energy accounting and availability declared by State Load Despatch Centre (in short 'SLDC') in its monthly energy accounting schedule:
- 6.5 The tariff for 2020 21 shall be applicable from 1<sup>st</sup> April 2020 to 31<sup>st</sup> march 2021 and tariff for 2021 22 shall be applicable from 1<sup>st</sup> April, 2021onwards till further order of the Commission. Adjustments, if any, for over recovery / under recovery for the period from 01.04.2020till the month of issue of this order, shall be made in the monthly bills in 10equal installments commencing from the month succeeding the month of issuance of this order.
- 6.6 There will be no separate Monthly Fuel Cost Adjustment (MFCA) for HMEL on and from 01.04.2020 till the month of issuance of this order. The MFCA realized, if any, by HMEL during the above mentioned period shall be adjusted in computation of adjustments for over recovery / under recovery from the energy recipients as mentioned in paragraph 6.5 above. HMEL shall, however, be entitled to realize MFCA for any subsequent period after the issuance of this tariff order as per the provisions of the Tariff Regulations.
- 6.7 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.
- 6.8 For merit order despatch, SLDC / ALDC shall consider the energy charge of the generating units of HMEL as determined in this tariff order as per the following table prospectively. The merit order despatch as per the table below will be applicable from the date of issuance 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 issuance of the MFCA notification respectively.

Generating Station	Energy Charge (Paisa/kWh)		
,0	2020 - 2021	2021 - 2022	
HMEL	321.52	323.15	







HMEL shall present to the Commission a gist of this order in accordance with 6.9 regulation 2.9.6 of the Tariff Regulations within three working days from the date of receipt of this order for approval of the Commission and on receipt of the approval shall publish the approved gist in terms of aforesaid regulation within six (6) working days from the date of receipt of the approval of the Commission.







# CHAPTER - 7 DIRECTIONS

- 7.1 The Commission has given some directions in different paragraphs in Chapter 3 and Chapter 4 while determining the variable and fixed cost of HMEL. HMEL is to comply with those directions. Now, the Commission issues the following directions too, to HMEL in the instant Tariff Order.
- 7.2 HMEL shall note that as MFCA has been introduced, the amount that may be claimed in FCA at the end of any year is not expected to be higher than the summated value of following factors:
  - a) impact due to rounding off as per note (f) under the sub- paragraph (d) of paragraph (B) of Schedule-7B of the Tariff Regulations against the applicable MFCA for the months of February and March of that year,
  - b) impact due to non-recovery of any additional fuel cost of March of any year over and above what is recovered on the basis of MFCA as calculated from data of February due to the fact that MFCA calculated on the basis of data of March becomes applicable for next financial year only,
  - impact due to application of disallowance of cost as per FCA formula at FCA determination stage.
- 7.3 While submitting APR application of any year, HMEL shall submit the certificates of the annual accounts of the said year from the statutory auditor for the following parameters:
  - a) List of expenditure arising on account of penalty, fine and compensation due to non-compliance of any statute or statutory order along with the reasons for each such type of penalty, fine and compensation separately.
  - b) Copies of the audited accounts of all the terminal benefit funds.







- 7.4 HMEL shall submit a reconciliation statement from statutory auditor showing the claim vis-à-vis the actual amount shown in the audited account against each head of expenditure along with their APR petition.
- 7.5 While submitting application of APR, HMEL shall have to submit through affidavit that no expenditure has been claimed by HMEL through the APR petition on employee or infrastructure or any other support or O&M activity pertaining to any other business of HMEL not related to their generation business.
- All the reports called for in this chapter are in addition to what are statutorily 7.6 required to be submitted, either in terms of the Act, any of the Regulations made thereunder, or both, for the purpose of submission in the Annual Performance Review.
- HMEL shall comply with all the provisions of Electricity Act 2003 and rules and 7.7 regulations made thereafter.

Sd/~

Sd/-

Sd/-

(PULAK KUMAR TEWARI) (DURGADAS GOSWAMI)

(SUTIRTHA BHATTACHARYA) CHAIRPERSON

MEMBER

MEMBER

Dated: 25.08.2029

Certified true Copy